Appendix I Section 4(f) Supporting Documentation

## SOUTHWEST LRT (METRO GREEN LINE EXTENSION)

- 1. US Department of the Interior comment letter on the DEIS/Draft Section 4(f) Evaluation, 2012
- 2. Data request letter from Southwest LRT Project Office to Minneapolis Park and Recreation Board (MPRB) Staff (January 2015) and MPRB response and attachments (February 2015)<sup>1</sup>
- 3. Materials from Minneapolis Park and Recreation Board Regular Meetings in February and March 2015
- 4. Materials from Southwest LRT Official With Jurisdiction Meetings, February and March 2015 (agenda, notes, handouts)
- 5. Kenilworth Channel Tunnel Crossing Study, draft Memorandum of Study Findings Prepared for Minneapolis Park and Recreation Board, Minneapolis, Minnesota, March 5, 2015; Prepared by Brierley Associates
- 6. Minneapolis Park and Recreation Board Superintendent letter to Mark Fuhrmann, Metro Transit Program Director – New Starts, March 2015
- 7. Kenilworth Channel/Lagoon Park Property and Kenilworth Lagoon Historic Property Section 4(f) Classification Technical Memorandum, 2015
- 8. City of Eden Prairie comment letter on the Supplemental Draft EIS/Draft Section 4(f) Evaluation Update, 2015
- 9. Minneapolis Park and Recreation Board comment letter on the Supplemental Draft EIS/Draft Section 4(f) Evaluation Update, 2015
- 10. United States Department of the Interior comment letter on the Supplemental Draft EIS/Draft Section 4(f) Evaluation Update, 2015
- 11. Hennepin County Regional Railroad Authority Interim Trail Use Agreements
- 12. City of Eden Prairie Temporary Occupancy Exception Concurrence Letter for Purgatory Creek Park
- 13. Minnesota State Historic Preservation Office Temporary Occupancy Exception Concurrence Letter for Minikahda Club
- 14. Minnesota State Historic Preservation Office Temporary Occupancy Exception Concurrence Letter for Cedar Lake Parkway
- 15. Minneapolis Park and Recreation Board Temporary Occupancy Exception Concurrence Letter for Cedar Lake Park
- 16. Minneapolis Park and Recreation Board *De Minimis* Concurrence Letter for Bryn Mawr Meadows Park
- 17. Minneapolis Park and Recreation Board *De Minimis* Concurrence Letter for Kenilworth Channel/Lagoon
- 18. City of Minnetonka *De Minimis* Concurrence Letter for Unnamed Open Space B
- 19. City of Minnetonka *De Minimis* Concurrence Letter for Local Trail Network in Opus Woods Area

<sup>&</sup>lt;sup>1</sup> In response to the Southwest LRT Project's request for information, the MPRB included: use reports for Bryn Mawr Park, Cedar Lake Park, Lake of the Isles, Park Siding Park; boat rental and beach attendance reports for Lake Calhoun; and Minneapolis Bicyclist and Pedestrian Count reports. Due to the length of this content and the detail included, these reports are not included in this appendix but are available at the Southwest LRT Project website.

### SOUTHWEST LRT (METRO GREEN LINE EXTENSION)

- 20. Materials from City of Minnetonka Official with Jurisdiction Meeting, January 2016
- 21. Open Space A and B: Property Legal Documents
- 22. Notice of Publication of the Amended Draft Section 4(f) Evaluation
- 23. Open Space B: Correspondence and Documentation Regarding Wetlands

1. U.S. Department of the Interior comment letter on the DEIS/Draft Section 4(f) Evaluation, 2012

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"Darby, Valincia" <valincia\_darby@ios.doi.gov>

- To <swcorridor@co.hennepin.mn.us>
- cc Lindy Nelson <lindy\_nelson@ios.doi.gov>

12/07/2012 10:24 AM

- bcc
- Subject FTA Southwest Transitway Construction and Operation Light Rail- DEIS comments

Ms. Simon

DOI correspondence on the subject DEIS is attached. If there are questions please contact this office at (215) 597-5378. Regards, Valincia Darby --Valincia Darby Regional Environmental Protection Assistant Department of the Interior, OEPC 200 Chestnut Street, Rm. 244

Philadelphia, PA 19106

Phone: (215) 597-5378 Fax: (215) 597-9845

Valincia\_Darby@ios.doi.gov



IN REPLY REFER TO:

### United States Department of the Interior

OFFICE OF THE SECRETARY Office of Environmental Policy and Compliance Custom House, Room 244 200 Chestnut Street Philadelphia, Pennsylvania 19106-2904



December 7, 2012

9043.1 ER 12/751

Ms. Marisol Simon Regional Administrator, Region V Federal Transit Administration 200 West Adams Street, Suite 320 Chicago, Illinois 60606

Dear Ms. Simon:

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement and Section 4(f) Evaluation for the Southwest Transitway, Hennepin County, Minnesota. The Department offers the following comments and recommendations for your consideration.

### Section 4(f) Evaluation Comments

The Federal Transit Administration (FTA), along with the Hennepin County Regional Railroad Authority (HCRRA) and the Metropolitan Council Regional Transit Board (RTB), have proposed the construction and operation of a 15-mile light rail transit (LRT) line in the Minneapolis/St. Paul region. The draft Section 4(f) Evaluation identified several properties in the project study area eligible to be considered under Section 4(f) of the Department of Transportation Act of 1966 (48 U.S.C. 1653(f)). The proposed Southwest Transitway connects downtown Minneapolis to the cities of St. Louis Park, Hopkins, Edina, Minnetonka, and Eden Prairie. The intent is to improve access and mobility to the jobs and activity centers in the Minneapolis Central Business District, as well as to the expanding suburban employment centers. The Southwest Transitway was identified by the RTB in the late 1990s as warranting a high-level of transit investment to respond to increasing travel demand in a highly congested area of the region.

The analysis of impacts to eligible 4(f) properties is not entirely straightforward, and it seems much of the decision-making has been postponed for further analysis and consultation. What is understood from the evaluation is that alternatives are anticipated to result in the use of relatively small amounts of parkland; the impacts are estimated to range between 0.002 to 1.12 acres of permanent use depending on the alternative selected. For historic properties, there is the potential for Section 4(f) uses between one and five historic properties/districts, depending on the alternative selected. These uses would consist of affecting historic channels, replacing historic bridges, and placing LRT facilities within eligible or listed sites and a historic district. Consultation on design features may result in a *de minimis* finding under Section 4(f). However,

the historic Regan Brothers Bakery (historic structure) would likely be demolished if a certain facility location is selected and the facility is constructed.

The Section 4(f) Evaluation appears rather preliminary. Therefore, the Department cannot concur with the FTA that there are no feasible or prudent avoidance alternatives to the any of the alternatives presented which result in impacts to Section 4(f) properties. A preferred alternative has not been selected and it would appear that each alternative has some level of impact. It is unclear whether any of the impacts proposed in the evaluation would even be subject to a *de minimis* finding. All discussion of impact mitigation for all Section 4(f) properties are being postponed until more design information is available and consultation with the Minnesota State Historic Preservation Officer (SHPO) and other consulting parties has proceeded. Therefore, the Department cannot concur that all possible planning needed to minimize harm to Section 4(f) resources has been employed. The Department will withhold its final concurrence that there are no feasible or prudent avoidance alternatives and that all possible planning needed to minimize harm to the 4(f) resources has been employed until a preferred alternative is selected and mitigation measures have been determined.

The Department has a continuing interest in working with the FTA to ensure impacts to resources of concern to the Department are adequately addressed. For continued consultation and coordination with the issues concerning historic resources identified as Section 4(f) resources, please contact Regional Environmental Coordinator Nick Chevance, Midwest Regional Office, National Park Service, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1844.

We appreciate the opportunity to provide these comments.

Sincerely,

Lindy Nelson Regional Environmental Officer,

cc: MN-SHPO (Barbara.howard@mnhs.org) Ms. Katie Walker, AICP Senior Administrative Manager Hennepin County Housing, Community Works & Transit 701 Fourth Avenue South, Suite 400 Minneapolis, Minnesota 55415 (swcorridor@co.hennepin.mn.us) This page intentionally left blank.

### 2. Data request letter from SWLRT to MPRB (January 2015) and MPRB response and attachments (February 2015)

In response to the Southwest LRT Project's request for information, the MPRB included: use reports for Bryn Mawr Park, Cedar Lake Park, Lake of the Isles, Park Siding Park; boat rental and beach attendance reports for Lake Calhoun; and Minneapolis Bicyclist and Pedestrian Count reports. Due to the length of this content and the detail included, these reports are not included in this appendix but are available at the Southwest LRT Project website. This page intentionally left blank.



January 29, 2015

Jennifer Ringold Minneapolis Park & Recreation Board 2117 West River Road Minneapolis, MN 55411

Re: Section 4(f) Evaluation for the Southwest LRT (METRO Green Line) Project

### Dear Ms. Ringold

The purpose of this letter is to request assistance from the Minneapolis Park and Recreation Board (MPRB) as the Southwest Light Rail Transit (SWLRT) Project continues to conduct its review of potential impacts and mitigation to parks and recreation areas located within the Project's park and recreation study area. The project's park and recreation study area, as defined in the Draft Environmental Impact Statement (DEIS), is 350 feet on either side of the proposed light rail alignment (see purple dashed line in the adjacent figure). In particular, the Metropolitan Council's SWLRT Project Office (SPO) and Federal Transit Administration (FTA) are working to update the project's Federal Section 4(f) analysis and documentation. Section 4(f) is a requirement that Federal transportation projects for publically-owned, publically-accessible and locally-significant parks and recreation areas, as well as any historic property that is listed or eligible to be listed on the National Register of Historic Places. For historic resources, including historic park and recreation areas, we are working with Minnesota Department of Transportation Cultural Resources Unit (MnDOT CRU), the Minnesota State Historic Preservation Office (MnSHPO) staff and SWLRT Section 106 consulting parties to complete the project's Section 106 historic preservation review process. Over the next few months, SPO and FTA will be coordinating with the MPRB concerning park and recreation areas

that they own and manage to develop the update to the Section 4f analysis. It is FTA's intent to publish an update to the Section 4(f) analysis, with coordination with the MPRB, in the supplemental DEIS.

As part of the Section 4(f) effort, we are requesting information from MPRB to help develop the analysis and documentation of proposed impacts on publically-owned parks and recreation properties within the project's park and recreation area study area. SPO and FTA have identified the following publically-owned, publically-accessible parks and recreation areas within the project's park and recreation study area that are under the jurisdiction of the MPRB:

Grade-Separation from LRT ast Lim Penn Station division (BNSF) Trail to East Cedar Beach W rank W 21st St 21st Street Station LRT Tunnel Cedar Lake Pku Kenilworth Lagoon Minneap West Lake Station www.swlrt.or AVe Lake Calhoun

Reconstruction of

Trails to allow for

• Alcott Triangle

6465 Wayzata Boulevard, Suite 500 • St. Louis Park, MN 55



- Park Siding Park
- Kenilworth Lagoon Recreation Easement
- Lake of the Isles/Kenilworth Lagoon
- Cedar Lake Park
- Lake of the Isles Park
- Bryn Mawr Meadows

For these park and recreation areas, we respectfully request the following:

- 1. Confirmation that MPRB owns and manages these properties.
- 2. Identification of any other jurisdiction that has ownership or management responsibility for these properties (e.g., through a shared use agreement or a management agreement).
- 3. Confirmation that these properties are of local recreational significance.
- 4. Identification of the applicable adopted master plan or other plans for each property.
- 5. Identification any future adopted planned physical improvements for each property.
- 6. If available, provide maps of prominent facilities and brief descriptions of the key recreational activities that occur within each property (or source documents where this information can be obtained).
- 7. If available, data on the frequency and type of use for each property.
- 8. Identification of any other properties that the MPRB owns within the park and recreation study area that are primarily used for park and recreation purposes, that are publically-accessible and that are of local significance, including permanent recreation easements.

In addition to this information related to specific parks and recreation areas, SPO and FTA staff would like the following information in order to move the Section 4f analysis forward:

- To satisfy the requirements of Section 4(f), in some instances, written concurrence is required by FTA for the Section 4(f) evaluation and determination. Please describe MPRB processes for obtaining written concurrences for park business.
  - Name/title of MPB staff who is responsible for written concurrences under the "official with jurisdiction" designation for the Section 4f process
  - > Do these types of concurrences require legal review? Or Board approval?
  - > What is the schedule for signature of a concurrence letter?
- Management agreement, if one exists, between the MPRB and the City of Minneapolis for the recreational easement property.
  - Is MPRB the sole agency with jurisdiction over the parks, or does MPB share this responsibility with the City of Minneapolis?
- Pertaining to the permanent recreational easement across the Kenilworth Channel:
  - Has the recreational easement been amended since it was initially acquired (e.g., to allow for the demolition of the prior freight railroad bridge and construction of the existing wood pile bridges)?
  - Does MPRB believe that the existing recreational easement would need to be permanently amended for the project to construct a light rail bridge across the



channel and to remove and replace the existing freight rail and trail bridges across the channel? If so, could you please provide a summary of your rationale?

- Confirmation that the Comprehensive Plan MPRB 2007-2020, approved October 17, 2007, is the latest master plan document and that we do not need to review any additional documents to get the full breadth of management goals for recreational properties.
- Is there an approved management plan for MPRB parks and recreational areas that provides more specific information on the parks within the study area?

The information requested within this letter will be considered as FTA updates the determinations of which properties are protected under Section 4(f) and as it updates its determination of the official(s) with jurisdiction for each Section 4(f) property. Throughout the continuation of the project's Section 4(f) process, FTA and the SPO will continue coordination with the MPRB concerning Section 4(f) properties for which it is the official with jurisdiction. Based on Section 4(f) requirements and depending on forthcoming analyses and considerations, this coordination could include consultation on such things as: all possible planning to minimize harm (i.e., incorporation of reasonable mitigation measures) and least overall harm analysis for properties with a non-*de minimis* Section 4(f) use; Section 4(f) *de minimis* impact determinations; and temporary occupancy exemptions. This type of additional coordination between FTA, the SPO and the MPRB will be conducted through additional future meetings, correspondence and documentation.

Please let me know if you need any clarification on this request. SPO and FTA are requesting receipt of this information by Friday, February 6, 2015. We look forward to working with you on updating the Section 4(f) analysis for the SWLRT project.

Thank you, Nani

### **Nani M. Jacobson** *Assistant Director, Environmental & Agreements*

MetroTransit- Transit Systems Development Southwest Light Rail Transit Project Office 6465 Wayzata Boulevard, Suite 500 St. Louis Park, MN 55426 Direct: 612.373.3808 | Cellular: 808.497.0405 | Fax: 612.373.3899 nani.jacobson@metrotransit.org

www.swlrt.org





Administrative Offices 2117 West River Road Minneapolis, MN 55411-2227

Operations Center 3800 Bryant Avenue South Minneapolis, MN 55409-1000

> Phone 612-230-6400 Fax 612-230-6500

www.minneapolisparks.org

President Liz Wielinski

Vice President Scott Vreeland

Commissioners Brad Bourn John Erwin Meg Forney Steffanie Musich Jon C. Olson Anita Tabb M. Annie Young

Superintendent Jayne Miller

Secretary to the Board Jennifer B. Ringold



February 12, 2015

Nani M. Jacobson Assistant Director, Environmental & Agreements MetroTransit-Transit Systems Development Southwest Light Rail Transit Project Office 6465 Wayzata Boulevard, Suite 500 St. Louis Park, MN 55426

Re: Section 4(f) Evaluation

Dear Ms. Jacobson:

In response to your letter of January 29, 2015, requesting information about several of our parks, below and enclosed is the following information:

For the seven parks listed in your letter, here are answers to the first seven questions. Note that much of the information on master plans or future planned improvements, as well as frequency and use data, are contained on the enclosed flash drive.

#### Alcott Triangle

- 1. MPRB owns and manages this property.
- 2. There is no other jurisdiction with ownership/management responsibilities for this park.
- 3. This park is of local recreational significance.
- 4. There is no master plan or other plan for this park.
- 5. There are no future planned physical improvements for this park within our five year capital improvement plan.
- This park does not have any recreational infrastructure so there is no map of prominent facilities and key recreational activities conducted there. It is used primarily as open space.
- There is no segregated data on frequency and type of use for this park, as our data collection systems in current use focus on regional parks and parks with reserve-able, programmable spaces and features.

#### **Park Siding Park**

- 1. MPRB owns and manages this property.
- 2. There is no other jurisdiction with ownership/management responsibilities for this park.
- 3. This park is of local recreational significance.
- 4. Master Plan or other plan (see enclosed Park Siding folder).
- 5. There are no additional planned physical improvements within our five year capital improvement plan.
- 6. See **enclosed plan** showing recently installed prominent facilities and key recreational activities conducted there.

Nani Jacobson re: 4(f) Evaluation February 12, 2015 Page 2 of 4

7. There is no segregated data on frequency and type of use for this park, as our data collection systems in current use focus on regional parks and parks with reserve-able, programmable spaces and public facilities. The playground and other recreational amenities in this park are open to public use on a first come, first served basis during park hours and not available for exclusive reservation.

#### **Kenilworth Channel**

- 1. MPRB owns and manages this property (we hold an easement interest only for the railroad portion of the channel. The remainder of the channel property is owned in fee title.)
- 2. The only other jurisdiction with ownership/management responsibilities is the railroad bridge over channel, currently held by BNSF Railroad.
- 3. This park is of local recreational significance, as part of both the Minneapolis Chain of Lakes Regional Park and the larger Grand Rounds Historic District (eligible).
- 4. See attached Chain of Lakes Improvement Plan from 1997.
- 5. For planned physical improvements, see documents in Kenilworth Channel folder
- 6. We will forward a map of prominent facilities and key recreational activities for this and all following parks with a follow-up letter.
- 7. For primary use data on the Minneapolis Chain of Lakes Regional Park, see the Annual Use Estimates for the Metropolitan Regional Parks System report. These annual reports are produced by Metropolitan Council Park Division staff in coordination with all regional park implementing agencies. The purpose of preparing the annual use estimates is to determine the number of visits to each regional park and trail within the system, by park implementing agency. The visit estimate is used to inform the formulas for calculating the distribution of regional, State and Legacy funds for capital as well as for operations and maintenance purposes.

For more specific data sets on public use of this property, including permits issued for various purposes, see Frequency and Use Reports Folder (enclosed). For bicycle and pedestrian counts for this property, see the City of Minneapolis Count report published yearly from 2010-2014, in Frequency and Use Reports folder.

#### Lake of the Isles Park (including Kenilworth Lagoon)

- 1. MPRB owns and manages this property.
- 2. Any other jurisdiction with ownership/management responsibilities none.
- 3. Of local recreational significance yes.
- 4. See attached Chain of Lakes Improvement Plan from 1997.
- 5. There are no planned physical improvements for this park in our five year capital improvement plan.
- 6. We will forward a map of prominent facilities and key recreational activities for this and all following parks with a follow-up letter.
- 7. For primary use data on the Minneapolis Chain of Lakes Regional Park, see the Annual Use Estimates for the Metropolitan Regional Parks System report. These annual reports are produced by Metropolitan Council Park Division staff in coordination with all regional park implementing agencies. The purpose of preparing the annual use estimates is to determine the number of visits to each regional park and trail within the system, by park implementing agency. The visit estimate is used to inform the formulas for calculating the distribution of regional, State and Legacy funds for capital as well as for operations and maintenance purposes.

Nani Jacobson re: 4(f) Evaluation February 12, 2015 Page 3 of 4

For more specific data sets on public use of this property, including permits issued for various purposes, see Frequency and Use Reports folder. For bicycle and pedestrian counts for this property, see the City of Minneapolis Count report published yearly from 2010-2014, in Frequency and Use Reports folder.

#### **Cedar Lake Park**

- 1. MPRB owns and manages this property.
- 2. Any other jurisdiction with ownership/management responsibilities none.
- 3. Of local recreational significance yes.
- 4. See attached Chain of Lakes Improvement Plan from 1997.
- 5. There are no planned physical improvements for this park in our five year capital improvement plan.
- 6. We will forward a map of prominent facilities and key recreational activities for this and all following parks with a follow-up letter.
- 7. For primary use data on the Minneapolis Chain of Lakes Regional Park, see the Annual Use Estimates for the Metropolitan Regional Parks System report. These annual reports are produced by Metropolitan Council Park Division staff in coordination with all regional park implementing agencies. The purpose of preparing the annual use estimates is to determine the number of visits to each regional park and trail within the system, by park implementing agency. The visit estimate is used to inform the formulas for calculating the distribution of regional, State and Legacy funds for capital as well as for operations and maintenance

For more specific data sets on public use of this property, including permits issued for various purposes, see the Cedar Lake Park Folder (enclosed). For bicycle and pedestrian counts for this property, see the City of Minneapolis Count report published yearly from 2010-2014, in Frequency and Use Reports folder.

### Bryn Mawr Meadows Park

purposes.

- 1. MPRB owns and manages this property.
- 2. Any other jurisdiction with ownership/management responsibilities none.
- 3. Of local recreational significance yes.
- 4. There is at this time no master plan for this park.
- 5. In 2019-2020, this park is slated to have \$3.5 million in athletic field, site and playground improvements.
- 6. We will forward a map of prominent facilities and key recreational activities for this and all following parks with a follow-up letter.
- 7. For data on frequency and type of use, see attached Bryn Mawr Use Report.

To answer question number eight in your letter, there are no other properties in the Southwest Light Rail Transit area besides the above parks that meet 4(f) guidelines for study.

MPRB's process for conducting business will include staff review of all proposals, followed by recommendations to the Superintendent, review by legal counsel, and then will require full board approval of any action on behalf of the organization. Our "official with jurisdiction" designee for the Section 4(f) process is our President of the Board, Liz Wielinski. Any documents requiring board approval

Nani Jacobson re: 4(f) Evaluation February 12, 2015 Page 4 of 4

will need to be finalized between MPRB and other parties involved, including legal counsel review and recommendations as necessary. The final document is included in a recommended board resolution on an approximate four-week approval schedule. Board meetings are held the first and third Wednesday of most months.

MPRB and the City of Minneapolis are separate entities, with separate legal charters and governing documents. The City of Minneapolis has no involvement in the ownership, management or any decisions regarding MPRB's park property, whether held in fee or by other rights.

MPRB's Comprehensive Plan 2007-2020, approved October 17, 2007, is the most recent comprehensive plan document for our park system.

We are still compiling additional information in response to the questions in your letter and will forward same as soon as possible.

Sincerely,

Mab

Michael Schroeder Assistant Superintendent for Planning

cc: Jennifer B. Ringold, MPRB Deputy Superintendent Renay Leone, MRPB Real Estate Planner This page intentionally left blank.

3. Materials from MPRB Regular Meetings in February and March 2015

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# KENILWORTH CROSSING ALTERNATIVES

**Prudence** assessment

Revised February 5, 2015 Slides 34 and 47 February 4, 2015

## Overview

Definitions

Feasibility, cost and schedule for tunnel alternatives

Prudence assessment

## **Critical definitions**

### Feasible is defined as:

Able to be accomplished as a matter of sound engineering judgment

## Feasibility factors

- Conformance with SWLRT Design Criteria
- Engineering
- Cost
- Constructability
- Resource impacts
- User impacts
- Overall schedule, staging and sequencing
- Light rail operations

## **Critical definitions**

### An alternative is <u>not prudent</u> if:

- It compromises the project to a degree that it is unreasonable to proceed in light of the project's stated purpose and need (i.e., the alternative doesn't address the purpose and need of the project);
- It results in unacceptable safety or operational problems;
- After reasonable mitigation, it still causes severe social, economic, or environmental impacts; severe disruption to established communities; severe or disproportionate impacts to minority or low-income populations; or severe impacts to environmental resources protected under other Federal statutes;
- It results in additional construction, maintenance, or operational costs of extraordinary magnitude;
- It causes other unique problems or unusual factors; or
- It involves multiple factors as outlined above that, while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

## "Built-up" costs for tunnel options

MPRB OPTION 1 - CUT AND COVER SHALLO				(A		
	(\$M BASE YR)			(\$M YOE)		
Tunnel (South)	\$	(6.1)	\$	(12.4)		
Tunnel (Under Channel)	\$	41.5	\$	84.6		
Other (LRT Channel Bridge Deduct, Add'l LRT DF Track)	\$	(0.4)	\$	(0.8		
ADD'L CAPITAL COST (& FROM SPO CURRENT DESIGN)	\$	35.0	\$	71.4		

ADD'L CAPITAL COST (A FROM SPO CURRENT DESIGN): \$60 M - \$75 M

MPRB OPTION 2 - JACKED BOX TUNNEL							
	(\$M BASE YR)			(\$M YOE)			
Tunnel (South)	\$	(6.1)	\$	(12.4)			
Tunnel (Under Channel)	\$	51.1	\$	104.3			
Other (LRT Channel Bridge Deduct, Add'l LRT DF Track)	\$	(0.4)	\$	(0.8)			
ADD'L CAPITAL COST (A FROM SPO CURRENT DESIGN)	\$	44.6	\$	91.1			

ADD'L CAPITAL COST (& FROM SPO CURRENT DESIGN): \$80 M - \$95 M

## "Built-up" costs for tunnel options

### Cost parameters

- "Built-up" costs include FTA contingencies and escalation for year of expenditure
- Costs reflect the cost delta beyond the bridge option
- Cost estimates as additional capital cost
  - Cut and cover tunnel
    - \$60M to \$75M
  - Jacked box tunnel
    - \$80M to \$95M
  - The difference in costs between the tunnel options is \$9.6M in base year dollars.
- Estimates do not reflect the costs resulting from additional time that may be required for reviews and approvals under Municipal Consent

## Comparison of schedules for alternative crossings

Activity	Months
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Comment (DO Deviler)	
Current SPO Design	
Close Kenilworth Trail @ W Lake St.	
Utility Relocations, Access Road, Lift Stations	Utilities & Access
Construction New Channel FR Bridge & Prep FR realignment	New FR Channel Bridge
Construct FR Permanent Realignment - Tracks/Signals	FR Align Channel Closed Intermittently for 12 months
Construct South Portal	South Portal
Construct Shallow Tunnel Section (2,200 LF)	Construct Shallow Tunnel - 9 mo, 2200 LF
Construct North Portal	North Portal
Remove existing RF/Trail/const. bridge & construct new LRT/Trail bridge	Demo Ex FR BR Const LRT/Trail BR
Reconstruct & Open Kenilworth Trail	Reconstruct Kenilworth Trail
MPRB Option 1 - Cut and Cover Shallow Tunnel	4.3 months
(This option similar to SPO version of shallow tunnel under channel)	
Close Kenilworth Trail @ W Lake St.	
Utility Relocations, Access Road, Lift Stations	Utilities & Access
Construction New Channel FR Bridge & Prep FR realignment	
Construct FR Permanent Realignment - Tracks/Signals	FR Alga
Construct South Portal	South Portal
Close Channel	
Construct Shallow Tunnel Section (3,100 LF)	Construct Shallow Tunnel - 15 months for 3100 LF
Remove FR/Trail Bridges	
Construct North Portal	North Portal
Construct New Trail Bridge	Const Trail Bridge
Reconstruct & Open Kenilworth Trail	Reconstruct Kenilworth Trail
MPRB Option 2 - Jacked Box Tunnel	
(Horizontal Alignment same as Option 1, Vertical Alignment Differs)	
Close Kenilworth Trail @ W Lake St.	
Utility Relocations, Access Road, Lift Stations	Utilities & Access
Construction New Channel FR Bridge & Prep FR realignment	New FR Channel Bridge
Construct FR Permanent Realignment - Tracks/Signals	FR Align Channel Closed intermittently for 12 months
Remove FR/Trail Bridges	Demo Ex Br
Construct Launching and Receiving Pits	Construct Pits
Ground Improvement (Soil Grout)	Ground Improvement
Build Tunnel Box	Construct Box Tunnel
Jack Box	
Construct South Portal	South Portal
Construct Shallow Tunnel Section - South	Construct Shallow Tunnel South
BRIERLEY Construct Shallow Tunnel Section - North	Construct shallow Tunnel North
	North Portal
ASSOCIATES Construct New Trail Bridge	Const Trail Bridge
Creating Space Underground Reconstruct & Open Kenilworth Trail	Reconstruct Kenilworth Trail

## Comparison of schedules for alternative crossings

### Bridge option

- 25.5 months to construct
- 12 months of intermittent channel closure
- O months of full channel closure
- Cut and cover tunnel option
  - 30 months to construct
  - 12 months of intermittent channel closure
  - 6 months of full channel closure
- Jacked box tunnel option
  - 30 months to construct
  - 12 months of intermittent channel closure
  - O months of full channel closure

## Comparison of schedules for alternative crossings

- While there may be some disagreement over the length of the construction period, MPRB and SPO agree on the general schedule
- If there is a need for "de-overlapping" tunnel activities indicated in the schedule as concurrent, the tunnel option may "bump" against critical path construction items

## Schedule adjustment for additional review and approval

#### **Current SPO Design**

Publish SDEIS Notice of Availability FEIS/ROD Development & Approval FEIS/Record of Decision

#### MPRB Option #2: Jacked Box Tunnel

Decision on Jacked Box Design/SDEIS Development & Approval/Municipal Consent Approval Publish SDEIS Notice of Availability FEIS/ROD Development & Approval FEIS/Record of Decision

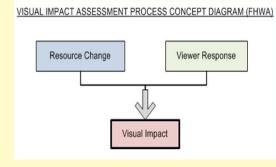


### Prudence assessment

- Focus areas
  - Visual quality
  - Noise and vibration
  - Cultural resources (archeology and historical)
  - Water resources (surface water, species movement, ground water)
- FHWA 4(f) impact
- Status of assessment
  - Methodologies indicated
  - Summary of findings presented however final report may include additional background or provide information that reinforces findings
  - Identification of least impactful alternative for each focus area
  - Mitigation measures have not been framed

## Visual quality

### Methodology based on Federal Highway Administration Visual Impact Assessment Guidelines

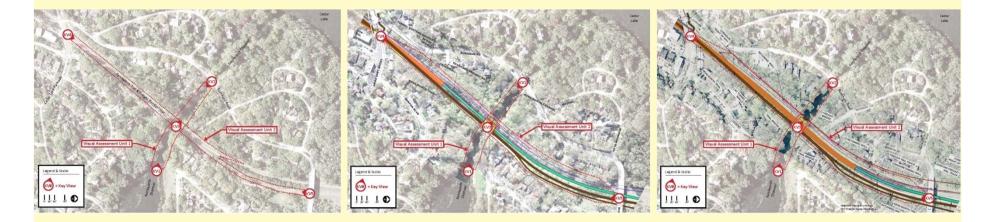


1	VISUAL ASSESSMENT UNIT	KEY VIEW (KV)	Bridge Option			Tunn	& 2	
			Resource Change	Viewer Response	Visual Impact	Resource Change	Viewer Response	Visual Impact
	1 17 11	1	MH	Η	Η	ML	Η	MH
	1-Kenilworth Channel	2	Μ	Μ	Μ	ML	Μ	Μ
	Challilei	3	Η	Η	Η	ML	Η	MH
	2-Kenilworth	4	Μ	MH	MH	ML	MH	Μ
	Trail Corridor	5	MH	Μ	MH	Η	Μ	MH

### Visual impact assessment process

- 1) Define the project location and setting.
- 2) Identify visual assessment units and key views.
- 3) Analyze existing visual resources, resource change and viewer response.
- 4) Depict *(or describe)* the visual appearance of project alternatives.
- 5) Assess the visual impacts of project alternatives.
- 6) Propose mitigation measures to offset visual impacts.

## Visual assessment units and key views



**Existing Conditions** 

Bridge Option

Tunnel Options 1 & 2

Alignment based on SWLRT preliminary plans released September 2014 Alignment based on SWLRT short tunnel under channel alternative released March 2014

# Visualizations for Key View 1 (view from Kenilworth Channel)



**Existing Conditions** 

Bridge Option

Tunnel Options 1 & 2

# **Trail-only bridge at Key View 1** (view from Kenilworth Channel)



Modified SPO bridge Concrete arched in-channel piers Pedestrian and bicycle bridge Vaulted steel structure, no inchannel piers

# Visualizations for Key View 2 (view from Burnham Road Bridge)



Existing Conditions Bridge Option Tunnel Options 1 & 2

# Visualizations for Key View 3 (view from Kenilworth Trail Bridge)



Existing Conditions Bridge Option Tunnel Options 1 & 2

#### Visual Impact Summary

VISUAL ASSESSMENT UNIT	KEY VIEW (KV)	Bridge Option			Tunnel Options 1 & 2		
		Resource Change	Viewer Response	Visual Impact	Resource Change	Viewer Response	Visual Impact
1-Kenilworth Channel	1	MH	Н	Н	ML	Η	MH
	2	M	Μ	М	ML	Μ	М
	3	Н	Н	Н	ML	Н	МН
2-Kenilworth Trail Corridor	4	Μ	MH	MH	ML	MH	М
	5	MH	М	MH	Н	М	MH

Compare impact ratings

Tunnel options result in *lesser cumulative visual impacts* to Kenilworth Channel water trail and Kenilworth trail users than the bridge option

#### **Noise and Vibration**

 Methodology based on Federal Transportation Administration Noise and Vibration Assessment Guidelines
 Land use category is a critical determinant for the channel

Table 3-2. Land Use Categories and Metrics for Transit Noise Impact Criteria				
Land Use Category	Noise Metric (dBA)	Description of Land Use Category		
1	Outdoor L <sub>eq</sub> (h)*	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Also included are recording studios and concert halls.		
2	Outdoor L <sub>dn</sub>	Residences and buildings where people normally sleep. This category includes homes, hospitals and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.		
3	Outdoor L <sub>eq</sub> (h)*	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds and recreational facilities can also be considered to be in this category. Certain historical sites and parks are also included.		
* L <sub>eq</sub> for the noisiest hour of transit-related activity during hours of noise sensitivity.				

# Land Use Categories

- DEIS (2012) evaluated channel as Category 3, however MPRB comments indicated the resource should be aligned with Category 1 due to the nature of the resource
  - Category 3: "...Certain historical sites and parks are also included...."
  - Category 1 "...includes lands set aside for serenity and quiet...."
- Additional detail specific to parks in FTA guidance:
  - Parks are a special case. Whether a park is noise-sensitive depends on how it is used. Most parks used primarily for active recreation would not be considered noise-sensitive. However, *some parks---even some in dense urban areas---are used for passive recreation* like reading, conversation, meditation, etc. These places are valued as havens from the noise and rapid pace of everyday city life *and they should be treated as noise-sensitive*.... The state or local agency with jurisdiction over the park should be consulted on questions about how the park is used and how much use it gets." [emphasis added]

# **Basics of noise analysis**

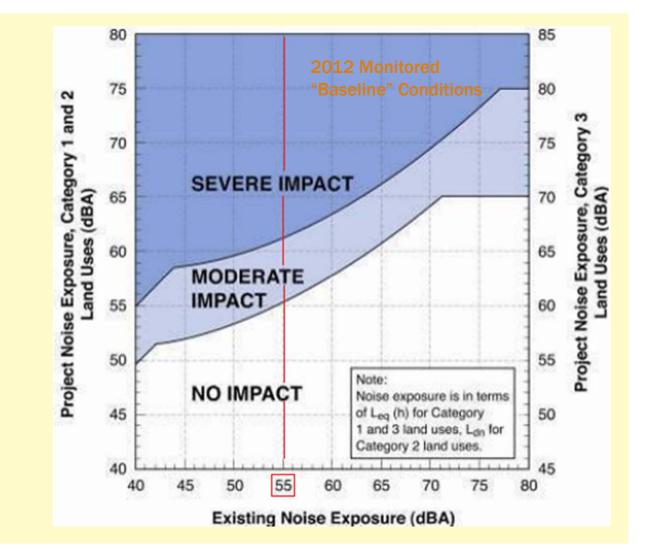
- Baseline noise levels according to SPO 2012 monitoring were 55 dBA
- Process requires a comparison of existing noise conditions to predicted exposure
  - Moderate impacts are clearly noticeable but may not necessarily yield complaints
  - Severe impacts are expected to yield a significant percentage of highly annoyed receivers
  - According to FTA guidance, noise mitigation is generally specified unless not feasible or reasonable

#### Noise impacts on channel

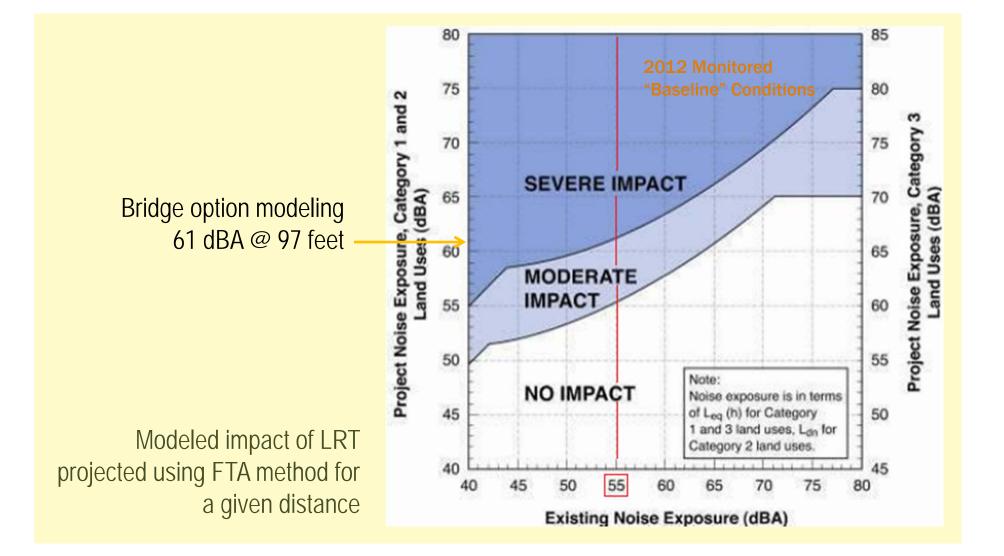


Example channel user @ 97' from LRT

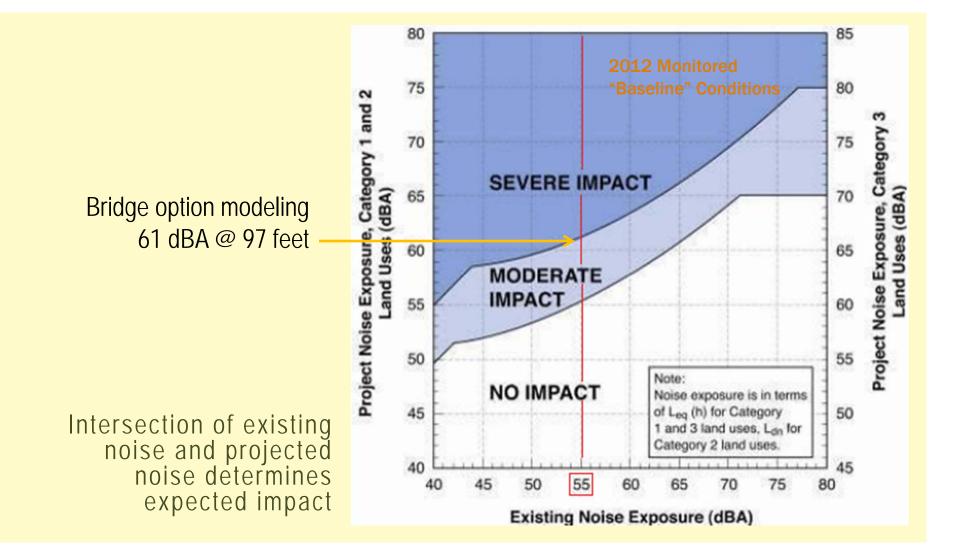
# Modeled noise impacts



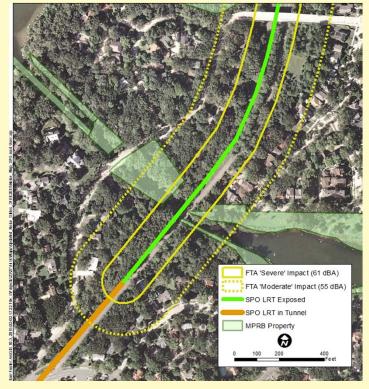
### Modeled noise impacts



### Modeled noise impacts



# Mapped noise impact



**Proposed Bridge Option** 



Tunnel Options 1 & 2

#### Other noise and vibration considerations

- Vibration impacts are not expected to vary significantly between crossing options
  - From FTA: "Ground-borne vibration is almost never annoying to people who are outdoors"
  - Ground-borne vibration from tunnel options expected to be lower due to additional decay distance provided by depth
- Construction noise will have mixed impacts
  - Additional piling placement required for construction of tunnel options
  - Activity below grade will be screened by terrain
- Operational noise from tunnel options is less impactful
  - Bridge noise impacts to channel are greater than tunnel options

Tunnel options are the least impactful alternative for crossing Kenilworth Channel

#### Cultural resources

Archeological Assessment are being completed in a manner that meets Section 106 of the National Historic Preservation Act as well as Minnesota Statutes 138.31 -138.42 (the "Field Archaeology Act") and 307.08 (the "Private Cemeteries Act").

#### Archeology

- Judging by records reviews that have been completed to date, areas that would be impacted by the tunnel options generally lack Native American and historic Euro-American archaeological potential, a possible exception being the two portal segments where some aspects of the records search still are in progress
- Should any archaeological issues be identified along either of these tunnel options, they could likely be mitigated
- The results of the initial SWLRT cultural resources review have already indicated that the corresponding segment of the bridge option lacks archaeological potential

# Historical

Process focused on performing above-ground cultural resources assessment, noting the following resources:

- Grand Rounds
- Kenilworth Channel
- Frieda and Henry J. Neils House
- Potential effects on Lake of Isles Residential Historic District
- Potential effects on Kenwood Parkway Residential Historic District
- If identified, historical issues could likely be mitigated for each of the channel crossing options



#### **Surface Water**

- Total Suspended Solids (TSS) and Total Phosphorus (TP) loading calculated for bridge area would be reduced depending on treatment method (filtration vs. infiltration)
- Imperviousness includes ballast and hard surfaces
- All options will likely meet City of Minneapolis and Minnehaha Creek Watershed District runoff and water quality requirements

#### **Surface Water**

Comparison Feature	Bridge	Cut/Cover Tunnel	Jacked Box Tunnel
Impervious Area (acre) Sta 2793+00 to 2819+50	5.07	4.369	4.268
Impervious Area (acre) Bridges (E3-6)	0.47	0.243	0.243
Annual TSS Loading from Bridges (lbs)	154	80	80
Annual TP Loading from Bridges (lbs)	0.85	0.44	0.44

For surface water considerations, the tunnel options offer the least impactful alternative for Kenilworth Channel

# Species movement

- Kenilworth Channel currently facilitates aquatic and terrestrial species movement
- An "openness ratio" is used to determine terrestrial species movement
  - (Height x Width)/Length
  - Impairment level at 0.75
  - Tunnel Option = 10.0, Bridge Option= 3.28, Existing = 4.28
  - While no impairment anticipated, the tunnel option are least impactful when completed
- No permanent impacts for aquatic and terrestrial species passage are anticipated
- Channel closure during construction may impact movement for spawning

# Literature cited

 Arizona Game and Fish Department, Habitat Branch. 2006. Guidelines for Bridge Construction or Maintenance to Accommodate Fish & Wildlife Movement and Passage.

http://www.azgfd.gov/hgis/pdfs/BridgeGuidelines.pdf

- Maine Department of Transportation. 2008. Waterway and Wildlife Crossing Policy and Design Guide, For Aquatic Organism, Wildlife Habitat, and Hydrologic Connectivity, Environmental Office, Augusta, Maine.
- Minnesota Department of Natural Resources. 2009. Lake Survey of Cedar Lake and Lake Calhoun, Hennepin County; accessed via LakeFinder at: <u>http://www.dnr.state.mn.us/lakefind/index.html.</u>
- National Marine Fisheries Service Southwest Region, 2001. "Guideline for Salmonid Passage at Stream Crossings." National Oceanic and Atmospheric Administration.

# Species movement

Comparison Feature	Bridge	Cut/Cover Tunnel	Jacked Box Tunnel
Openness Ratio (lower is worse)	3.28	10.0	10.0
Channel Closures- intermittent (months)	12	12	12
Channel Closures- complete (months)	0	6	0
Total Impacted Months	12	18	12

Bridge and jacked box tunnel offer the least impactful alternative from the perspective of aquatic species movement in the Kenilworth Channel

#### Groundwater

- Groundwater analysis methodology includes:
  - Adding local detail to the Metro Model 3 groundwater model
  - Simulating the dewatering effects of a jacked box tunnel
  - Evaluating four "effective permeability" conditions of construction pits

#### Groundwater modeling

- The induced seepage rates from the nearby lakes are modest, provided they are not permanent (i.e. only for construction)
- The local water balance will be unaffected, provided the pumped water is either (1) allowed to re-infiltrate or (2) returned directly to one of the lakes (or channel)
- The rate of dewatering will depend on how effective pile walls and poured floor are at reducing seepage into the pits

#### **Groundwater modeling**



Shallow groundwater flow direction

- Neither the bridge or tunnel options were found to have any discernable effect on shallow or deep groundwater flow directions upon completion of construction
- Shallow groundwater flow extends to depths below construction

- Section 4(f) is part of the Department of Transportation Act intended to prevent conversion of specific types of property to transportation use, including, among others, publicly owned land of a park with national, state or local significance.
  - Significance is determined by the national, state or local officials with jurisdiction over the resource
  - For the Kenilworth Channel, the MPRB has jurisdiction

- In addition, the project proposer intending to use the Section 4(f) resource must demonstrate that there is no feasible and prudent alternative and the action includes all possible planning to minimize the use of the resource.
- For Section 4(f), a "use" is:
  - Temporary: generally viewed as construction phase
  - Direct/Permanent: land from Section 4(f) resource is permanently removed from resource and is incorporated into the transportation use
  - Constructive: due to the proximity of the transportation use, the impact is so significant that it impairs use of the resource

- The Section 4(f) methodology requires documentation of the proposed project, as well as its purpose and need
- Resources are listed and mapped, the jurisdiction over the resource is defined, and the amenities or characteristics of the resources are identified and mapped
- Impacts to the amenities or characteristics are then classified as temporary, direct/permanent, or constructive, and avoidance alternatives are framed
- Coordination with the party having jurisdiction of the Section 4(f) resource is required

For the Kenilworth Channel, the amenities or characteristics to be considered under Section 4(f) include the channel and adjacent green areas that provide space for:

- Active uses
  - canoeing/kayaking, fishing, ice skating and skiing in the channel
  - biking, walking, running, in line skating near the channel
- Aesthetic and visual experiences
- Passive experiences
- Quietude

- In general, the types of impacts considered in the assessment include:
  - Temporary: closure or impeded access and noise or visual impacts occurring during construction
  - Direct/Permanent: right of way/property loss, obstruction in channel; or
  - Constructive: noise and visual impacts

- Because each crossing alternative varies in its temporary, direct/permanent, and constructive impacts, each amenity or characteristic was assessed separately.
- A technical review of each aspect of each alternative was performed, and then the alternative with the least impact upon the resource was defined.
- No overall evaluation was performed
  - The authority having jurisdiction over the resource should determine the nature of impacts
  - Because some amenities or characteristics may, in the opinion of that jurisdiction, be weighted more heavily for the resource being assessed

# Section 4(f) methodology

- Document the proposed project and its purpose and need
- Compile Section 4(f) resource information:
- Identify the types of impacts that may occur to each amenity or characteristic and categorize as temporary, direct or constructive.
- Identify avoidance alternatives (point at which feasible and prudence comes into play)
- Identify minimization and mitigation measures
- Coordinate with the party having jurisdiction over the Section 4(f) resource

#### **Distinguishable 4(f) impacts** (impacts sufficient to distinguish between alternatives)

#### Bridge **Uses/Alternatives Cut Cover Tunnel** Jacked Box Tunnel Increased noise and vibration immediately Canoeing/Kayaking in channel Increased noise directed Portal & crash or retaining overhead; shadow/shelter from bridge will toward channel; portal walls not likely to be visible reduce natural light in channel; immensity of & crash or retaining from channel bridges overhead will result in visual impact walls not likely to be visible from channel Increased noise directed Fishing Increased noise and vibration immediately Portal & crash or retaining overhead; immensity of bridges overhead will toward channel; portal walls not likely to be visible result in visual impact from channel & crash or retaining walls not likely to be Trail bridge may be less visually dominant Trail bridge may be less visually dominant visible from channel 6 months of closure for construction Ice skating/skiing in the channel Increased noise and vibration immediately **Increased noise directed** Portal & crash or retaining impact overhead; shadow/shelter from bridge will toward channel; portal walls not likely to be visible reduce natural light in channel & snow & crash or retaining from channel <u>Severe</u> noise accumulation may be hindered; immensity of walls not likely to be bridges overhead will result in visual impact visible from channel User will now have a Biking, walking, running, Increased noise and vibration immediately User may view crash or adjacent to user; continued inability to see in line skating near the channel direct view of the portal retaining walls channel; view of portal & crash or retaining and associated walls; walls, and introduction of a large, yellow, fast user may view crash or moving vehicle retaining walls Passive use within grass areas along bank of Increased noise and vibration; possibility to Increased noise directed User may view crash or channel reduce bank area for passive use, and toward channel bank; retaining walls (incl. quietude and aesthetic/visual experience) introduction of a large, yellow, fast moving portal & crash or vehicle retaining walls may be visible from channel bank; user may view crash or retaining walls

# Indistinguishable 4(f) impacts

(impacts are indistinguishable between alternatives)

- Temporary construction disturbance of soils and vegetation
- Construction noise
- Intermittent closures for construction
- Visual impacts from construction
- Construction Vibration
- At least a moderate increase in noise

# Summary

- Feasibility
  - All options (bridge and tunnels) are feasible from the perspective of sound engineering judgment
- Prudence
  - Visual quality: tunnel options pose the least impactful alternative
  - Noise and vibration: tunnel options pose the least impactful alternative
  - Cultural resources (archeology and historical): While more investigation is needed, any option with archeological or historical issues is likely to have the potential for mitigation
  - Water resources (surface water, species movement, ground water):
    - All options will meet requirements for surface water management
    - While no options presents significant impacts for species movement, the tunnel options pose the least impactful alternative
    - There were no discernable differences in groundwater impacts among the options
  - FHWA 4(f) impacts: The tunnel options pose the least impactful alternative

#### **Definition of prudence**

#### An alternative is <u>not prudent</u> if:

- It compromises the project to a degree that it is unreasonable to proceed in light of the project's stated purpose and need (i.e., the alternative doesn't address the purpose and need of the project);
- It results in unacceptable safety or operational problems;
- After reasonable mitigation, it still causes severe social, economic, or environmental impacts; severe disruption to established communities; severe or disproportionate impacts to minority or low-income populations; or severe impacts to environmental resources protected under other Federal statutes;
- It results in additional construction, maintenance, or operational costs of extraordinary magnitude;
- It causes other unique problems or unusual factors; or
- It involves multiple factors as outlined above that, while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

# Kenilworth Crossing Alternatives

# Questions



**Regular Meeting** 

#### March 4, 2015

~ Minutes ~

Wednesday 5:00 PM

#### I. CALL TO ORDER

The time being 5:01 PM, President, Commissioner District 1 Liz Wielinski called the meeting to order.

President, Commissioner District 1 Liz Wielinski: Present, Vice President, Commissioner District 3 Scott Vreeland: Present, Commissioner District 6 Brad Bourn: Present, Commissioner At Large John Erwin: Present, Commissioner At Large Meg Forney: Present, Commissioner District 5 Steffanie Musich: Present, Commissioner District 2 Jon Olson: Present, Commissioner District 4 Anita Tabb: Present, Commissioner At Large Annie Young: Present.

#### II. APPROVAL OF AGENDA

Approved as amended: Remove Resolution 2015-137 from Consent Business to allow for discussion.

<b>RESULT:</b>	ADOPTED [UNANIMOUS]		
MOVER:	Scott Vreeland, Vice President, Commissioner District 3		
SECONDER:	John Erwin, Commissioner At Large		
AYES:	Wielinski, Vreeland, Bourn, Erwin, Forney, Musich, Tabb, Young		
ABSENT:	Jon Olson		

#### III. APPROVAL OF MINUTES

Minneapolis Park and Recreation Board - Regular Meeting - Feb 18, 2015 5:00

ΡM

<b>RESULT:</b>	ACCEPTED [UNANIMOUS]
MOVER:	Scott Vreeland, Vice President, Commissioner District 3
SECONDER:	John Erwin, Commissioner At Large
AYES:	Wielinski, Vreeland, Bourn, Erwin, Forney, Musich, Tabb, Young
ABSENT:	Jon Olson

#### IV. REPORTS OF OFFICERS

Jayne Miller, Superintendent

Superintendent Miller reported that the Forestry Department will be receiving two

Minnesota Community Forestry Awards on March 17<sup>th</sup> during a presentation at the Shade Tree Short Course for Outstanding Project Award and Practitioners Award of Excellence to Craig Pinkalla, Arborist in the Forestry Department; Youth Basketball Tournament will run March 2-10; Citywide Youth Wrestling Meet will be held on Saturday, March 14; MPRB Cinderella Ball was held on Sat, February 28 at Columbia Manor with 110 children and 150 adults in attendance, Thanks to Board President Wielinski for supervising the event again this year as our resident Fairy Godmother; St. Patty's Senior Luncheon at Creekview Park; Wearing of the Green Party for adults with disabilities at Windom South Park; Summer Rec Plus citywide registration is March 17<sup>th</sup>; Rec Plus is excited to offer Explorakits at the parks and upcoming Public Meetings.

# V. REPORTS OF APPOINTEES TO OUTSIDE BOARDS, COMMISSIONS OR COMMITTEES

### VI. CONSENT BUSINESS

(All items on the Consent Agenda are considered to be routine and have been made available to Commissioners prior to the meeting; the items will be enacted by one motion. There will be no separate discussion of these items unless a Commissioner so requests, in which event the item will be removed from this Agenda and considered under separate motion.)

6.1 That the Board adopt Resolution 2015-137 captioned as follows:

#### Resolution 2015-137

Resolution Authorizing Approval of Contracts for the Purchase of Trees as Requested Per O.P. #8060 at an Estimated Total Expenditure of \$900,000

## **VII. CONSENT BUSINESS (continued)**

2 That the Board adopt Resolution 2015-138 captioned as follows:

#### Resolution 2015-138

Resolution Approving the Negotiated Full, Final and Complete Settlement with Future Medical Expenses Closed and an Employment Release as Discussed in a Closed Session on March 4, 2015 for Work Injuries Sustained While Working for the Minneapolis Park and Recreation Board

<b>RESULT:</b>	ADOPTED [7 TO 0]		
MOVER:	Scott Vreeland, Vice President, Commissioner District 3		
SECONDER:	Anita Tabb, Commissioner District 4		
AYES:	Wielinski, Vreeland, Erwin, Forney, Musich, Olson, Tabb		
ABSTAIN:	Brad Bourn, Annie Young		

#### VII. REPORTS OF STANDING COMMITTEES

#### A. Planning Committee

7.A.1 That the Board adopt Resolution 2015-121 captioned as follows:

#### Resolution 2015-121

Resolution to Approve the Master Plan for Nokomis-Hiawatha Regional Park

<b>RESULT:</b>	ADOPTED [UNANIMOUS]		
MOVER:	Annie Young, Commissioner At Large		
SECONDER:	Steffanie Musich, Commissioner District 5		
AYES:	Wielinski, Vreeland, Bourn, Erwin, Forney, Musich, Olson, Tabb, Young		

#### 7.A.2 That the Board adopt Resolution 2015-133 captioned as follows:

#### Resolution 2015-133

Resolution Approving the Master Plan for Theodore Wirth Regional Park

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Annie Young, Commissioner At Large
SECONDER:	John Erwin, Commissioner At Large
AYES:	Wielinski, Vreeland, Bourn, Erwin, Forney, Musich, Olson, Tabb, Young

#### **B.** Administration and Finance Committee

7.B.1 That the Board adopt Resolution 2015-135 captioned as follows:

#### Resolution 2015-135

Resolution Amending Professional Services Agreement #C-37983 with Miller Dunwiddie Architecture Related to the Existing HVAC System Evaluation at Minnehaha Park Refectory in the Amount of \$1,000 for a New Contract Total of \$96,500

### RESULT: ADOPTED [UNANIMOUS]

MOVER:Anita Tabb, Commissioner District 4SECONDER:Scott Vreeland, Vice President, Commissioner District 3AYES:Wielinski, Vreeland, Bourn, Erwin, Forney, Musich, Olson, Tabb, Young

#### VIII. PETITIONS AND COMMUNICATIONS

8.1 MPRB Construction Permits - 2015 Permit Log 1/17/15 Thru 2/17/2015

8.2 Planning Project List - March 2015

#### IX. 5:30 p.m. OPEN TIME

Bob Again Carney Jr., 42xx Colfax Ave S - stated that he was concerned that after 3 business days after announcing an agreement with the Met Council the Board is voting on it, adding that he feels that this needs more public input.

Art Higinbotham 34xx St. Louis Ave, concerned about safety issues in the corridor both in construction and operational with collocated freight rail line and light rail line, Requested Commissioners to reconsider the approval of the MOU.

Patty Schmitz, 28xx Dean Parkway, stated that she was opposed to SWLRT in the Kenilworth Corridor, and requested the preservation of the Park lands.

Dave Vanhattum 35xx Pleasant Ave S, Transit for Livable Communities, spoke in strong support for Resolution 2015-139 and requested approval of the resolution.

Kathy Low 21xx W. Franklin Ave, requested the Board not to vote for Resolution 2015-139 because they do not have the full Draft Environmental Impact statement.

Jeanette Colby, 22xx Sherudan Ave S, urged the board to table a vote on Resolution 2015-139, stating that she doesn't feel it is ready, then read a note from Louise Erdrich, 21xx Newton Ave S thanked the Board for their service to the residents of Minneapolis, independent Park Board, requesting please vote no tonight.

Shelley Fitzmaurice, 26xx Burnham Road, stated that our responsibility is to protect our lakes, expressed concerns of derailment and approving a Resolution with out all studies being complete.

George Puzak, 17xx Girard Ave S, urged the Commissioners to vote no on the MOU with the Met Council, stating that it is premature and that the Board lacks critical information that Met Council is required to provide, requesting please uphold your mission to preserve, protect and enhance our parks and lakes. Carol Kummer, 48xx 30th Ave S, stated that as the Board would be prioritizing the process/implementation of the Lake Hiawatha/Lake Nokomis Master Plan, urging the Board to put off closing Lake Hiawatha Beach until the very end.

Russ Adams, 33xx 14th Ave S, Alliance for Metropolitan Stability, encouraged the Board to pass Resolution 2015-139 and encouraged the removal of the freight rail lines from this corridor.

Arlene Fried, 11xx Xerxes Ave S, suggested that a solution for additional parking at Graco was to use one of it's surface lots to build a parking ramp.

Susu Jeffrey, 10xx Antoinette, urged the Commissioners to vote no against any plan that would take the SWLRT through the parks.

Gordon Everest, 46xx 28th Ave S, came to speak against closing the beach at Lake Hiawatha stating he, his family and friends would be very disappointed if the Lake Hiawatha was closed

Charlie Casserly, 47xx 27th Ave S, urged the Board to stop the permanent removal of the Lake Hiawatha Beach in the master plan, and that it was not representative of the public comments.

Edna Brazaitis, 4x Grove Street, stated Graco agreed to supported the Mississippi River trail and provided an easement to the MPRB on their property between the river and their headquarters when the money became available and requested that Graco to uphold this agreement.

#### X. UNFINISHED BUSINESS

The time being 6:26 p.m., President Wielinski recessed the Regular Meeting for the purpose of convening the Planning Committee

The time being 7:55 p.m., President Wielinski reconvened the Regular Meeting

10.1 That the Board adopt Resolution 2015-139 captioned as follows:

#### Resolution 2015-139

Resolution Determining that the Minneapolis Park and Recreation Board (MPRB) Will Not Pursue Tunnel Crossing Options for the Southwest Light Rail Transit (SWLRT) Project; Approving a Legally Binding Memorandum of Understanding with the Metropolitan Council that 1) Establishes a Process that Recognizes Parks and Park Resources in the Transit Project Development Process, 2) Outlines a Process for Collaboration Between the Southwest Project Office and MPRB on Design of Bridge Crossings at the Kenilworth Channel, and 3) Results in an Agreement Between the Metropolitan Council and the MPRB to Facilitate Approval and Construction of the SWLRT Project; and Authorizing the Superintendent to Initiate Agreements with Metropolitan Council to Reimburse the MPRB for Costs Related to Its Work on the SWLRT Project and the Blue Line Light Rail Transit Extension (Bottineau) Project ;

Approved as Amended (Olson & Erwin amendment) on a roll call vote

<b>RESULT:</b>	ADOPTED [6 TO 3]		
MOVER:	Scott Vreeland, Vice President, Commissioner District 3		
SECONDER:	Brad Bourn, Commissioner District 6		
AYES:	Wielinski, Vreeland, Bourn, Erwin, Musich, Olson		
NAYS:	Meg Forney, Anita Tabb, Annie Young		

That the Board adopt Resolution 2015-139 captioned as follows:

### Resolution 2015-139

Resolution Determining that the Minneapolis Park and Recreation Board (MPRB) Will Not Pursue Tunnel Crossing Options for the Southwest Light Rail Transit (SWLRT) Project; Approving a Legally Binding Memorandum of Understanding with the Metropolitan Council that 1) Establishes a Process that Recognizes Parks and Park Resources in the Transit Project Development Process, 2) Outlines a Process for Collaboration Between the Southwest Project Office and MPRB on Design of Bridge Crossings at the Kenilworth Channel, and 3) Results in an Agreement Between the Metropolitan Council and the MPRB to Facilitate Approval and Construction of the SWLRT Project; and Authorizing the Superintendent to Initiate Agreements with Metropolitan Council to Reimburse the MPRB for Costs Related to Its Work on the SWLRT Project and the Blue Line Light Rail Transit Extension (Bottineau) Project ;

Amend Resolution 2015-139 as follows,

The caption of Resolution:

Resolution Determining that the Minneapolis Park and Recreation Board (MPRB) Will Not Pursue Tunnel Crossing Options for the Southwest Light Rail Transit (SWLRT) Project; Approving a <u>Legally Binding</u> Memorandum of Understanding with the Metropolitan Council that...

The resolved clause of Resolution:

Resolved, That the Board of Commissioners approve a <u>Legally Binding</u> Memorandum of Understanding between the Metropolitan Council and the MPRB that...

The Memorandum of Understanding, Now therefore, section 3:

3. The MPRB agrees to work with the Metropolitan Council to facilitate the approval and construction of any LRT project.

<b>RESULT:</b>	AMENDMENT ADOPTED [7 TO 0]
MOVER:	Jon Olson, Commissioner District 2
SECONDER:	John Erwin, Commissioner At Large
AYES:	Wielinski, Vreeland, Bourn, Erwin, Forney, Musich, Olson
ABSTAIN:	Anita Tabb, Annie Young

That the Board adopt Resolution 2015-139 captioned as follows:

#### Resolution 2015-139

Resolution Determining that the Minneapolis Park and Recreation Board (MPRB) Will Not Pursue Tunnel Crossing Options for the Southwest Light Rail Transit (SWLRT) Project; Approving a Legally Binding Memorandum of Understanding with the Metropolitan Council that 1) Establishes a Process that Recognizes Parks and Park Resources in the Transit Project Development Process, 2) Outlines a Process for Collaboration Between the Southwest Project Office and MPRB on Design of Bridge Crossings at the Kenilworth Channel, and 3) Results in an Agreement Between the Metropolitan Council and the MPRB to Facilitate Approval and Construction of the SWLRT Project; and Authorizing the Superintendent to Initiate Agreements with Metropolitan Council to Reimburse the MPRB for Costs Related to Its Work on the SWLRT Project and the Blue Line Light Rail Transit Extension (Bottineau) Project ;

That the Board Table resolution 2015-139

Forney Tabb amendment fail on a roll call vote

<b>RESULT:</b>	AMENDMENT DEFEATED [3 TO 6]		
MOVER:	Meg Forney, Commissioner At Large		
SECONDER:	Anita Tabb, Commissioner District 4		
AYES:	Meg Forney, Anita Tabb, Annie Young		
NAYS:	Wielinski, Vreeland, Bourn, Erwin, Musich, Olson		

## XI. NEW BUSINESS

# XII. ADJOURNMENT

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Scott Vreeland, Vice President, Commissioner District 3
SECONDER:	John Erwin, Commissioner At Large
AYES:	Wielinski, Vreeland, Bourn, Erwin, Forney, Musich, Olson, Tabb, Young

Regular Meeting adjourned at 9:04 PM



# **Minneapolis Park and Recreation Board**

**Regular Meeting** 

March 4, 2015

#### ~ Agenda ~

Wednesday 5:00 PM

#### Meeting Times are subject to change based on discussion from previous meetings.

#### I. CALL TO ORDER

Liz Wielinski	President, Commissioner District 1
Scott Vreeland	Vice President, Commissioner District 3
Brad Bourn	Commissioner District 6
John Erwin	Commissioner At Large
Meg Forney	Commissioner At Large
Steffanie Musich	Commissioner District 5
Jon Olson	Commissioner District 2
Anita Tabb	Commissioner District 4
Annie Young	Commissioner At Large

#### II. APPROVAL OF AGENDA

#### III. APPROVAL OF MINUTES

Wednesday, February 18, 2015

#### IV. REPORTS OF OFFICERS

Jayne Miller, Superintendent

# V. REPORTS OF APPOINTEES TO OUTSIDE BOARDS, COMMISSIONS OR COMMITTEES

#### VI. 5:30 p.m. OPEN TIME

Persons wishing to speak can call in before 3:00 p.m. on the day of the meeting by calling 612-230-6400 to be placed on the agenda or can sign up at the Board meeting prior to the start of "Open Time". As stated in Board Rules "Open Time" shall not exceed a total of 15 minutes with up to three minutes allowed for citizen testimony, with the time limit to be allotted by the President.

#### VII. CONSENT BUSINESS

(All items on the Consent Agenda are considered to be routine and have been made available to Commissioners prior to the meeting; the items will be enacted by one motion. There will be no separate discussion of these items unless a Commissioner so requests, in which event the item will be removed from this Agenda and considered under separate motion.)

7.1 That the Board adopt Resolution 2015-137 captioned as follows:

#### Resolution 2015-137

Resolution Authorizing Approval of Contracts for the Purchase of Trees as Requested Per O.P. #8060 at an Estimated Total Expenditure of \$900,000

7.2 That the Board adopt Resolution 2015-138 captioned as follows:

#### Resolution 2015-138

Resolution Approving the Negotiated Full, Final and Complete Settlement with Future Medical Expenses Closed and an Employment Release as Discussed in a Closed Session on March 4, 2015 for Work Injuries Sustained While Working for the Minneapolis Park and Recreation Board

#### VIII. REPORTS OF STANDING COMMITTEES

#### A. Planning Committee

8.A.1 That the Board adopt Resolution 2015-121 captioned as follows:

#### Resolution 2015-121

Resolution to Approve the Master Plan for Nokomis-Hiawatha Regional Park

8.A.2 That the Board adopt Resolution 2015-133 captioned as follows:

#### Resolution 2015-133

Resolution Approving the Master Plan for Theodore Wirth Regional Park

#### **B. Administration and Finance Committee**

8.B.1 That the Board adopt Resolution 2015-135 captioned as follows:

#### Resolution 2015-135

Resolution Amending Professional Services Agreement #C-37983 with Miller Dunwiddie Architecture Related to the Existing HVAC System Evaluation at Minnehaha Park Refectory in the Amount of \$1,000 for a New Contract Total of \$96,500

#### IX. UNFINISHED BUSINESS

9.1 That the Board adopt Resolution 2015-139 captioned as follows:

#### Resolution 2015-139

Resolution Determining that the Minneapolis Park and Recreation Board (MPRB) Will Not Pursue Tunnel Crossing Options for the Southwest Light Rail Transit (SWLRT) Project; Approving a Memorandum of Understanding with the Metropolitan Council that 1) Establishes a Process that Recognizes Parks and Park Resources in the Transit Project Development Process, 2) Outlines a Process for Collaboration Between the Southwest Project Office and MPRB on Design of Bridge Crossings at the Kenilworth Channel, and 3) Results in an Agreement Between the Metropolitan Council and the MPRB to Facilitate Approval and Construction of the SWLRT Project; and Authorizing the Superintendent to Initiate Agreements with Metropolitan Council to Reimburse the MPRB for Costs Related to Its Work on the SWLRT Project and the Blue Line Light Rail Transit Extension (Bottineau) Project ;

#### X. NEW BUSINESS

## XI. PETITIONS AND COMMUNICATIONS

- 11.1 MPRB Construction Permits 2015 Permit Log 1/17/15 Thru 2/17/2015
- 11.2 Planning Project List March 2015

#### XII. ADJOURNMENT

#### MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is between the Minneapolis Park & Recreation Board (MPRB) and the Metropolitan Council as of March 12, 2015.

#### WHEREAS,

- 1. The Metropolitan Council has authority under Minnesota Statutes sections 473.399 to 473.3999 to plan, design, acquire, construct and equip light rail transit (LRT) facilities in the seven-county metropolitan area, as defined in Minnesota Statutes section 473.121, subdivision 2. Further, the Metropolitan Council has authority under Minnesota Statutes section 473.405, subdivision 4, and other applicable statutes, to engineer, construct, equip, and operate transit systems projects, including LRT, in the metropolitan area.
- 2. The Metropolitan Council is developing the Southwest Light Rail Transit (SWLRT) Project, a proposed approximately 15.8 mile extension of the METRO Green Line, which would operate from downtown Minneapolis to Eden Prairie.
- 3. The Metropolitan Council is working cooperatively with the Hennepin Country Regional Rail Authority (HCRRA) on the Bottineau Light Rail Transit (BLRT) Project, a proposed approximately 13 mile extension of the METRO Blue Line, which would operate from downtown Minneapolis to Brooklyn Park.
- 4. The MPRB is responsible for maintaining and developing the Minneapolis Park system to meet the needs of Minneapolis citizens and is the official with jurisdiction relating to Section 4(f) for park and recreational areas within its jurisdiction.
- 5. LRT projects involve numerous statutory and regulatory processes and coordination or engagement between multiple government units or other entities. The Parties discussed these processes with respect to property owners of park and recreation areas. A summary of those discussions is attached as Attachment A. Attachment B is a visual representation of the coordination of these activities.
- 6. The SWLRT Project's current scope and budget include the use of bridges to cross the Kenilworth Channel for freight rail, LRT and the Kenilworth Trail. The Parties discussed process and design considerations in the event the final design utilizes a bridge crossing. These process and design considerations are set forth in Attachment C.

#### NOW THEREFORE, the Parties set forth their understandings as follows:

- 1. The Metropolitan Council agrees to the terms and processes outlined in Attachments A and B with respect to park and recreation areas under the jurisdiction of the MPRB.
- 2. The Metropolitan Council and the MPRB agree to the Kenilworth Channel Crossing Process and Design Considerations for Bridge Concepts as outlined in Attachment C.
- 3. The MPRB agrees to work with the Metropolitan Council to facilitate the approval and construction of any LRT project.
- 4. .Nothing in this MOU shall be construed as limiting or affecting the legal authorities of the Parties, or as requiring the Parties to perform beyond their respective authorities.
- 5. The Parties acknowledge that the planning and construction of any LRT project will require numerous federal, state, and local processes, approvals and funding commitments. The SWLRT Project is currently in the Project Development phase of the federal New Starts program and a substantial amount of design, engineering, environmental review, and funding commitments must occur before construction can begin. Any LRT project cannot proceed without the issuance of the Record of Decision by the FTA and funding of the Project, including the Full Funding Grant Agreement from the FTA.
- 6. Nothing in this MOU shall require the Metropolitan Council or the MPRB to take any action or make any decision that will prejudice or compromise any processes required under state or federal environmental or other laws or regulations. This MOU further does not limit the alternatives or mitigative measures that the Metropolitan Council may undertake in the development and construction of any LRT project.

# MINNEAPOLIS PARK & RECREATION IN BOARD

#### **METROPOLITAN COUNCIL**

By Its: President	By Its: Regional Administrator
By Its: Secretary	Date
Date	

Approved as to form:

Attorney

#### Attachment A LRT Project Coordination Park and Recreation Areas

Attachment B outlines critical coordination opportunities and process changes that will be implemented by the Metropolitan Council with property owners of park and recreation areas. These processes are designed to support the protection of park and recreation areas by fully integrating consideration of these important resources into project development, engineering and construction processes and activities. This includes exercising full authority under the National Environmental Policy Act of 1969 (NEPA), the Minnesota Environmental Policy Act (MEPA) and Section 4(f) of the Department of Transportation Act of 1966. Specifically, these coordination opportunities ensure the protection of park and recreation areas are addressed early under these processes and continue through the construction of the LRT project. The exhibit identifies five new coordination opportunities and process changes (see below) that will be incorporated into the appropriate Metropolitan Council's LRT Project Office Procedures. The Metropolitan Council agrees to update these administrative procedures effective March 12, 2015.

**Coordination Opportunities and Process Changes** 

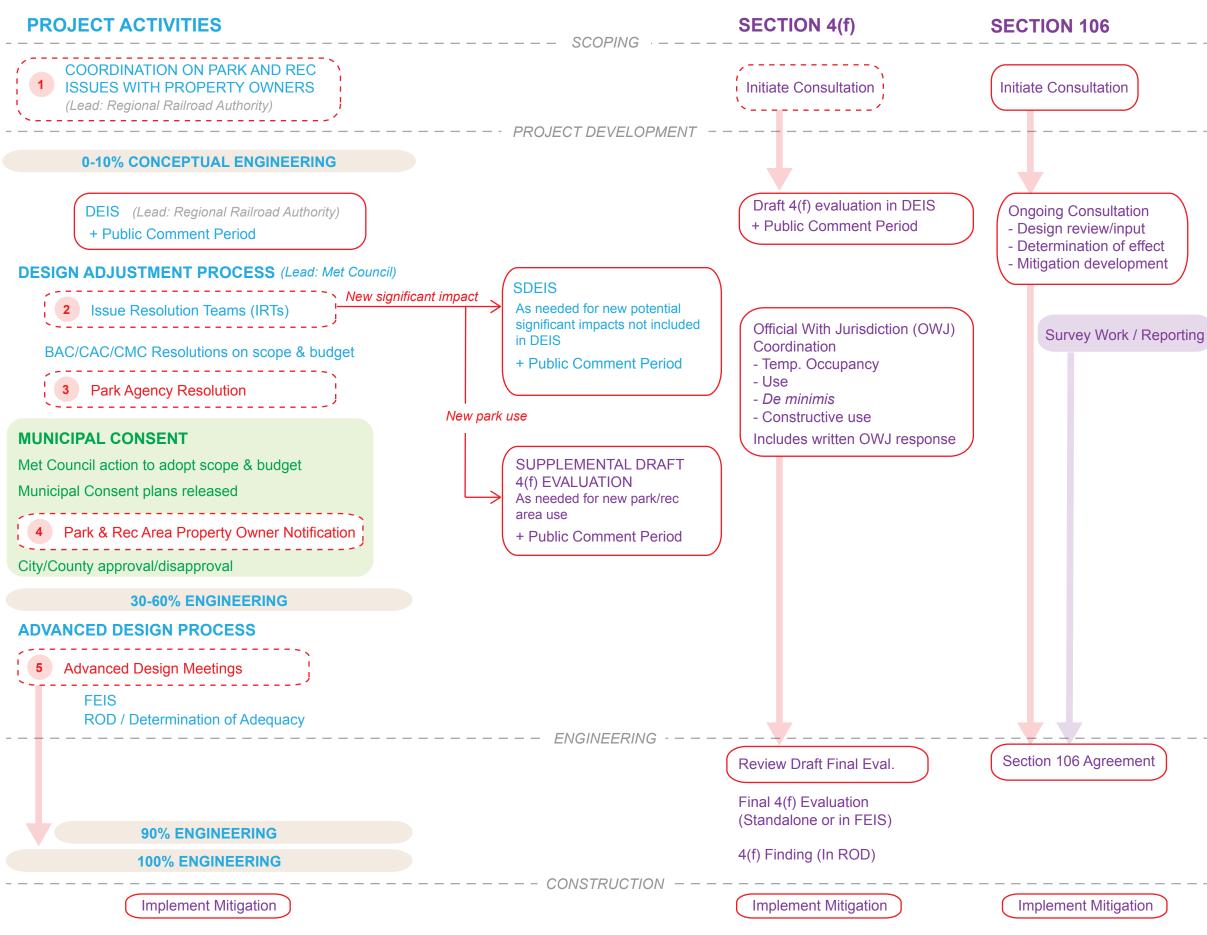
- 1. Scoping and Planning Engagement: In accordance with NEPA and Section 4(f) requirements, the lead project agency(ies) will work with park and recreation area property owners to identify park properties and conduct a preliminary review of potential impacts to parks and Section 4(f) avoidance and mitigation alternatives during the scoping and planning process. Since this element of the process would likely be led by the responsible regional railroad authority, the Metropolitan Council will coordinate with the regional railroad authority to address issues and concerns for park properties during the scoping process and review the Scoping Report and/or applicable planning documentation on park and recreation areas when it assumes responsibility for the project.
- 2. Park and Recreation Area Issue Resolution Team (IRT): In addition to other identified IRTs, there will be an IRT specifically focused on park and recreation areas within the project study area. The IRT will be comprised of property owners of those park and recreation areas in the project study area. The purpose of the IRT will be to incorporate the protection of park properties and the Draft Section 4(f) Evaluation into the design adjustment process. The IRT process will also include other applicable topics that would involve affected park properties, including but not limited to design adjustments, Section 106 status, Section 4(f) status, NEPA/MEPA status, Municipal Consent Plans, and 30% design plans.
- Park and Recreation Area Property Owner Resolution: Prior to the Metropolitan Council action to adopt the scope and budget initiating the Municipal Consent process, the park and recreation area property owner may take a resolution indicating its position on the project scope and budget.
- 4. Park and Recreation Area Property Owner Notification of Changes: If, during the Municipal Consent process, the Metropolitan Council, city, town, or county propose a substantial change to the preliminary design plans for a park or recreation area, the Metropolitan Council will notify

the park and recreation area property owner of the proposed change and identify the next steps and timeframe in the Municipal Consent process, thereby allowing the property owner to provide input to the Council, city, town, or county.

5. Advanced Design Meetings: Park and recreation area property owners will have the opportunity to participate in the advanced design process including design coordination on project elements that impact park and recreation areas, as well as conducting 60% and 90% design plan reviews.

# **Attachment B: LRT Project Coordination**

Parks and Recreation Areas



9.1.c

# **COORDINATION OPPORTUNITIES** Existing New SCOPING ENGAGEMENT Identify park properties and preliminary review of park impacts PARK AND REC AREA 2 ISSUE RESOLUTION TEAM (IRT) In addition to regular IRTs, to incorporate park properties and draft 4(f) evaluation into design adjustment process (w/ park owners and project office) IRT presentations as requested by stakeholders: - design adjustments

- 106 status
- 4(f) status
- NEPA status
- Municipal Consent plans
- 30% plans

PARK AGENCY RESOLUTION

On park and recreation area impacts based on current design

#### PARK AND REC AREA PROPERTY OWNER NOTIFICATION

Notice of any changes to municipal consent plans that may impact park and rec areas

ADVANCED DESIGN MEETINGS

Address park properties in design process (with park owners and project office) including:

- design coordination
- 60% plan review
- 90% plan review

#### ACRONYMS:

5

DEIS: Draft Environmental Impact Statement FEIS: Final Environmental Impact Statement OWJ: Official With Jurisdiction ROD: Record of Decision SDEIS: Supplemental Draft Environmental Impact Statement

Attachment: MPRB-Council MOU Bridges - Attach C 2-26-15 (2015-139 : SWLRT Kenilworth Channel Crossing)

#### Attachment C Kenilworth Channel Crossing Process and Design Considerations for Bridge Concepts

20 February 2015

#### Overview

To aid in advancing the design of bridge concepts for the crossing of the Kenilworth Channel, this document frames a process of collaboration between the Southwest LRT Project Office (SPO) and the Minneapolis Park and Recreation Board (MPRB) and outlines a set of parameters intended to guide further exploration of bridge concepts beginning with a conceptual perspective and eventually arriving at a mutually supportable design.

In describing both a process to follow as well as design principles, it is understood there is work that *has been accomplished* and additional work that will continue using the design principles outlined in this attachment. The goals of this effort are to:

- encourage collaboration between SPO and MPRB in defining design directions that satisfy concerns raised by MPRB in its review of the SWLRT alignment in the area of the Kenilworth Channel;
- incorporate strategies or features in the design of a bridge that respond to findings of MPRB's study of channel crossing concepts; and
- allow for the eventual implementation of bridge crossings of the channel for freight rail, light rail, and the Kenilworth Trail in ways that maintain the feasibility, budget and schedule of the SWLRT project.

In pursuing a process focused on design, SPO and MPRB recognize the effort to be more aspirational than prescriptive. Steps of the design process may focus on history, user experience, environmental context, or structure relationships in varying ways.

#### Process

The process pursued in the design of the bridges recognizes concurrent and ongoing required reviews facilitated by SPO and other project design work in the same corridor, some of which may influence bridge designs as a result of proximity to the Kenilworth Channel. Bridge design activities will be coordinated to align with existing schedules established by SPO for Section 4(f) and Section 106, and the Kenilworth Landscape Design Consultant activities. Schedules for those processes will be defined separately from this document.

9.1.d

Bridge concepts and design refinements will be presented by SPO as a part of meetings that address topics related to the Kenilworth corridor or areas near the Kenilworth Channel that are influenced by the alignment of SWLRT. For these efforts, MPRB staff may participate in presentations to support the design.

SPO and MPRB commit the resources of key staff to effect the process of creating a supportable bridge design.

#### **Design Milestones**

Work related to bridge design will begin immediately and be pursued according to the following schedule (note that reviews noted above will be required as a part of the schedule described below; note also that the term "bridge," as used in the following table, may apply to any configuration of single or multiple bridges required for the channel crossing):

Task			
1	Establish design criteria, environmental mitigation strategies, and concept directions (narrative descriptions)	SPO/MPRB	Q1 2015
2	Review and finalize design criteria, environmental mitigation strategies, and narrative concepts; compare to directions from previous bridge design work	SPO/MPRB	
3	Explore initial design directions based on narrative concepts	SPO	
4	Develop a range of bridge design concepts	SPO	
5	Update MPRB Board of Commissioners on bridge design process; gain input on preferred directions	SPO/MPRB	
6	Coordinate with ongoing Section 4(f), Section 106 and Kenilworth Landscape Design Consultant activities	SPO	Ongoing
6	Select a preferred bridge design direction	MPRB	
7	Develop 60 percent bridge design documents	SPO	
8	Conduct 60 percent formal reviews	MPRB	Q3 2015
9	Develop 90 percent bridge design documents	SPO	
10	Conduct 90 percent formal reviews	MPRB	Q1 2016
11	Complete final bridge design	SPO	Q2 2016

The tasks described will be pursued collaboratively to the extent practicable, with production work related to concept documentation, design refinements, and presentation materials being the primary responsibility of SPO with coordination and review by MPRB.

#### Design Principles

The design of the bridge crossing may introduce forms other than those defined in previously shared bridge design concepts. The process should result in distinct bridge concepts that can be assessed for their ability to resolve impacts identified by MPRB in its process of studying tunnel alternatives. <sup>1</sup>

The bridge designs may follow the following conceptual design principles:

- a) Bridges are defined primarily by structural design requirements, and considering, at a minimum:
  - a. Separation of freight, LRT, and trail bridges
  - b. Exploration of pier and deck configurations aimed at reducing piers in the channel while maintaining desired vertical clearances in the channel
  - c. Use of other structure types based on structural requirements (loading, deflection)
- b) Bridges are defined primarily by the context of the channel and its users, and considering, at a minimum:
  - a. User-focused experience with few or no penetrations of the channel
  - b. Elimination of roosts on the underside of the bridge or piers
  - c. Minimization of continuous deck expanse in order to bring more light to channel
- c) Bridges are defined primarily by the context of the Grand Rounds, and considering, at a minimum:
  - a. Reference to other bridges in the Chain of Lakes Regional Park, using the form, scale, materials, color, and details to influence the design without mimicry
  - b. Creation of a contrast with historical channel elements (WPA walls) to clearly separate the newly introduced structures from those elements currently considered contributing to its historic nature
  - c. Recognition that there was no trail bridge at this location, that the railroad bridge that was constructed does not match other nearby railroad bridges, and that new bridges may not need to reference those other structures
- d) Bridges are defined primarily by their relationships to one another, and considering, at a minimum:
  - a. Creation of a series of bridges all based on the same structural system, style, mass, and detail (no distinction by use)
  - b. Establishment of freight and rail bridges based on the same structural system, style, mass, and detail, with a trail bridge employing a different structural system, style, mass, and detail (distinction by use)
  - c. Creation of a "family" of structures, focused on coherency but allowing each to be different based on structure type and use

Through the Section 106 consultation process, directions for bridge form, configuration, and details have been proposed and may be incorporated into the conceptual design principles described above, including:

a) Related to Bridge Concepts:

page 3

<sup>&</sup>lt;sup>1</sup> The MPRB undertook a study of the channel crossing and determined visual quality and noise as the MPRB's highest priorities for consideration in the design of the bridge.

9.1.d

- a. Design investigation in coordination with Section 106 process and Secretary of Interior Standards
- b. Tested with structural engineering
- b) Aesthetic Considerations
  - a. Space for banks between abutments and water
  - b. Symmetry
  - c. Consistency of elevations: curbs, railings and fencing
- c) Summary of Consulting Party input (Nov. 2014)
  - a. Maximize natural light between bridges
  - b. Importance of bank engagement: vegetation restoration and bank walls; bridge abutments and retaining wall
  - c. Create more space for skiers and kayakers
  - d. Natural materials, dark colors
  - e. Utilitarian, non-ornamental
  - f. Re-interpretation of existing bridge
  - g. Modern construction techniques

Designs shall demonstrate the relationship to the concepts framed (or as refined through the process) through illustrations and supporting narrative descriptions and be augmented by precedent images or other information supportive of the concept.

My Passport for Mac:michaelschroeder:Desktop:Minneapolis Park and Recreation Board:SWLRT:Kenilworth Crossing bridges, process and design, 20150218.docx

March \_\_, 2015

Minneapolis Parks and Recreation Board Superintendent Jayne Miller 2117 W River Road Minneapolis, MN 55411

#### Re: Engineering Consultant's Report on the Kenilworth Channel

Dear Superintendent Miller:

This letter is a follow-up to recent discussions between the Metropolitan Council (Council) and the Minneapolis Park and Recreation Board (MPRB) about the Kenilworth Channel and 4(f) analysis under Section 4(f) of the Department of Transportation Act of 1966. The MPRB is an official with jurisdiction under the federal 4(f) statutes and regulations and hired an engineering consultant to study a tunnel option under the Kenilworth Channel.

The Council will benefit from analysis conducted by the Park Board commissioned engineering study to further evaluate tunnel alternatives under the channel. This information will help inform the 4(f) analysis that will be addressed in the Supplemental Environmental Impact Statement (SDEIS) and the final 4(f) analysis. The Council proposes the following:

- To help cover the costs of the MPRB's consultant study, the Council will reimburse the MPRB: (a) fifty percent (50%) of the MPRB's engineering consultant costs or \$250,000, whichever amount is less; and (b) \$21,500 for MPRB staff work associated with the preparation of that report. The \$21,500 is in addition to the reimbursement for engineering consultant costs.
- 2. The MPRB will provide the Council with a copy of the report and any underlying data that may have been collected for the report if those data will help the Council complete its 4(f) analysis.
- The MPRB will submit an invoice with supporting documentation showing actual MPRB expenditures for the consultant report.
- 4. The Council will reimburse the MPRB within thirty days after receiving the invoice and supporting documentation.
- 5. The Council will reimburse the MPRB for any future MPRB staff work performed on behalf of the SWLRT Project consistent with the Project's standard protocol for reimbursement of Project partners' staff work and pursuant to the terms of a future Master Funding Agreement and Subordinate Funding Agreements between the MPRB and the Council.

If this reimbursement proposal is acceptable to the MPRB, please sign below and return a copy of this letter to me for the Council's contract files.

Accepted on behalf of the Minneapolis Park and Recreation Board

By:

Sincerely,

Patrick P. Born Regional Administrator

Patrick I Regiona





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4. Materials from Official With Jurisdiction Meetings, February and March 2015 (agenda, notes, handouts)

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Minneapolis Park and Recreation Board Meeting February 13, 2015

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Meeting Title:	Section 4(f) Coordination – Parks within the City of Minneapolis			
Date:	02/13/2015 <b>Time:</b> 1:00 p.m. <b>Duration:</b> 1.5 hour			
Location:	SPO Conf. Rm. A			
Meeting called by:	Call in #: 1 (872) 240-3412; code: 751-213-109 GoToMeeting: <u>https://global.gotomeeting.com/join/751213109</u> Nani Jacobson Assistant Director Environmental & Agreements			
Invitees:	Nani Jacobson, Assistant Director, Environmental & Agreements MPRB: Jennifer Ringold, Renay Leone, Michael Schroeder City of Minneapolis: Paul Miller Hennepin County: Kimberly Zlimen FTA (phone): Maya Sarna, Amy Zaref SPO: Jim Alexander, Ryan Kronzer, Mark Bishop, Jeanne Witzig, Leon Skiles, Michael Hoffman (phone)			
Purpose of Meeting:	Discuss 4(f) properties under jurisdiction of the City and/or MPRB, 4(f) process and analysis.			

Agenda			
1:00-1:05 pm	1. Welcome and Introductions		
1:05-1:15 pm	2. Overview of Section 4(f) Requirements (handout)		
1:15 – 1:30 pm	3. Overview of SWLRT 4(f) Process (handout)		
1:30 – 2:00 pm	<ul> <li>4. Section 4(f) Properties within the City of Minneapolis and the Project Study Area – with potential Section 4(f) Use, <i>de minimis</i> Use or Temporary Occupancy (handout):</li> <li>a. Kenilworth Lagoon Recreational Easement (MPRB/City of Minneapolis)</li> <li>b. Cedar Lake Park – East Cedar Beach (MPRB)</li> <li>c. Cedar Lake Park – Cedar Lake Junction (MPRB)</li> <li>d. Bryn Mawr Park (MPRB)</li> </ul>		
2:00 – 2:15pm	<ul> <li>5. Section 4(f) Properties within the City of Minneapolis and the Project Study Area – with potential proximity impacts (handout):</li> <li>a. Alcott Triangle (MPRB)</li> <li>b. Park Siding Park (MPRB)</li> <li>c. Lake of the Isles Park (MPRB)</li> </ul>		
2:15 – 2:30pm	<ul> <li>6. Next Steps <ul> <li>a. Continued Coordination</li> <li>b. Review and discussion of Preliminary Section 4(f) Determinations</li> <li>c. Consultation on Mitigation</li> <li>d. Meetings: <ul> <li>i. February 20, 2015 from 1:00-2:30</li> </ul> </li> </ul></li></ul>		



ii.	February 27, 2015 from 2:00-3:30
iii.	March 6, 2015 – not scheduled

Discussion:		
ACTION ITEMS:	PERSON RESPONSIBLE:	DEADLINE

# **SIGN-IN SHEET**



# Section 4(f) Officials With Jurisdiction Coordination Meeting February 13, 2015 1:00 – 2:30

Name	Organization	Email	Phone
Jeanne Witzig	Kimley-Horn	1 earne witzge Kimky-	451-643-0447
Par Miller	CTTY OF MALS	paul.miller Cminneapolomu.ge	V 6/2-673-3603
Pachel Haase	Kimley-Horn	rachel. haase Okimley-hom.	
MAR BISITOP.	SPO	mark . bishop @metrokransit.o	
Kun Zlimen	HERRA	· · ·	
Jessica Galatz	HCRDA	jessica.galatz@	hennepin.us
Jennike Bangda	MPRB	J J	1
Miamer scynes of	AMPKIB	e	
JIM ALEXANI SIZ	SPO		
Vim Proix	SPO		
Vin Proix Renayleone	MPRB	rleone@minneapolispa	Ks. org 612-230 77
		11	



Meeting Title:	Section 4(f) Coordination – Parks within the City of Minneapolis – MEETING NOTES				
Date:	02/13/2015	Time:	1:00 p.m.	<b>Duration:</b> 1.5 hour	
Location:	SPO Conf. Rn	n. A			
	Call in #: 1 (872) 240-3412; code: 751-213-109				
	GoToMeeting: https://global.gotomeeting.com/join/751213109				
Meeting called by:	Nani Jacobson, Assistant Director, Environmental & Agreements				
Attendees:	MPRB: Jennifer Ringold, Renay Leone, Michael Schroeder				
	City of Minneapolis: Paul Miller				
	Hennepin County: Kimberly Zlimen, Jessica Galatz, Nelrae Succio (phone)				
	FTA (phone): Maya Sarna, Amy Zaref				
	SPO: Jim Alexander, Ryan Kronzer, Mark Bishop, Jeanne Witzig, Leon Skiles (phone), Michael Hoffman (phone), Kim Proia, Rachel Haase				
Purpose of Meeting:	Discuss 4(f) process and an	-	nder jurisdiction o	of the City and/or MPRB, 4(f)	

Agenda			
1:00 – 1:05 pm	1. Welcome and Introductions		
1:05-1:15 pm	2. Overview of Section 4(f) Requirements (handout)		
1:15 – 1:30 pm	3. Overview of SWLRT 4(f) Process (handout)		
1:30 – 2:00 pm	<ul> <li>4. Section 4(f) Properties within the City of Minneapolis and the Project Study Area – with potential Section 4(f) Use, <i>de minimis</i> Use or Temporary Occupancy (handout):</li> <li>a. Kenilworth Lagoon Recreational Easement (MPRB/City of Minneapolis)</li> <li>b. Cedar Lake Park – East Cedar Beach (MPRB)</li> <li>c. Cedar Lake Park – Cedar Lake Junction (MPRB)</li> <li>d. Bryn Mawr Park (MPRB)</li> </ul>		
2:00 – 2:15pm	<ul> <li>5. Section 4(f) Properties within the City of Minneapolis and the Project Study Area – with potential proximity impacts (handout):</li> <li>a. Alcott Triangle (MPRB)</li> <li>b. Park Siding Park (MPRB)</li> <li>c. Lake of the Isles Park (MPRB)</li> </ul>		
2:15 – 2:30pm	<ul> <li>6. Next Steps <ul> <li>a. Continued Coordination</li> <li>b. Review and discussion of Preliminary Section 4(f) Determinations</li> <li>c. Consultation on Mitigation</li> <li>d. Meetings: <ul> <li>i. February 20, 2015 from 1:00-2:30</li> </ul> </li> </ul></li></ul>		



ii.	February 27, 2015 from 2:00-3:30
iii.	March 6, 2015 – not scheduled

#### DISCUSSION:

- 1. Welcome and Introductions
- 2. Overview of Section 4(f) Requirements
  - Refer to handout titled "Section 4f of the Department of Transportation Act Overview"
  - Section 4(f) is a DOT law that prohibits transportation projects from using a qualifying park/recreation area, historic site, or wildlife/waterfowl refuge unless there is no prudent and feasible avoidance alternative or the use would be *de minimis*
  - The 4(f) evaluation to date in the Draft EIS identified all 4(f) properties that would be impacted by the project
  - The list of impacted properties has been updated based on advances in design able to avoid some properties, some information was corrected, and some new 4(f) properties that could be impacted were identified
  - "Use" is permanent incorporation of any portion of a 4(f) property into a project through the fee simple acquisition of the property or acquiring a property right that allows permanent access to the property (e.g., easement)
  - See handout for other definitions of impacts under Section 4(f) including:
    - o Constructive use
    - o De minimis impact
    - Temporary occupancy
  - Eligibility requirements for a 4(f) park/recreation area include:
    - o Primary purpose of the property is recreation
    - o Property is publically owned, publically accessible, and of local significance
  - Who is the Official with Jurisdiction (OWJ) for 4(f) properties?
    - o Parks: the agency/agencies that own or administer the 4(f) property
    - Historic sites: State Historic Preservation Office (SHPO)
  - How are Section 4(f) and Section 106 related?
    - The Section 106 process determines the eligibility of historic/archaeological resources for potential 4(f) protection and the level of 4(f) use
- 3. Overview of SWLRT 4(f) Process
  - Refer to handout titled "Southwest LRT Section 4(f) Process"
  - The Draft EIS included a Draft Section 4(f) Evaluation with a comment period
    - The Department of Interior (DOI) commented on the 4(f) evaluation but did not say it needed to be redone
  - Following the publication of the Draft EIS, the Locally Preferred Alternative (LPA) underwent design adjustments as the Project advanced from conceptual design to preliminary design



- There were significant changes during that time (e.g., changed location of freight rail went from relocation to co-location, which required a Supplemental Draft EIS (SDEIS))
- Process concluded in July 2014 and the Metropolitan Council adopted the project's scope and budget
- Preliminary Engineering (PE) plans identified historic properties, started to identify avoidance, minimization, and mitigation measures
- Currently the project is in the impact determination stage for historic properties (106 process)
  - Will be working with SHPO on the Kenilworth Lagoon/Channel and Grand Rounds Historic District
- The SDEIS will be published with an update to the Draft 4(f) Evaluation
- The Final EIS and Record of Decision (ROD) will include a Final Section 4(f) Evaluation and Determination
- 2. Section 4(f) Properties within the City of Minneapolis and the Project Study Area with potential Section 4(f) Use, *de minimis* Use, or Temporary Occupancy:
  - *Refer to handout titled "Southwest LRT Project: Current Preliminary Status of Section 4(f) Park Properties within the City of Minneapolis"*
- 3. Kenilworth Lagoon Recreational Easement (MPRB/City of Minneapolis)
  - Per Nani: Project has the easement from 1912 with City and MPRB for recreational use of the channel, therefore considers both as Officials With Jurisdiction (OWJ)
  - Clarification from MPRB:
    - o Condemned right-of-way for channel for park purposes
    - o Condemnation by the Park Board (separate from the City)
    - Agreement was between the Park Board and the parties named in the condemnation (two railroads and an individual)
    - Language in condemnation was likely along the lines of "City acting by and through" (needs to be verified)
    - o City was not signatory to agreement
    - MPRB legal counsel can be engaged to help explain relationship
  - There is overlap between the recreational easement and the Grand Rounds Historic District
    - The Kenilworth Lagoon (as part of the Grand Rounds Historic District) will be forwarded in the Section 4(f) analysis under two distinct property classes—the historic property and the easement property.
      - The historic property definition received an "adverse effect" determination under the Section 106 process; therefore, an individual Section 4(f) evaluation will be prepared under a non-de minimis "use" analysis. The MPRB "jacked box" tunnel alternative will be evaluated within this individual evaluation process.
      - FTA and the SPO believe the easement property definition may be forwarded under a de minimis "use" analysis.
    - Action: FTA and SPO would like feedback from MPRB on the type of use under Section 4(f)- specifically for the easement property.
    - o If it is a de minimis use: document in project file and move forward with design (would



need written concurrence from OWJ for completion of documentation)

- o If it is a non-de minimis use: prepare an individual 4(f) evaluation
- All construction and permanent impacts stay within the combined boundary of the BNSF and HCRRA parcels
  - Parcel lines are based on Alta land survey and the project has full title work for the parcels (worked with MnDOT right-of-way staff to obtain titles, etc.)

#### a. Action: MPRB requested the final title work

- o The easement overlaps the BNSF and HCRRA properties in the channel area
  - a. New (replacement) piers placed in channel are being discussed as part of the 106 process
- There will be temporary impacts to the channel as part of construction the project is further defining what these impacts would be based on design and construction plans
- There will be a Section 4(f) use permanent incorporation of piers into the channel in the recreational easement
  - o The piers will be in different location than the current piers
  - There may be fewer piers that currently exist based on the design of the bridge. Longer spans are being considered as part of the evaluation (longer spans would require larger structures)
- FTA (Maya):
  - The OWJ will have multiple opportunities to comment and provide input on how the 4(f) evaluation should move forward, including input on mitigation and avoidance alternatives
  - FTA needs to understand how the MPRB wants to move forward for the easement property definition.
  - The easement is essentially receiving double analysis (from both the park/recreation and historic sides of Section 4(f))
  - FTA believes the impact would qualify as *de minimis* as the project would not change any attributes related to why the easement was provided (recreational use) but understands that the MPRB has a significant view on it too
- 4. Cedar Lake Park East Cedar Beach (MPRB)
  - There was a memorandum of understanding (MOU) between the City and Met Council last year to determine improvements as part of project, which included:
    - Improvements to access to East Cedar Beach: wayfinding kiosks, improving connection to beach (walkway connection from 21<sup>st</sup> Street station area to the beach)
      - a. Stakeholder process last summer
      - b. Incorporate into municipal consent documents and then plans
  - Key issue: Sidewalk would transition from public street to MPRB property. Action: Would it be a city sidelwalk or owned by the MPRB?

 Could stop the sidewalk short of MPRB property but that might not accomplish the intent of the MOU

- 0 Ownership of the sidewalk on park property will inform 4(f) engagement.
- o If owned by others than MPRB What type of use does the MPRB consider that (de



minimis or non-de minimis)?

- If the sidewalk were owned by the MPRB then it would likely be a Temporary Occupancy under 4(f)
- o Issues to consider:
  - a. The City would most likely do snow removal on its part of the sidewalk
  - b. The MPRB would be doing snow plowing on the Kenilworth Trail
- FTA and SPO seeking feedback from MPRB on the type of Section 4(f) analysis to forward for this property, regardless of ownership decisions.
- The BNSF parcel nearby is about 52 feet wide
  - The MPRB believes that in the 1950s BNSF transferred a piece of the parcel to the MPRB and reiterated that they would like to see the title work
  - The Project is currently proceeding as if BNSF owns the whole parcel
- 5. Cedar Lake Park Cedar Lake Junction (MPRB)
  - The existing North Cedar Lake Trail is within park property
  - Current design has Cedar Lake Trail crossing over the Kenilworth Trail on a bridge structure and tying into the existing trail network
  - The bridge structure would start on HCRRA property and extend onto MPRB property
  - The revised trail alignment and new bridge structure would be on park property
  - Action: Who is going to own it?
    - If the MPRB owned the pedestrian overpass, then the impact would be temporary occupancy during construction
  - If it were owned by someone else, then it would be temporary occupancy plus *de minimis* or non*de minimis* useFTA and SPO seeking feedback from MPRB on the type of Section 4(f) analysis to forward for this property.

o Considerations:

- a. The Three Rivers Park District's ownership of the Cedar Lake Trail starts west of Hwy 100
- b. The City built the trail so it is thought of as a City owned trail on others property (i.e., MPRB, HCRRA, Three Rivers Park District)
- c. City does inspections
- d. Data will be needed to understand what would be agreed to with ownership
  - i. Maintenance equipment need proper bridge design to accommodate
  - ii. Loring Park bike bridge that connects to Bryant might be an example
- 6. Bryn Mawr Park (MPRB)
  - Luce Line Trail bridge built as part of I-394 project and owned by MnDOT; MPRB does maintenance
  - Project would be removing existing bridge and replacing it with a bridge on a new alignment

     Part of MOU discussions last year



- The bridge would parallel/sit in MPRB property some retaining walls and grading would be needed to tie back into the existing trail in the park
- SPO would like any information on easements or other documentation regarding how the trail bridge sits in the park currently
- The new bridge alignment was put in as placeholder still need to sort out true alignment of what it wants to be
  - The bridge is meant to minimize the impact to the park as much as possible there could be a more optimal alignment with more impacts to park but that would need to be discussed
  - o Also need to consider the location of overhead power lines
  - Action: Who will own the portion on park property?
- Action: Who will own the portion outside of park property?
  - o Up for discussion MnDOT would prefer not to own the bridge moving forward
- Stations areas will ultimately be owned by the Met Council

General discussion regarding Section 4(f) Properties with potential Section 4(f) use, *de minimis* use, or Temporary Occupancy

• How do we move along the ownership questions for the sidewalk in Cedar Lake Park – East Cedar Beach, the bridge in Cedar Lake Park – Cedar Lake Junction, and the bridge in Bryn Mawr Park?

• Conversations around long term ownership and maintenance responsibilities will take longer to figure out but would like to start soon

- Who will own the bridge over the Kenilworth Channel?
  - o Existing bridges owned by HCRRA (freight rail and trail)
  - $\circ$  In the future freight would be publically owned by an agency to be determined (but not HCRRA)
    - a. LRT bridge would be owned by the Met Council
    - b. Pedestrian bridge ownership is to be determined
  - o Does easement change parties as well?
    - a. Easement tied to title and transfers with title under property acquisition or transfer
- 4. Section 4(f) Properties within the City of Minneapolis and the Project Study Area with potential proximity impacts (handout):
  - *Refer to handout titled "Southwest LRT Project: Current Preliminary Status of Section 4(f) Park Properties within the City of Minneapolis"*
  - Proximity impacts occur when the project is not physically on park property
    - The study area is 350 feet on either side of alignment
  - The following parks are within the study area but there will be no physical incorporation of the park into the project
    - Alcott Triangle (MPRB)
    - Park Siding Park (MPRB)
    - o Lake of the Isles Park (MPRB)



- Cedar Lake Pkwy is being treated as a historic resource preliminary finding of no adverse impacts based on current design; working with SHPO
- Looking at tunnel under the parkway so there would be a very small shift in elevation (few inches) reestablishment of exiting conditions in terms of freight tracks and trails

### 5. Next Steps

- Continued Coordination
  - o Essential questions that need to be answered for the evaluation in the SDEIS
    - Type of use for the Lagoon easement property
    - Ownership questions might not be possible to have answers in next couple weeks; Nani and Maya to discuss 4(f) evaluation for those areas for which we aren't sure of the 4(f) landscape yet
      - Don't want to hold up SDEIS for ownership questions
      - MPRB will provide a path to resolve ownership questions
      - City will have internal discussion re: their ownership process
      - City and MPRB may set up preliminary conversation to discuss
  - SPO to provide parcel info to the MPRB
  - Would be ideal for FTA if all questions raised today could be answered, otherwise there is a chance the 4(f) evaluation would be published and then new information could cause a second 4(f) evaluation to be needed; FTA would prefer to avoid that
  - FTA indicated that MPRB's can make preliminary determination on how to forward the Section 4(f) analysis for the properties where ownership determination is unknown currently
  - Met Council will be meeting with all OWJs separately (Eden Prairie Purgatory Creek Park and SHPO historic properties)
- Review and Discussion of Preliminary Section 4(f) Determinations
- Consultation on Mitigation
  - Farther down the road
- Meetings
  - o February 20, 2015 from 1:00-2:30
    - Planned to be used to discuss the canal right of way easement
  - February 27, 2015 from 2:00-3:30
  - March 6, 2015 to be scheduled
  - March 13, 2015 to be scheduled



ACTION ITEMS:	PERSON RESPONSIBLE:	DEADLINE:
Provide title work to MPRB for all areas impacting parks	SPO – Nani Jacobson	Complete – 3/3/15
MPRB to provide information requested from SPO on 1/29/2015	MPRB	First installation – Complete – 2/16/2015 Remaining information – TBD
Meeting to discuss canal ROW easement	All	March
Determine ownership of ped bridges and East Cedar Beach project elements	City, MPRB	City/MPRB to hold meetings and continue discussion; provide status at next meeting
Provide feedback on Channel/Lagoon use(s)	MPRB	TBD – next few weeks
Input on preliminary 4(f) determinations	MPRB and City	TBD – next few weeks

### Section 4(f) of the Department of Transportation Act Overview

### 1. What is the intent of Section 4(f)?

• To prohibit a transportation project from using a qualifying park/recreation area, historic site or wildlife/ waterfowl refuge, unless there is no prudent and feasible avoidance alternative or the use would be *de minimis* 

### 2. What is a 4(f) Use?

- The permanent incorporation of any portion of a 4(f) property into a project through the fee simple acquisition of the property or acquiring a property right that allows permanent access to the property (e.g., easement)
- Use has a greater than *de minimis* impact (*de minimis* = no adverse effect to the activities, features or attributes of the 4(f) property, after minimization and mitigation)
- A proximity impact (e.g., noise, visual) that substantially impairs use of the property = Constructive Use
- A short-term construction use that cannot meet five Temporary Occupancy criteria

### 3. What is a *de minimis* impact?

 (1) For historic sites, a Section 106 finding of no adverse effect or no historic properties affected on a historic property, or (2) For parks, recreation areas, and wildlife and waterfowl refuges, the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f).

### 4. What is a Constructive Use?

Occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features or attributes of the property are substantially diminished.

### 5. What is a Temporary Occupancy?

- Temporary occupancies of land that are so minimal as to not constitute a use under 4(f). These must meet:
  - Duration must be temporary, i.e. less than the time needed for construction of the project and no change in ownership of the land
  - Scope of work must be minor, i.e. both the nature and magnitude of the changes to the 4(f) property are minimal
  - No anticipated permanent adverse physical impacts, nor will it interfere with protected activities, features or attributes of the property
  - The land being used must be fully restored (returned to a condition which is at least as good as that which existed prior to the project)
  - Documented agreement with the official(s) with jurisdiction

### 6. How is the eligibility of a 4(f) park/recreation area determined?

- Primary purpose of the property is recreation
- Property is publically-owned, publically-accessible and of local significance

### 7. What is an Official with Jurisdiction?

- Parks: Officials with the agency/ies that own or administer the 4(f) property
- Historic sites: SHPO

### 8. How are Section 4(f) and Section 106 related?

- Section 106 process determines the eligibility of historic/archaeological resources for potential 4(f) protection
- Section 106 determines level of 4(f) use (e.g., use + no adverse effect = de minimis; use + adverse effect = non-de-minimis 4(f) use)
- 106 Agreement documents 4(f) All Possible Planning to Minimize Harm

### 9. What is a Feasible and Prudent Avoidance Alternative?

- Completely avoids the permanent use of a 4(f) property
- Feasibility: Can be built as a matter of sound engineering
- Prudence: No severe problems that outweigh protecting the 4(f) property, considering:
  - Meeting Purpose/Need
  - o Safety
  - o Severe impacts (after mitigation)
  - o Extraordinary costs
  - Unique problems/factors
  - o Cumulative impact of multiple factors

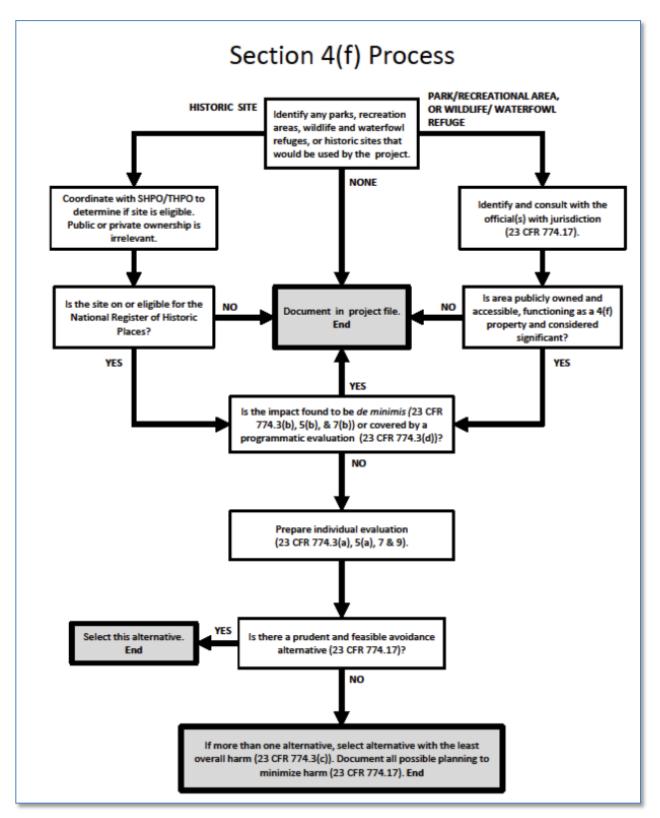
### 10. What happens if the LPA uses a protected property?

- FTA issues a 4(f) Evaluation (draft and final), including three required determinations:
  - o There is No Prudent/Feasible Avoidance Alternative
  - All Possible Planning to Minimize Harm has occurred (includes all reasonable mitigation measures)
  - o LPA must have Least Overall Harm compared to other alternatives that have a 4(f) use

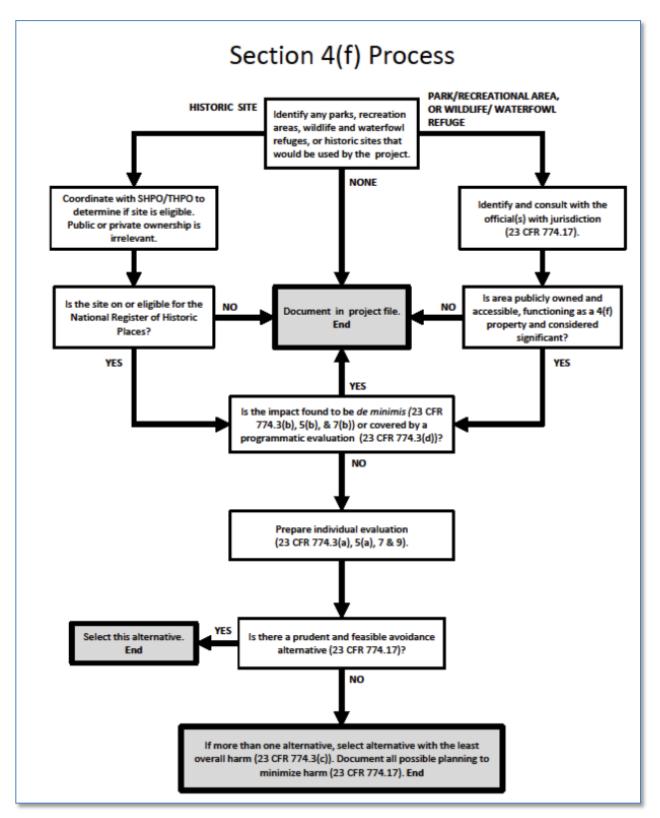
### 11. What is a Least Overall Harm Analysis?

- When there is no feasible and prudent avoidance alternative, the comparison of the LPA with other alternatives under consideration that would have a use of any 4(f) property
- Comparative criteria used to reach the determination:
  - Relative value of and impacts to 4(f) properties, after similar mitigation efforts criteria:
    - Ability to mitigate adverse impacts to each 4(f) property
    - Relative severity of harm to protected characteristics of the 4(f) properties (after mitigation)
    - Relative significance of the 4(f) properties
    - Views of officials with jurisdiction over the 4(f) properties
  - Consideration of substantial problem/s criteria:
    - Degree to which the alternative meets P&N
    - Magnitude of adverse impacts to non-4(f) resources (after mitigation)
    - Substantial cost differences
- Only the alternative/s with the Least Overall Harm may be approved by FTA

Sources: 23 USC 138; 49 USC 303; 23 CFR Part 774; *Section 4(f) Policy Paper* (USDOT: July 20, 2012)

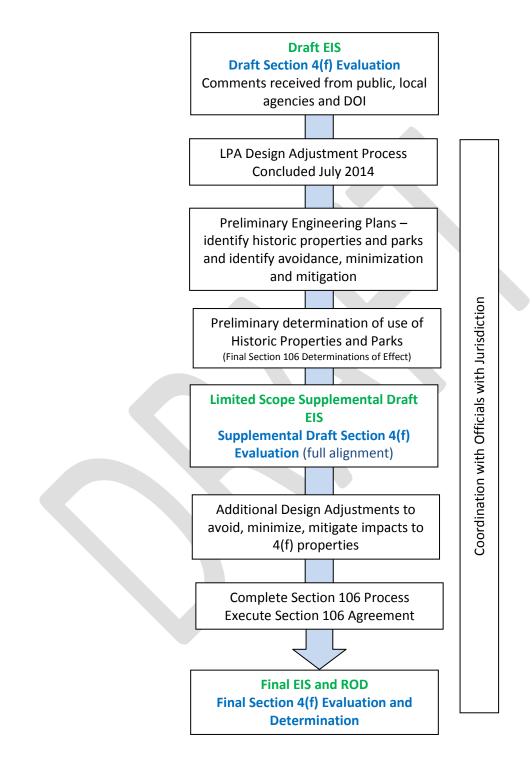


Source: Section 4(f) Policy Paper (p. 62; USDOT: July 20, 2012)



Source: Section 4(f) Policy Paper (p. 62; USDOT: July 20, 2012)

### Southwest LRT Section 4(f) Process





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# Legend

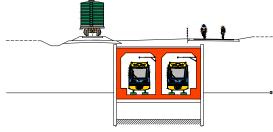
**Recreation Easement** 

Grand Rounds Historic District

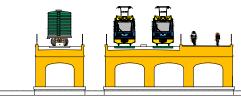
Hennepin County Parcels







TYPICAL SECTION AT TUNNEL



TYPICAL SECTION AT BRIDGE

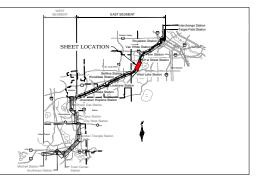
# SOUTHWEST LRT ALIGNMENT

SEGMENT E3 - MINNEAPOLIS CEDAR LAKE PKWY CROSSING PRELIMINARY ENGINEERING PLAN

COLOR LEGEND				
	LRT TRACK AREA	$\mathbf{\Theta}$	EXISTING SIGNALIZED INTERSECTION	
	PEDESTRIAN / SIDEWALK AREA		PROPOSED SIGNALIZED INTERSECTION	
	STATION PLATFORM	$\searrow$	TRACTION POWER SUBSTATION	
	TUNNEL	Here was a second s	SYSTEMS BUILDING (DESIGN VARIES)	
	ROADWAY	H	GATE ARM	
	TRAIL / BIKEWAY		TOTAL PROPERTY ACQUISITION	
	SURFACE PARKING		PARTIAL PROPERTY ACQUSITION	
	BRIDGE		RIGHT OF WAY PROPERTY LINE	
	RETAINING WALL		TEMPORARY CONSTRUCTION EASEMENT	

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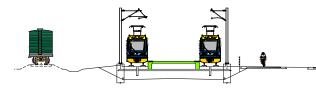






(21)







TYPICAL SECTION AT STATION

SOUTHWEST

TYPICAL SECTION AT TRACK

# SOUTHWEST LRT ALIGNMENT

SEGMENT E3 - MINNEAPOLIS 21ST ST STATION PRELIMINARY ENGINEERING PLAN

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LRT TRACK AREA	$\mathbf{\Theta}$	EXISTING SIGNALIZ	ED INTERSECTION
PEDESTRIAN / SIDEWALK AREA		PROPOSED SIGNAL	IZED INTERSECTION
STATION PLATFORM	$\bowtie$	TRACTION POWER	SUBSTATION
TUNNEL	H	SYSTEMS BUILDING	(DESIGN VARIES)
ROADWAY	H	GATE ARM	
TRAIL / BIKEWAY		TOTAL PROPERTY	ACQUISITION
SURFACE PARKING		PARTIAL PROPERT	Y ACQUSITION
BRIDGE		RIGHT OF WAY	PROPERTY LIN
 RETAINING WALL		TEMPORARY CONS	TRUCTION EASEMENT









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# SOUTHWEST LRT ALIGNMENT SEGMENT E4 - MINNEAPOLIS VAN WHITE STATION



PRELIMINARY ENGINEERING PLAN

COLOR	LEGEN	D
LRT TRACK AREA		EXISTING SIGNALIZED INTERSECTION
PEDESTRIAN / SIDEWALK AREA		PROPOSED SIGNALIZED INTERSECTION
STATION PLATFORM	$\geq$	TRACTION POWER SUBSTATION (GENERAL AREA)
TUNNEL		SIGNAL BUNGALOW (GENERAL AREA)
ROADWAY	H	GATE ARM
TRAIL / BIKEWAY		TOTAL PROPERTY ACQUISITION
SURFACE PARKING		PARTIAL PROPERTY ACQUSITION
BRIDGE		RIGHT OF WAY PROPERTY LINE
 RETAINING WALL		TEMPORARY CONSTRUCTION EASEMENT

(23)

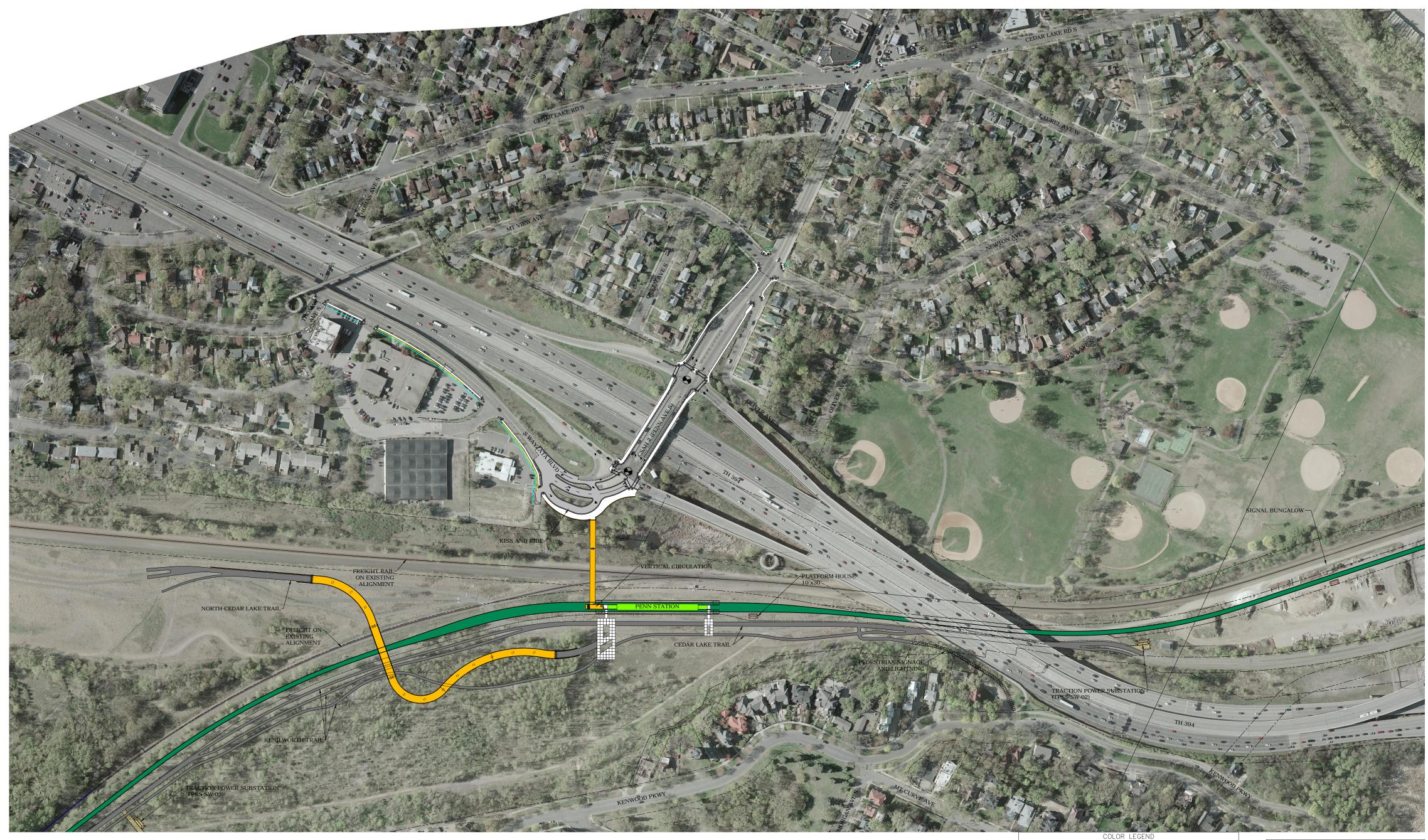
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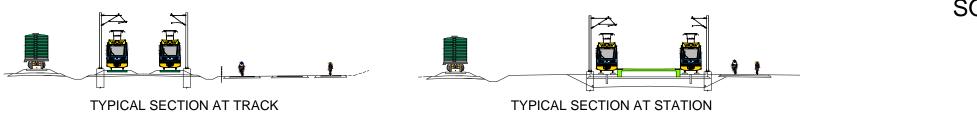


SEPTEMBER 2014

Curre	Southv nt Preliminary Status of Section 4	vest LRT Project (f) Park Properties within th	e City of Minn	eapolis
Section 4(f) Property	Section 4(f) Eligibility/Official with Jurisdiction and Potential for Permanent 4(f) Use	Potential for Temporary 4(f) Use	Addressed in Draft EIS or Draft 4(f) Evaluation?	Addressed in SDEIS & Supplemental Draft 4(f) Evaluation
Alcott Triangle (park)	<ul> <li>Publicly-owned, publicly-accessible park (MPRB)</li> <li>No permanent use</li> <li>Determination of local significance pending</li> <li>No long-term proximity impacts</li> </ul>	No temporary use during construction	Yes	Yesª
Park Siding Park (park)	Publicly-owned, publicly-accessible park (MPRB) • No permanent use • Long-term proximity impacts	No temporary use during construction	Yes	Yesª
Kenilworth Lagoon (recreation area)	<ul> <li>Permanent publicly-owned recreation easement (MPRB/City)</li> <li>Removal of existing freight rail and trail bridge</li> <li>Construction of two new bridges over the lagoon, piers within the lagoon, new abutments, work along banks within the easement, etc.</li> <li>Section 4(f) use to be determined</li> </ul>	No temporary use during construction outside of the area of permanent improvements	No	Yes
Lake of the Isles Park (park)	<ul><li>Publicly-owned, publicly-accessible park (MPRB)</li><li>No permanent use</li><li>Long-term proximity impacts</li></ul>	No temporary use during construction	Yes	Yes <sup>a</sup>
Cedar Lake Park (park)	<ul> <li>Publicly-owned, publicly-accessible park (MPRB)</li> <li>Section 4(f) use to be determined (at East Cedar Beach and at North Cedar Lake Trail)</li> </ul>	• Temporary use during construction for trail reconstruction at East Cedar Beach and in the NE corner of the park to allow for the grade separation of the North Cedar Lake Trail over the existing freight rail and proposed light rail alignment	Yes	Yes
Bryn Mawr Meadows (park)	<ul> <li>Publicly-owned, publicly-accessible park (MPRB)</li> <li>Section 4(f) use to be determined</li> </ul>	Temporary use during construction	Yes	Yes

<sup>a</sup> To be addressed briefly, noting that proximity impacts would not substantially impair the activities, features and attributes of the property.





# SOUTHWEST LRT AL SEGMENT E4 - MINNEA

PENN STATION PRELIMINARY ENGINEER



LIGNMENT				
APOLIS				
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RING PLAN				

COLOR LEGEND				
	LRT TRACK AREA		EXISTING SIGNALIZED INTERSECTION	
	PEDESTRIAN / SIDEWALK AREA		PROPOSED SIGNALIZED INTERSECTION	
	STATION PLATFORM		TRACTION POWER SUBSTATION (GENERAL AREA)	
	TUNNEL		SIGNAL BUNGALOW (GENERAL AREA)	
	ROADWAY	H	GATE ARM	
	TRAIL / BIKEWAY		TOTAL PROPERTY ACQUISITION	
	SURFACE PARKING		PARTIAL PROPERTY ACQUSITION	
	BRIDGE		RIGHT OF WAY PROPERTY LINE	
	RETAINING WALL		TEMPORARY CONSTRUCTION EASEMENT	

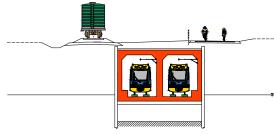
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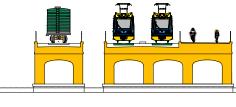


SEPTEMBER 2014





TYPICAL SECTION AT TUNNEL



TYPICAL SECTION AT BRIDGE

# SOUTHWEST LRT ALIGNMENT

SEGMENT E3 - MINNEAPOLIS CEDAR LAKE PKWY CROSSING PRELIMINARY ENGINEERING PLAN

	С
LRT TRACK AREA	
PEDESTRIAN / SIDEWALK AREA	
STATION PLATFORM	
TUNNEL	
ROADWAY	
TRAIL / BIKEWAY	
SURFACE PARKING	
BRIDGE	
RETAINING WALL	

SEPTEMBER 2014



#### COLOR LEGEND EXISTING SIGNALIZED INTERSECTION PROPOSED SIGNALIZED INTERSECTION TRACTION POWER SUBSTATION SYSTEMS BUILDING (DESIGN VARIES) GATE ARM TOTAL PROPERTY ACQUISITION PARTIAL PROPERTY ACQUSITION ---- RIGHT OF WAY ---- PROPERTY LINE TEMPORARY CONSTRUCTION EASEMENT

21





### Southwest Light Rail Transit Project Parks in Minneapolis with Potential Proximity Impacts

- For SWLRT, Proximity Impacts to parks and recreation areas = effects on visual, noise, access
- If proximity impacts would *substantially impair* the activities, features and attributes of the 4(f) property, there would be a *Constructive Use* of the property (23 CFR 774.15)

### a. Alcott Triangle





- 1. Within the parks and recreation study area
- 2. Owned by MPRB, publically- accessible
- 3. Does MPRB consider the Alcott Triangle to be a locally-significant park/recreation area?
- 4. DEIS: Identified as "open space" no proximity impacts identified
- 5. Draft SDEIS: there would be no proximity impacts, due to its distance from the proposed light rail alignment (approximately 300-350 feet)

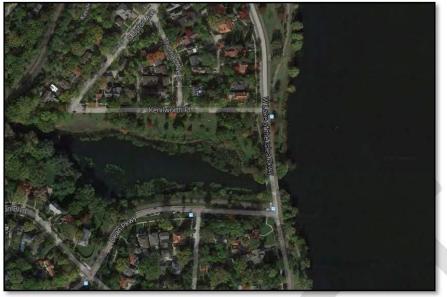
### b. Park Siding Park





- 1. Within the parks and recreation study area
- 2. Owned by MPRB, publically-accessible, locally-significant
- 3. Identified in the DEIS as "open space"
  - i. Identified 0.016-acre temporary occupancy during construction for a trail detour (LRT 3A and LRT 3A-1)
- 4. Draft SDEIS:
  - i. No permanent use or temporary occupancy required
  - ii. Proximity impacts would include increased noise, change in the visual environment and change in access, due to its close proximity to the proposed light rail alignment
  - iii. Proximity impacts would not substantially impair the activities, features and attributes of the park

### c. Lake of the Isles Park





- 1. Within the parks and recreation study area
- 2. Includes the Kenilworth Lagoon, east of the HCRRA ROW
- 3. Owned by MPRB, publically-accessible, locally-significant
- 4. Identified in the DEIS as a park with numerous recreational activities, features and attributes
  - i. LRT 3A: no permanent or temporary use of the park
  - ii. LRT 3A-1: 0.01-acre of permanent use and temporary use undetermined
- 5. Draft SDEIS LPA:
  - i. No permanent use or temporary occupancy required
  - ii. Proximity impacts to the western portion of the lagoon would include increased noise, change in the visual environment and change in access, due to its close proximity to the proposed light rail alignment
  - iii. Proximity impacts would not substantially impair the activities, features and attributes of the park

City of Eden Prairie Meeting February 20, 2015

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Meeting Title:	Section 4(f Prairie	E) Coord	ination – Parks	within the Ci	ty of Eden
Date:	02/20/2015	Time:	2:30 p.m.	<b>Duration:</b>	30 Minutes
Location:	SPO Conf. Rn	n. A			
	Call in #: 1 (64	46) 749-31	22; Access Code: 34	2-433-709	
	GoToMeeting: h	ttps://global.	gotomeeting.com/join/34	2433709	
Meeting called by:	Nani Jacobson, Assistant Director, Environmental & Agreements				
Invitees:	City of Eden Prairie: Robert Ellis, Randy Newton, Jay Lotthammer				
	FTA (phone): Maya Sarna, Amy Zaref				
	SPO: Jim Alexander, Ryan Kronzer, Kim Proia, Jeanne Witzig, Leon Skiles (phone), Michael Hoffman (phone)				
Purpose of Meeting:	Discuss 4(f) properties under jurisdiction of the City of Eden Prairie and the 4(f) process and analysis.				

Agenda					
9:00 – 9:05 am	1. Welcome and Introductions				
9:05 – 9:10 am	2. Overview of Section 4(f) Requirements (handout)				
9:10 – 9:25 am	3. Purgatory Creek Park – Preliminary Temporary Occupancy Determination				
	<ul><li>a. City of Eden Prairie's Status as a Section 4(f) Official With Jurisdiction</li><li>b. Section 4(f) Temporary Occupancy Criteria</li></ul>				
	<ul> <li>c. Description of Area, Duration and Type of Construction Activities within the Park</li> <li>d. Avoidance, Mimimization and Mitigation Measures to Address the Construction Activities within the Park</li> </ul>				
	<ul> <li>e. Written Concurrence from the City that the Construction Activities within the Park Meet the Section 4(f) Tempoary Occupancy Criteria</li> </ul>				
9:25 – 9:30 am	<ul> <li>4. Next Steps</li> <li>a. 4(f) Determination and Documentation</li> <li>b. Discusion of Potential Mitigation of Permanent Proximity Impacts to Purgatory Creek Park (i.e., visual, noise, access)</li> </ul>				



Discussion:		
ACTION ITEMS:	PERSON RESPONSIBLE:	<b>DEADLINE:</b>



Meeting Title:	Section 4(f) Coordination – Parks within the City of Eden Prairie – MEETING NOTES					
Date:	02/20/2015 <b>Time:</b> 2:30 p.m. <b>Duration:</b> 1 hour					
Location:	SPO Conf. Rm. A Call in #: 1 (646) 749-3122; Access Code: 342-433-709					
		,	gotomeeting.com/jo			
Meeting called by:				onmental & Agreements		
Attendees:	City of Eden Prairie: Robert Ellis, Randy Newton, Jay Lotthammer, Rod Rue, Stu Fox					
	FTA (phone): Maya Sarna					
	SPO: Ryan Kronzer, Rachel Haase, Leon Skiles (phone), Don Demers, Mark Bishop, Dan Pfeiffer, Nani Jacobson					
Purpose of Meeting:	Discuss 4(f) properties under jurisdiction of the City of Eden Prairie and the 4(f) process and analysis.					

Agenda				
2:00 – 2:05 pm	Welcome and Introductions			
2:05 – 2:10 pm	. Overview of Section 4(f) Requirements (handout)			
2:10 – 2:25 pm	3. Purgatory Creek Park – Preliminary Temporary Occupancy Determination			
	a. City of Eden Prairie's Status as a Section 4(f) Official With Jurisdiction			
	b. Section 4(f) Temporary Occupancy Criteria			
	c. Description of Area, Duration and Type of Construction Activities within the Park			
	d. Avoidance, Minimization and Mitigation Measures to Address the Construction			
	Activities within the Park			
	e. Written Concurrence from the City that the Construction Activities within the			
	Park Meet the Section 4(f) Temporary Occupancy Criteria			
2:25 – 2:30 pm	4. Next Steps			
	a. 4(f) Determination and Documentation			
	b. Discussion of Potential Mitigation of Permanent Proximity Impacts to			
	Purgatory Creek Park (i.e., visual, noise, access)			



### DISCUSSION:

- 1. Welcome and Introductions
- 2. Overview of Section 4(f) Requirements
  - a. Refer to handout "Section 4(f) of the Department of Transportation Act Overview" for Section 4(f) definitions
    - i. Use de minimis and non-de minimis
    - ii. Temporary occupancy
    - iii. Constructive use
  - b. There are two parts of 4(f) process parks/rec and historic sites
    - i. We're only focusing on parks/rec today
- 3. Overview of Section 4(f) Requirements
  - a. Description of Area, Duration, and Type of Construction Activities within the Park
    - i. The project would have no permanent improvements or easements within the park. There would be a new elevated LRT alignment along the NE park boundary parallel to Prairie Center Drive the LRT alignment would be within street right-of-way that contains a sidewalk/path and landscaping.
    - ii. The Project needs a staging area during construction that would be within the park property, as illustrated in the handout map.
      - 1. Used for cranes, materials storage
      - 2. May be some impacts to sewer and water infrastructure during construction of bridge foundation, but those impacts will be defined later during final design and when existing utilities are finally located
    - iii. Bridge construction would take 1 <sup>1</sup>/<sub>2</sub> to 2 construction seasons (duration for the temporary use of land for the staging area)
      - 1. Exact timing of other Project construction work (track, etc.) might lag behind the bridge, the details aren't known yet and will be determined during future design
    - iv. There is existing sidewalk/trail directly beneath the bridge and outside of the park that would remain in public road right-of-way the trail would be maintained during construction or a detour will be provided.
    - v. No permanent part of the Project would be constructed on park property
    - vi. Some closures of the access to the park from Prairie Center Drive are expected
      - 1. The access road off of Technology Drive would not be impacted by the Project and would remain open during construction
    - vii. The existing park roadway is located 25-30 feet from the edge of the proposed LRT bridge
    - viii. The outer edge of the hatched area indicating where the temporary occupancy would occur within the park is 40-50 feet from the existing road right-of-way. Refer to handout "Purgatory Creek Park Temporary Occupancy Impacts"



- ix. An alternate route for pedestrian access between the sidewalk/path along Prairie Center Drive into the park would be designated if needed to maintain access
- x. City of Eden Prairie (City) would prefer if the access road from Prairie Center Drive/Flagship Office Building parking remained open as much as possible during construction (currently included in hatched area on handout)
  - 1. SPO noted that the driveway access off of Prairie Center Drive may need to be closed for short periods at off-peak times for placement of piers
- xi. The City noted that there may need to be adjustments in the location of existing message signs and other items in the park due to the location of bridge piers
  - 1. SPO noted that the new LRT bridge (in particular, its piers) may impact how the design of the existing pedestrian entrance to the park (i.e., the existing sidewalk/path connection from the park to the sidewalk/path at the intersection of Technology Drive and Prairie Center Drive). There may be a desire to permanently re-designed that connect once the precise pier size, location and design is know; this issue will be addressed in advanced design
- xii. SPO staff noted that the use of the park during construction would be temporary, and that the construction use in the park (about two construction seasons) would be shorter than the duration of construction for the project (up to about four years) which would meet FTA's criteria for a temporary occupancy under Section 4(f).
- b. Avoidance, Minimization, and Mitigation Measures to Address the Construction Activities within the Park
  - i. Minimizing impacts inside park property is important for Section 4(f)
  - When construction is complete, any construction related impacts, as illustrated in the handout (hatched area) would be reconstructed to existing conditions or better (e.g., replacing trees in kind if any are removed, replacing sidewalk if torn up for utilities) in consultation with the City.
    - 1. The City staff noted that when restoration happens, the City wants to make sure it is coordinated with whatever the new circulation or design plan is (this fits with the requirement to replace to existing conditions *or better*)
    - 2. SPO staff noted that advanced design meetings will be held between SPO and the City to discuss restoration of the park
  - iii. The City noted that it wants to maintain as much access as possible during construction
  - iv. Facilities in roadway/street right-of-way outside what is officially park property are not addressed in the Section 4(f) Evaluation, however, these areas would be addressed during the advanced design process
  - v. The City noted that it wants to be able to tell people what they can likely expect as to construction within the park when they visit the park, as the park is a highly used area that is booked up to about a year in advance
    - 1. Events include weddings, 5ks, daytime concerts for kids
    - 2. Lots of daily walkers, mainly on the south end of the lake but start in parking lot
    - 3. Large weekend events use the Flagship Office Building parking lot (via driveway from Prairie Center Drive)
  - vi. The SPO staff noted that the Project will obtain construction permits, which restrict hours

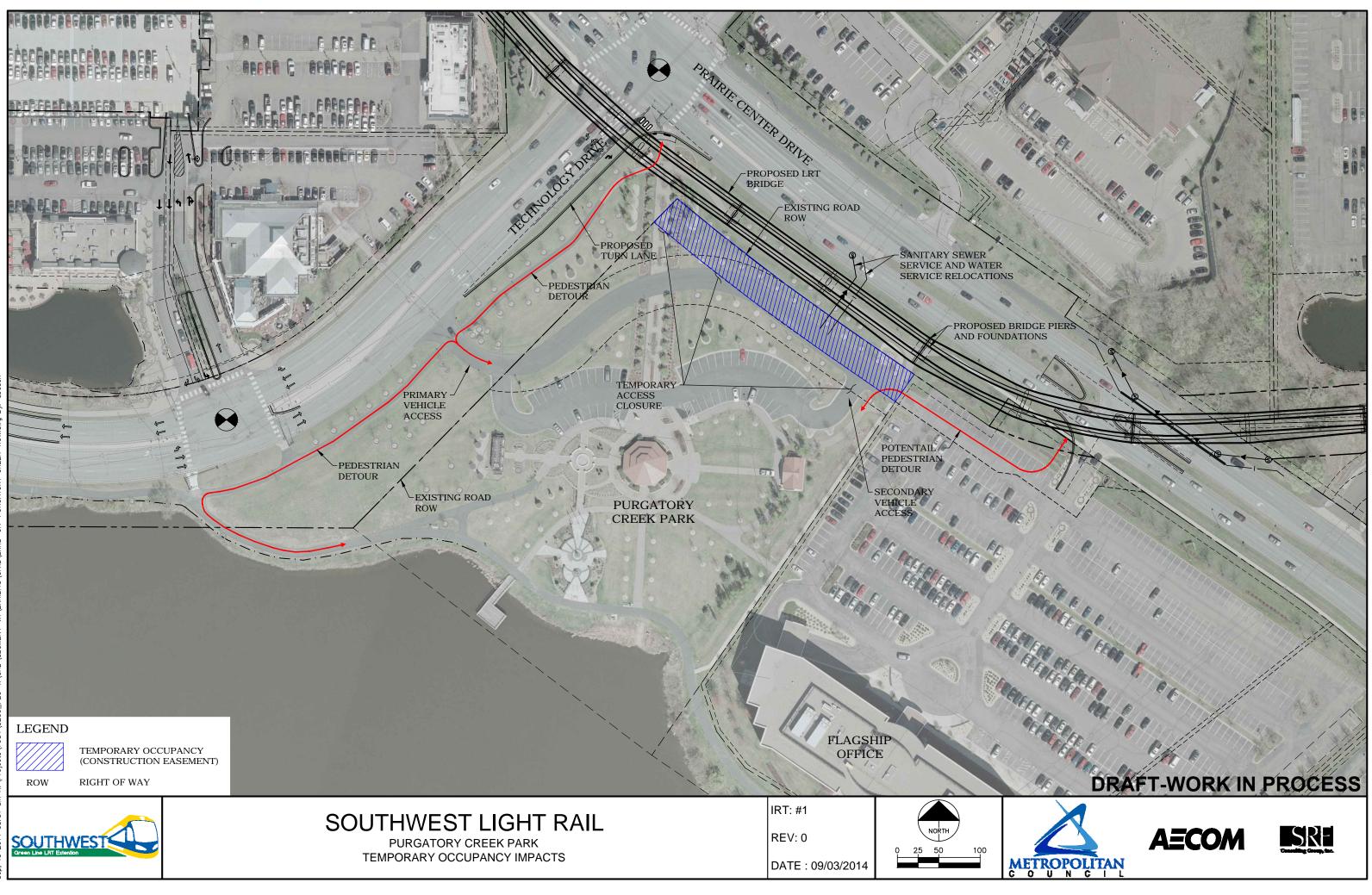


of operation, and will have a construction plan so the City knows when anticipated activities will occur

- vii. Action: SPO will create a revised figure with area of impact split into two one shows area of closures for duration of bridge construction, one shows area with intermittent or short-term closures to maintain the south access
- viii. SPO staff noted that mitigation measures will include a public communication plan and signage regarding access closures (e.g., closure of a portion of the park parking lot)
- ix. SPO staff noted that the Project will be sensitive to any special events as construction activities are scheduled and will coordinate construction activities with the City so they aren't adversely impacted (e.g., Memorial Day event)
- x. There will be regular coordination between the Project and the City on construction activities and communication to the public
- xi. Mitigation for impacts to facilities in roadway/street right-of-way (beyond the footprint of the temporary occupancy area and outside of park property) will be addressed in the parks section of the NEPA documents (not in the 4(f) process)
  - 1. The NEPA process, and specifically the Supplemental Draft Environmental Impact Statement (SDEIS) will include an assessment of park impacts (e.g., visual, noise) – the City can comment on these other impacts and related proposed mitigation when the SDEIS is published
  - 2. Mitigation commitments will be made in the Final EIS and Record of Decision
- c. Section 4(f) Temporary Occupancy Criteria
  - i. The following criteria must be met for an impact to be considered a temporary occupancy (Refer to handout "Section 4(f) of the Department of Transportation Act Overview" which has as its source 23 CFR Part 774]:
    - 1. Duration must be temporary
    - 2. Scope of work must be minor
    - 3. No anticipated permanent adverse physical impacts, nor will it interfere with protected activities, features, or attributes of the property
    - 4. The land used must be fully restored
    - 5. The official(s) with jurisdiction provides documented agreement
  - ii. If the City does not agree the impact is a temporary occupancy, the avoidance alternative would be closing one or both southbound lanes on Prairie Center Drive to use as a staging area
- d. Written Concurrence from the City that the Construction Activities within the Park meet the Section 4(f) Temporary Occupancy Criteria
  - i. Action: SPO staff noted that the Project will send a letter to the City in the coming weeks asking for concurrence with the temporary occupancy determination and the City would respond
    - 1. The revised figure will be sent as an attachment to the letter
    - 2. The letter will lay out the anticipated activities in the park, the estimated duration, the criteria for a temporary occupancy, and construction mitigation measures
  - ii. The temporary occupancy determination will be an iterative process to make sure everyone is in agreement



ACTION ITEMS:		<b>PERSON RESPONSIBLE:</b>	E: DEADLINE:	
1.	Create a revised figure with area of impact split into two – one shows areas of closures for duration of bridge construction, one shows area with intermittent or short-term closures to maintain the south access	SPO	To be sent with determinatio request letter to the City	
2.	Send determination request letter to the City	SPO	TBD	



### Section 4(f) of the Department of Transportation Act Overview

### 1. What is Section 4(f)?

• Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966 which established the requirement for consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development.

### 2. What are Section 4(f) properties?

• Section 4(f) properties include publicly owned public parks, recreation areas, and wildlife or waterfowl refuges, or any publicly or privately owned historic site listed or eligible for listing on the National Register of Historic Places.

### 3. What does Section 4(f) require?

Before approving a project that uses Section 4(f) property, FTA must either (1) determine that the impacts are de minimis (see discussion below), or (2) undertake a Section 4(f) Evaluation. If the Section 4(f) Evaluation identifies a feasible and prudent alternative that completely avoids Section 4(f) properties, it must be selected. If there is no feasible and prudent alternative that avoids all Section 4(f) properties, FFTA has some discretion in selecting the alternative that causes the least overall harm (see discussion below). FTA must also find that all possible planning to minimize harm to the Section 4(f) property has occurred.

### 4. What is a Section 4(f) Use?

- The permanent incorporation of any portion of a 4(f) property into a project through the fee simple acquisition of the property or acquiring a property right that allows permanent access to the property (e.g., easement)
- Temporary occupancy of land that is adverse in terms of the statute's preservation purpose
- When there is a constructive use (a project's proximity impacts are so severe that the protected activities, features, or attributes of a property are substantially impaired)
- Note: The regulation lists various exceptions and limitations applicable to this general definition

### 5. What is a *de minimis* impact?

For publicly owned public parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the activities, features, or attributes of the property. For historic sites, a *de minimis* impact means that FHWA has determined (in accordance with 36 CFR Part 800) that either no historic property is affected by the project or that the project will have "no adverse effect" on the historic property. A *de minimis* impact determination does not require analysis to determine if avoidance <u>alternatives</u> are feasible and prudent, but consideration of avoidance, minimization, mitigation or enhancement <u>measures</u> should occur. There are certain minimum coordination steps that are also necessary.

### 6. What is a Constructive Use?

- Occurs when the transportation project involves no physical use of the from a Section 4(f) property via permanent incorporation of land or a temporary occupancy of land into a transportation facility. A constructive use occurs when:
  - The project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired
  - The value of the resource, in terms of its Section 4(f) purpose and significance will be meaningfully reduced or lost
- The types of impacts that may qualify as constructive use, such as increased noise level that would substantially interfere with the use of a noise sensitive feature such as an outdoor amphitheater are addressed in the Section 4(f) regulations
- A project's proximity to a Section 4(f) property is not in itself an impact that results in constructive use.
- The assessment for constructive use should be based upon the impact that is directly attributable to the project under review, not the overall combined impacts to a Section 4(f) property from multiple sources over time

### 7. What is a Temporary Occupancy?

- Temporary occupancies of land that are so minimal as to not constitute a use under 4(f). These must meet:
  - Duration must be temporary, i.e. less that the time needed for construction of the project and no change in ownership of the land
  - Scope of work must be minor, i.e. both the nature and magnitude of the changes to the 4(f) property are minimal
  - No anticipated permanent adverse physical impacts, nor will it interfere with protected activities, features or attributes of the property
  - The land being used must be fully restored (returned to a condition which is at least as good as that which existed prior to the project
  - o Documented agreement with the official(s) with jurisdiction

### 8. What is an Official with Jurisdiction?

- Parks: Officials with the agency/ies that own or administer the 4(f) property
- Historic sites: SHPO

### 9. How are Section 4(f) and Section 106 related?

- Section 106 process determines the eligibility of historic/archaeological resources for potential 4(f) protection
- A key difference is Section 106 is essentially a consultative procedural requirement, while Section 4(f) precludes project approval if the specific findings cannot be made

### 10. What is a Feasible and Prudent Avoidance Alternative?

- Completely avoids the permanent use of a 4(f) property
- Feasibility: Can be built as a matter of sound engineering
- Prudence: No severe problems that outweigh protecting the 4(f) property, considering:
  - o Meeting Purpose/Need
  - o Safety
  - o Severe impacts (after mitigation)
  - o Extraordinary costs
  - Unique problems/factors
  - o Cumulative impact of multiple factors

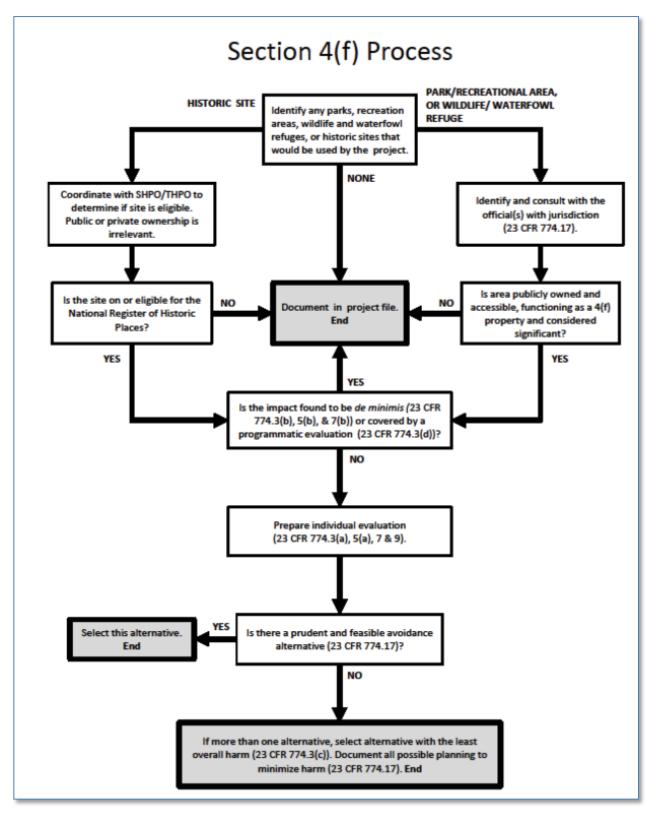
### 11. What happens if the LPA uses a protected property?

- FTA completes a Section 4(f) Evaluation (draft and final), including three required determinations:
  - There is *No Prudent/Feasible Avoidance Alternative*
  - All Possible Planning to Minimize Harm has occurred (includes all reasonable mitigation measures)
  - LPA must have *Least Overall Harm* compared to other alternatives that have a 4(f) use

### 12. What is a Least Overall Harm Analysis?

- When there is no feasible and prudent avoidance alternative, the comparison of the LPA with other alternatives under consideration that would have a use of any 4(f) property
- Comparative criteria used to reach the determination:
  - Relative value of and impacts to 4(f) properties, after similar mitigation efforts criteria:
    - Ability to mitigate adverse impacts to each 4(f) property
    - Relative severity of harm to protected characteristics of the 4(f) properties (after mitigation)
    - Relative significance of the 4(f) properties
    - Views of officials with jurisdiction over the 4(f) properties
  - Consideration of substantial problem/s criteria:
    - Degree to which the alternative meets P&N
    - Magnitude of adverse impacts to non-4(f) resources (after mitigation)
    - Substantial cost differences
- Only the alternative/s with the Least Overall Harm may be approved by FTA

Sources: 23 USC 138; 49 USC 303; 23 CFR Part 774; *Section 4(f) Policy Paper* (USDOT: July 20, 2012)



Source: Section 4(f) Policy Paper (p. 62; USDOT: July 20, 2012)

Minnesota State Historic Preservation Office Meeting March 2, 2015

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# **Meeting Title:** Section 4(f) Coordination – MnSHPO

Date:	03/02/2015	Time:	9:30 a.m.	<b>Duration:</b> 1 hour
Location:	,		d Blvd., St. Paul, MN; 5; code: 943-510-1712‡	Conference Room 702 #
Meeting called by:	Nani Jacobson	, Assistant	Director, Environment	al & Agreements
Invitees:	SHPO: Sarah H	Beimers		
	FTA (phone): 1	Maya Sarn	a, Amy Zaref	
	SPO: Greg Ma Rachel Haase,			, Leon Skiles (phone),
	Hennepin Cour	nty: Nelra	e Succio, Kim Zlimen	
Purpose of Meeting:	Discuss 4(f) pr analysis.	operties ur	nder jurisdiction of the	MnSHPO, 4(f) process and

Agenda	
9:30 – 9:35 am	1. Welcome and Introductions
9:35 – 9:40 am	2. Overview of Section 4(f) Requirements (handout)
9:40 – 9:45 am	3. MnSHPO Status as Section 4(f) Official with Jurisdiction
9:45 – 9:50 am	4. Preliminary <i>de minimis</i> Determination for the MStP&M/Great Northern Railway Historic District (handout)
	<ul> <li>a. Determination of district's boundary at Cedar Lake Junction</li> <li>b. Notice that a 106 "no adverse effect" finding will be used by FTA to reach a 4(f) de minimis determination</li> </ul>
0.50 0.55	c. Schedule and documentation for final finding of effect
9:50 – 9:55 am	<ul> <li>5. Preliminary Temporary Occupancy Determination for Cedar Lake Parkway</li> <li>a. FTA criteria for a temporary occupancy</li> <li>b. MnSHPO written concurrence that the criteria would be met for Cedar Lake Parkway</li> </ul>
9:55 – 10:10 am	<ul> <li>6. Section 4(f) non-<i>de minimis</i> Use of Grand Rounds Historic District/Kenilworth Lagoon <ul> <li>a. Section 106 Agreement minimization/mitigation measures = 4(f) All Possible Planning to Minimize Harm</li> <li>b. Coordination on Preliminary Least Overall Harm Analysis</li> <li>c. Schedule and documentation for final finding of effect and draft/final Section 106 Agreement</li> </ul> </li> </ul>
10:20 – 10:25 am	<ul> <li>7. Archaeological Sites (handout)</li> <li>a. Sites used by LPA with a preliminary Section 106 Adverse Effect (in the vicinity of the Royalston Station):</li> </ul>



	i. Site 21HE0436
	ii. Site 21HE0437
	b. SHPO concurrence mitigation (i.e., completion and implementation of Phase III
	Data Recovery Plan; and incorporation of interpretation into the design of the
	Royalston Station)
	c. Exempt from Section 4(f)
10:25 – 10:30 am	8. Next Steps
	a. Continued consultation and documentation as needed

ACTION ITEMS:	PERSON RESPONSIBLE:	<b>DEADLINE:</b>

## **SIGN-IN SHEET**



## SWLRT Section 4(f) Officials With Jurisdiction Coordination Meeting – MnSHPO

March 2, 2015 9:30 – 1030 am

am MNDOT

Name	Organization	Emạil	Phone
SarahBeimers	MUSHPO	Sarah bernert	2593456
GREG MATHIS	MNDOT		
Kim Zlimen	Hennepin County	Sreg. maths Est tem. Himberly. zlimence us	612-396-7618
Jessica Laabos	Kunley-Harn	jasica. laalosp Kinley-	651-643-0437
Nani Jarobson	SPO		
LOON SKILZ-Phone	SPO		
Anstail-ghore Maya Sarna-phone			
Maya Sama-phone			



## **Meeting Title:** Section 4(f) Coordination – MnSHPO

Date:	03/02/2015	Time:	9:30 a.m.	Duration: 1 h	our
Location:	,		d Blvd., St. Paul, MN; C 5; code: 943-510-1712#	onference Room 7	702
Meeting called by:	Nani Jacobson,	, Assistant	Director, Environmental	& Agreements	
Attendees:	SHPO: Sarah E	Beimers			
	FTA (phone): N	Maya Sarn	a, Amy Zaref		
	SPO: Greg Ma	this, Jessic	a Laabs		
Purpose of Meeting:	Discuss Section	n 4(f) prop	erties under jurisdiction	of the MnSHPO, S	Section

4(f) process and analysis.

Agenda	
9:30 – 9:35 am	1. Welcome and Introductions
9:35 – 9:40 am	2. Overview of Section 4(f) Requirements (handout)
9:40 – 9:45 am	3. MnSHPO Status as Section 4(f) Official with Jurisdiction
9:45 – 9:50 am	4. Preliminary <i>de minimis</i> Determination for the StPM&M/GN Rwy Historic District
	a. Determination of district's boundary at Cedar Lake Junction
	b. Notice that a Section 106 "no adverse effect" finding will be used by FTA to
	reach a Section 4(f) de minimis determination
	c. Schedule and documentation for final finding of effect
9:50 – 9:55 am	5. Preliminary Temporary Occupancy Determination for Cedar Lake Parkway
	a. FTA criteria for a temporary occupancy
	b. MnSHPO written concurrence that the criteria would be met for Cedar Lake
	Parkway
9:55 – 10:10 am	6. Section 4(f) non-de minimis Use of Grand Rounds Historic District/Kenilworth
	Lagoon
	a. Section 106 Agreement minimization/mitigation measures = Section 4(f) All
	Possible Planning to Minimize Harm
	b. Coordination on Preliminary Least Overall Harm Analysis
	c. Schedule and documentation for final finding of effect and draft/final Section
	106 Agreement
10:20 – 10:25 am	7. Archaeological Sites
	a. Sites used by LPA with a preliminary Section 106 Adverse Effect (in the vicinity
	of the Royalston Station):
	a. Site 21HE0436
	b. Site 21HE0437
	b. SHPO concurrence mitigation (i.e., completion and implementation of Phase III



	Data Recovery Plan; and incorporation of interpretation into the design of the Royalston Station) c. Exempt from Section 4(f)
10:25 – 10:30 am	

#### **DISCUSSION:**

- 1. Welcome and Introductions
- 2. Overview of Section 4(f) Requirements
  - a. Refer to handout titled "Section 4f of the Department of Transportation Act Overview"
  - b. Section 4(f) is a DOT law that prohibits transportation projects from using a qualifying park/recreation area, historic site, or wildlife/waterfowl refuge unless there is no prudent and feasible avoidance alternative or the use would be *de minimis*
  - c. The Section 4(f) evaluation in the Draft EIS identified all Section 4(f) properties that would be impacted by the project
  - d. The list of impacted properties has been updated based on advances in design able to avoid some properties, some information was corrected, and some new Section 4(f) properties that could be impacted were identified
  - e. "Use" is permanent incorporation of any portion of a Section 4(f) property into a project through the fee simple acquisition of the property or acquiring a property right that allows permanent access to the property (e.g., easement)
  - f. See handout for other definitions of impacts under Section 4(f) including:
    - i. Constructive use
    - ii. De minimis impact
    - iii. Temporary occupancy
  - g. Eligibility requirements for a Section 4(f) park/recreation area include:
    - i. Primary purpose of the property is recreation
    - ii. Property is publically owned, publically accessible, and of local significance
  - h. Who is the Official with Jurisdiction (OWJ) for Section 4(f) properties?
    - i. Parks: the agency/agencies that own or administer the Section 4(f) property
    - ii. Historic sites: State Historic Preservation Office (SHPO)
  - i. How are Section 4(f) and Section 106 related?
    - i. The Section 106 process determines the eligibility of historic/archaeological resources for potential Section 4(f) protection and the level of Section 4(f) use
- 3. MnSHPO Status as Section 4(f) Official with Jurisdiction
  - a. SHPO is the OWJ for historic sites in the context of Section 4(f)
  - b. Sarah's knowledge has been mostly on FHWA projects; not much involvement with FTA projects



- c. If historic property does not have an adverse effect under Section 106, it is considered under Section 4(f) as *de minimis* requires concurrence from official with jurisdiction; could also be a *de minimis* after incorporating minimization and mitigation
- d. If the effect remains adverse, it stays a use and must go through a process of preparing an individual evaluation including analysis for prudent and feasible avoidance alternative(s) and select alternative(s) with least overall harm
- 4. Preliminary de minimis Determination for the StPM&M/GN Rwy Railway Historic District
- a. Refer to handout titled "–Southwest LRT SDEIS Architecture/History Area of Potential Effect and Resources St. Louis Park/Minnepolis Segment, March 2, 2015 Draft Work in Process"
- b. Resource extends for large distance east and west resource identified as the freight track
- c. Sarah asked what are the boundaries of the historic resource at Cedar Lake Junction?
  - i. Greg confirmed that the whole BNSF mainline to the Minnesota-North Dakota border has been determined eligible. The Project's Section 106 survey documentation focused on the area within the APE and it did not describe in detail the boundary of the resource; it does, however, say that the resource's boundary generally includes the historic right-of-way for the railway. SPO is developing a map of the boundaries for the resource within the Project's right-of-way that is based on the railway's right-of-way.
- d. SPO will need to acquire small amounts of property rights within the right-of-way boundary that would be within the historic boundary this is the Section 4(f) use
- e. To move forward with *de minimis* impact determination, SHPO would need to concur with FTA's no adverse effect determination
- f. Steps in the Section 4(f) process
  - i. publish as a preliminary *de minimis* finding and go through public process; document the Section 106 process with understanding that FTA will make a final finding
  - ii. Section 4(f) will use the determination of effect under Section 106 this would occur before a final Section 4(f) determination
  - Section 4(f) doesn't add anything to the process for the Section 106 property other than the notice from FTA to the SHPO that FTA will use outcome of Section 106 process to reach Section 4(f) determination
- g. SDEIS will include Section 106 preliminary effects tables and FTA will make preliminary Section 4(f) determination
- No official correspondence from SHPO needed at this time. Before publication of FEIS, the *de minimis* finding will be finalized in the FEIS and SHPO will have to concur in writing –concurrence on final determination of effects will also be requested sometime between Supplemental Draft (SDEIS) and Final EIS (FEIS)
- i. Sarah agreed with the process outlined for this property, including inclusion in Section 4(f) in the SDEIS as a preliminary *de minimis* determination
- 5. Preliminary Temporary Occupancy Determination for Cedar Lake Parkway
  - a. Refer to handout titled "-Southwest LRT SDEIS Architecture/History Area of Potential Effect and Resources St. Louis Park/Minnepolis Segment, March 2, 2015 Draft Work in Process"



- b. There would be temporary construction within the boundary of Cedar Lake Parkway (address through temporary occupancy determination)
- c. There would not be a permanent incorporation of the resource into the Project
- *d.* There are 5 criteria for temporary use duration of occupancy shorter than construction schedule; long-term effects are minor; resource restored to it's original condition; effects during construction are not adverse; written concurrence from official with jurisdiction (*Refer to handout titled "Section 4f of the Department of Transportation Act Overview"*)
- e. Sarah expressed preference to reference this property as Grand Rounds Historic District/ Cedar Lake Parkway (attributed to Grand Rounds Historic District)
- f. Documentation would be same path as *de minimis*
- g. Sarah agreed with the process outlined for this property, including inclusion in Section 4(f) in the SDEIS as a preliminary Temporary Occupancy determination
- 6. Section 4(f) non-de minimis Use of Grand Rounds Historic District/Kenilworth Lagoon
  - a. Refer to handout titled "–Southwest LRT SDEIS Architecture/History Area of Potential Effect and Resources St. Louis Park/Minnepolis Segment, March 2, 2015 Draft Work in Process"
  - b. If there is an adverse effect under Section 106 and a use of the property, there is a preliminary non-*de minimis* use under Section 4(f)
  - c. Section 4(f) Evaluation must document there is no feasible and prudent complete avoidance alternative
  - d. Once mitigation is incorporated, Section 4(f) evaluation will compare effects of project on the resource and on other protected environmental resources to determine which alternative has least overall harm
  - e. Coordination with SHPO will continue throughout the Section 106 and Section 4(f) processes
  - f. The minimization/mitigation measures identified during the Section 106 process and included in the the Section 106 agreement will be included in/referenced in the the Section 4(f) evaluation
  - g. Sarah indicated this property is also of interest to the Park Board's because of the use of the property is there some sort of consultation with Park Board? Seems they also have jurisdiction as a recreational resource; how is that taken into account?
    - i. Nani explained that coordination with Park Board is occuring through the Section 106 process as a consulting party and through Section 4(f) in their role as an OWJ for the recreational use of the park. Their role as an owner of a recreational area, triggers their involvement in Section 4(f). This will be published as a preliminary *de minimis* use for the property, including easement/use of land, and will be included in the SDEIS.
  - h. Leon gave a summary of what a Section 4(f) evaluation looks like: description of how the property is used, how the project impacts it, and addresses if there are prudent and feasible alternative(s). If there is not prudent and feasible alternative, go through comparative analysis, including analysis of avoidance alternatives, all possible planning to minimize harm/mitigation, determination of least overall harm.
    "Least overall harm" is intended to balance Section 4(f) and historic effects but also includes taking into account other environmental resources
  - i. NEPA is perceived as procedural; Section 4(f) is procedural and substantive have to reach a certain threshold to move forward the no prudent or feasible question is that threshold
  - j. Sarah asked about alternatives for the freight rail relocation.
    - i. Maya indicated that within the Section 4(f) analysis, we would look at feasible alternatives. The



analysis of relocating freight rail already occurred through the design and engineering process and would not be looked at as an alternative in the Section 4(f) process.

k. Sarah agreed with the process outlined for this property, including inclusion in Section 4(f) in the SDEIS as a Sectin 4(f) Use

#### 7. Archaeological Sites

- a. Refer to handout titled "East Volumne 1 (CIVIL) Segment 4 Track Sheet Layout Index" exhibit.
- b. Greg and Leon explained:
  - i. For an archaeological site to qualify as a Section 4(f) property, it must meet both of these criteria: site used by the project; requires preservation in place
  - ii. Mitigation has been discussed, but no agreement has been reached
  - iii. Based on Phase I/II Archaeological Survey, Royalston was presented during the Section 106 consultation process
  - iv. Reports indicated potential for more archaeological sites but couldn't access them because they are located under roadway will be accessed during construction. A new report is being prepared now for additional sites identified near the Royalston sites.
  - v. Recognition that historic sites would be used for implementation of Royalston Station led to preliminary adverse effect under Section 106 (SHPO has preliminarily agreed)
  - vi. These two historic sites are exempt as Section 4(f) property since they will not be preserved in place so even though they are used, they will not go through Section 4(f) process
- c. Sarah agreed with the process outlined for this property, including not including these sites as Section 4(f) properties in the SDEIS

#### 8. Next Steps

- a. Preliminary determinations will be included in the SDEIS (preliminary Section 4(f) and Section 106 findings)
- b. Items 4, 5, 6, and 7 on this agenda will be covered in the SDEIS
- c. Sarah asked if SPO wants any specific comment from SHPO on the SDEIS?
  - i. Maya indicated that SHPO should probably comment that consultation under both Section 4(f) and Section 106 is accurate, and SHPO is waiting to make a determination at time FTA publishes the final determination. Official concurrence from SHPO will come at that time.
- d. Nani will schedule additional consultation meetings with SHPO to discuss Section 4(f) as needed.
- e. SDEIS publication date will hopefully be in next few months. When SPO has the date pinned down, will let SHPO know. Will be a 45-day public comment period.
- f. Planning to proceed with publishing the SDEIS with preliminary determinations, letting public have opportunity to comment on preliminary effects before they are finalized. However, Greg will continue to work on final determinations of effect over the coming months.
- g. A draft Section 106 agreement will not be in the SDEIS; it will be covered in general terms. The draft agreement will be part of the FEIS. Minimization/mitigation of adverse effects to historic properties will be included in the Section 106 agreement.
- h. Nani indicated that Section 106 information will be included in other open houses and public meetings throughout the year, including a series of upcoming station design open houses. These meetings are



planned for early to mid April.

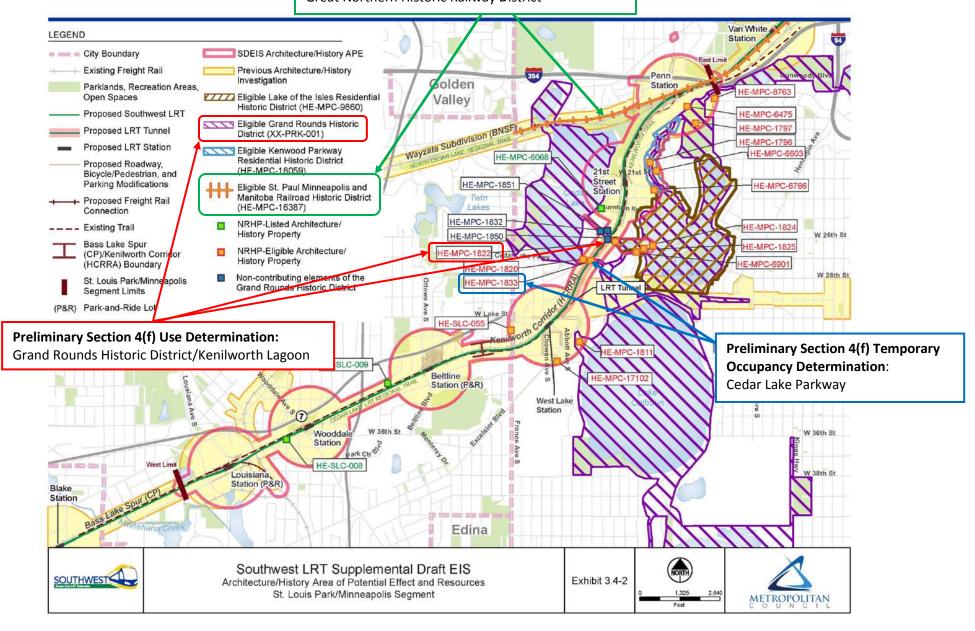
- i. Open houses on the Kenilworth landscape design will occur in May-June and will also be an opportunity to incorporate Section 106 materials. Could also be good to have landscape design consultant speak to Section 106 consulting parties during a future consultation meeting
- j. Maya would like to discuss Grand Rounds District in more detail, but hoping to do that at next consultation meeting after speaking with Greg and SPO.

#### Action: Discuss Grand Rounds Historic District at a future Consultation Meeting

k. FTA will likely advocate a Memorandum of Agreement instead of a Programmatic Agreement. FEIS will likely have the draft 106 agreement, and the Record of Decision will include the executed agreement.

ACTION ITEMS:	PERSON RESPONSIBLE:	DEADLINE:
Continue discussion on Grand Rounds in future consultation meeting	Greg/Maya/Nani	
Provide draft meeting notes for SHPO review	Greg/Nani	

**Preliminary Section 4(f)** *de minimis* **Determination:** Great Northern Historic Railway District



March 2, 2015 – DRAFT Work in Process

### Section 4(f) of the Department of Transportation Act Overview

#### 1. What is Section 4(f)?

• Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966 which established the requirement for consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development.

#### 2. What are Section 4(f) properties?

• Section 4(f) properties include publicly owned public parks, recreation areas, and wildlife or waterfowl refuges, or any publicly or privately owned historic site listed or eligible for listing on the National Register of Historic Places.

#### 3. What does Section 4(f) require?

Before approving a project that uses Section 4(f) property, FTA must either (1) determine that the impacts are de minimis (see discussion below), or (2) undertake a Section 4(f) Evaluation. If the Section 4(f) Evaluation identifies a feasible and prudent alternative that completely avoids Section 4(f) properties, it must be selected. If there is no feasible and prudent alternative that avoids all Section 4(f) properties, FFTA has some discretion in selecting the alternative that causes the least overall harm (see discussion below). FTA must also find that all possible planning to minimize harm to the Section 4(f) property has occurred.

#### 4. What is a Section 4(f) Use?

- The permanent incorporation of any portion of a 4(f) property into a project through the fee simple acquisition of the property or acquiring a property right that allows permanent access to the property (e.g., easement)
- Temporary occupancy of land that is adverse in terms of the statute's preservation purpose
- When there is a constructive use (a project's proximity impacts are so severe that the protected activities, features, or attributes of a property are substantially impaired)
- Note: The regulation lists various exceptions and limitations applicable to this general definition

#### 5. What is a *de minimis* impact?

For publicly owned public parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that will not adversely affect the activities, features, or attributes of the property. For historic sites, a *de minimis* impact means that FHWA has determined (in accordance with 36 CFR Part 800) that either no historic property is affected by the project or that the project will have "no adverse effect" on the historic property. A *de minimis* impact determination does not require analysis to determine if avoidance <u>alternatives</u> are feasible and prudent, but consideration of avoidance, minimization, mitigation or enhancement <u>measures</u> should occur. There are certain minimum coordination steps that are also necessary.

#### 6. What is a Constructive Use?

- Occurs when the transportation project involves no physical use of the from a Section 4(f) property via permanent incorporation of land or a temporary occupancy of land into a transportation facility. A constructive use occurs when:
  - The project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired
  - The value of the resource, in terms of its Section 4(f) purpose and significance will be meaningfully reduced or lost
- The types of impacts that may qualify as constructive use, such as increased noise level that would substantially interfere with the use of a noise sensitive feature such as an outdoor amphitheater are addressed in the Section 4(f) regulations
- A project's proximity to a Section 4(f) property is not in itself an impact that results in constructive use.
- The assessment for constructive use should be based upon the impact that is directly attributable to the project under review, not the overall combined impacts to a Section 4(f) property from multiple sources over time

#### 7. What is a Temporary Occupancy?

- Temporary occupancies of land that are so minimal as to not constitute a use under 4(f). These must meet:
  - Duration must be temporary, i.e. less that the time needed for construction of the project and no change in ownership of the land
  - Scope of work must be minor, i.e. both the nature and magnitude of the changes to the 4(f) property are minimal
  - No anticipated permanent adverse physical impacts, nor will it interfere with protected activities, features or attributes of the property
  - The land being used must be fully restored (returned to a condition which is at least as good as that which existed prior to the project
  - Documented agreement with the official(s) with jurisdiction

#### 8. What is an Official with Jurisdiction?

- Parks: Officials with the agency/ies that own or administer the 4(f) property
- Historic sites: SHPO

#### 9. How are Section 4(f) and Section 106 related?

- Section 106 process determines the eligibility of historic/archaeological resources for potential 4(f) protection
- A key difference is Section 106 is essentially a consultative procedural requirement, while Section 4(f) precludes project approval if the specific findings cannot be made

#### 10. What is a Feasible and Prudent Avoidance Alternative?

- Completely avoids the permanent use of a 4(f) property
- Feasibility: Can be built as a matter of sound engineering
- Prudence: No severe problems that outweigh protecting the 4(f) property, considering:
  - Meeting Purpose/Need
  - Safety
  - Severe impacts (after mitigation)
  - Extraordinary costs
  - Unique problems/factors
  - Cumulative impact of multiple factors

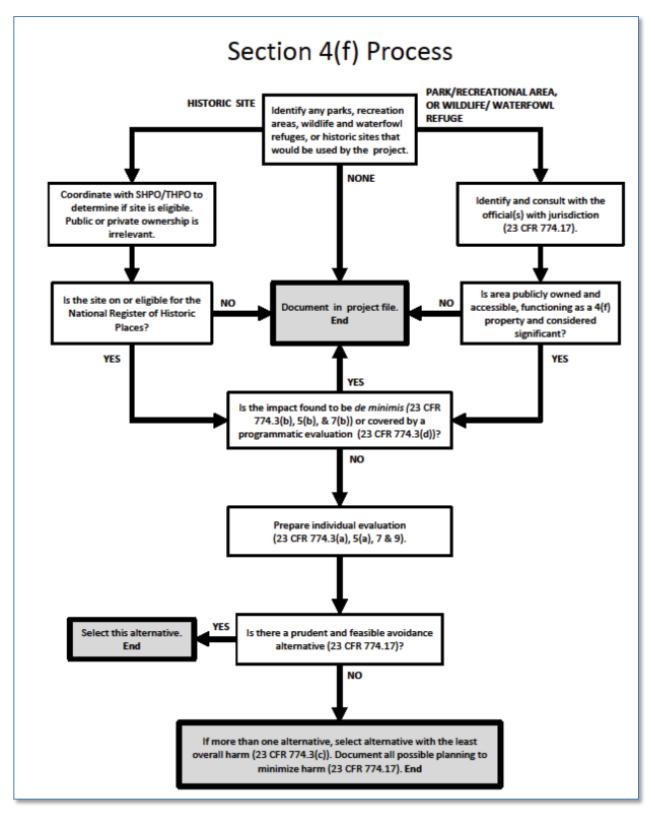
#### 11. What happens if the LPA uses a protected property?

- FTA completes a Section 4(f) Evaluation (draft and final), including three required determinations:
  - There is *No Prudent/Feasible Avoidance Alternative*
  - All Possible Planning to Minimize Harm has occurred (includes all reasonable mitigation measures)
  - LPA must have *Least Overall Harm* compared to other alternatives that have a 4(f) use

#### 12. What is a Least Overall Harm Analysis?

- When there is no feasible and prudent avoidance alternative, the comparison of the LPA with other alternatives under consideration that would have a use of any 4(f) property
- Comparative criteria used to reach the determination:
  - Relative value of and impacts to 4(f) properties, after similar mitigation efforts criteria:
    - Ability to mitigate adverse impacts to each 4(f) property
    - Relative severity of harm to protected characteristics of the 4(f) properties (after mitigation)
    - Relative significance of the 4(f) properties
    - Views of officials with jurisdiction over the 4(f) properties
  - Consideration of substantial problem/s criteria:
    - Degree to which the alternative meets P&N
    - Magnitude of adverse impacts to non-4(f) resources (after mitigation)
    - Substantial cost differences
- Only the alternative/s with the Least Overall Harm may be approved by FTA

Sources: 23 USC 138; 49 USC 303; 23 CFR Part 774; *Section 4(f) Policy Paper* (USDOT: July 20, 2012)



Source: Section 4(f) Policy Paper (p. 62; USDOT: July 20, 2012)

Minneapolis Park and Recreation Board Meeting March 6, 2015

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					2
Meeting Title:	Section 4(f) Coordination – Parks within the City of				
	Minneapo	lis			
Date:	03/06/2015	Time:	1:00 p.m.	<b>Duration:</b>	1.5 hour
Location:	SPO Conf. R		1.00 p.m.	Duration:	1.5 IIOuI
Location.			21. and 116 618	572	
		,	31; code: 446-618		
Meeting called by:	-		al.gotomeeting.com/j Director Enviror	om/440018575 omental & Agreemen	te
				e	115
Invitees:		-	, Renay Leone, M	ichael Schroeder	
	City of Minne	•			
	Hennepin Co	-	-		
		•	a, Amy Zaref		· •
	SPO: Jim Ale Skiles, Micha	•		Bishop, Jeanne Witz	zig, Leon
			Williams, Danie	lle Holder	
Dumpers of Meetings		0			
Purpose of Meeting:	process and a		+(1) properties uno	der jurisdiction of the	e MPKB, 4(1)
Agenda					
1. Welcome and Introdu	ictions				
2. Review Action Items					
3. Edits/Comments to 2/	/13/2015 Meeti	ng Notes (d	ue 3/11/15)		
4. Section 4(f) Propertie				piect Study Area – Pr	eliminary
<i>de minimis</i> Use:		- <b>j</b>			,
a. Easment for Cana	al Right-of-Wa	v in the Ker	ilworth Channel		
b. Cedar Lake Park	0	•			
c. Cedar Lake Park	– Cedar Lake J	unction			
d. Bryn Mawr Park					
5. Section 4(f) Propertie	es within the Ci	ty of Minne	apolis and the Pro	oject Study Area – Pr	operties
with no 4(f) Use:					
a. Alcott Triangle					
b. Park Siding Park					
c. Lake of the Isles Park					
6. Next Steps					
a. Consultation on M	litigation				
b. Meetings:					
i. March 13, 20	15 – TBD				



PERSON RESPONSIBLE:	DEADLINE:
PERSON RESPONSIBLE: SPO – Nani Jacobson	DEADLINE: Complete – 3/3/15
SPO – Nani Jacobson	Complete – 3/3/15 First installation – Complete –
SPO – Nani Jacobson	Complete – 3/3/15 First installation – Complete – 2/16/2015
SPO – Nani Jacobson MPRB	Complete – 3/3/15 First installation – Complete – 2/16/2015 Remaining information – TBD

## **SIGN-IN SHEET**



SWLRT Section 4(f) Officials With Jurisdiction Coordination Meeting – MPRB

March 6, 2015

1:00 – 2:30 pm

**SPO Conference Room A** 

Name	Organization	Email	Phone
PAUL MILLER	CITY OF MPLS	paul miller @ mineapolour. Gov	612-673-3603
Kim Zlimen	Hennepin Co.	Kimberly 21imene hennepin us	612-396-7618
Aavid Jager	- <i>H</i> C	david. j'a eger @ hennep	612-340-571+
Nani Jacobsr	n SPU		
MARIA BISHA -	SPD		
Kachel Maase	Kimley-Horn	rachel - parase offinley	har in
Seanne with	Kineley-Hern	jeanne. witzige Kinder	y-harn con
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Ryan Kunze	9PD		
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Meeting Title:	eting Title: Section 4(f) Coordination – Parks within the City of				
Jan San San San San San San San San San S			eting Notes		
Date:	03/06/2015	Time:	1:00 p.m.	Duration:	1.5 hour
Location:	SPO Conf. R	m. A			
			31; code: 446-61		
Maation called buy	-		al.gotomeeting.com	-	
Meeting called by:				onmental & Agreemen	its
Attendees:		-	Michael Schroe	eder	
	City of Minne	-			
	-	-	-	e Jaeger, Nelrae Succ	10
	FTA (phone)	•	•	Witzia Loon Skilog	Dechal
	Haase	ronzer, war	к ызпор, jeann	e Witzig, Leon Skiles,	, Rachel
Purpose of Meeting:	Continued dis process and a		4(f) properties u	nder jurisdiction of the	e MPRB, 4(f)
Agenda					
1. Welcome and Introdu	uctions				
2. Review Action Items					
3. Edits/Comments to 2	/13/2015 Meeti	ng Notes (d	ue 3/11/15)		
4. Section 4(f) Propertie	es within the Ci	ty of Minne	apolis and the P	roject Study Area – Pr	reliminary
de minimis Use:					
a. Easement for Car	-	•	nilworth Channe	el	
b. Cedar Lake Park					
c. Cedar Lake Park		unction			
d. Bryn Mawr Park 5. Section 4(f) Propertie		ty of Minne	apolis and the P	roject Study Area – Pr	operties
with no Section 4(f)		ty of winne	upons and the T	lojeet Study Thea	operaes
a. Alcott Triangle					
b. Park Siding Park					
c. Lake of the Isles	Park				
6. Next Steps					
a. Consultation on M	litigation				
b. Meetings:					
A. March 13, 20	015 – TBD				



#### DISCUSSION:

- 2. Review Action Items
  - a. Provided title work to MPRB SPO has given two transmittals of title work and maps to Renay
  - b. MPRB information to SPO outlined in SPO's data request SPO received the 1<sup>st</sup> installation of that information on 2/16/15 (the transmittal letter noted that additional information requested was under development). Information in this transmittal included SPO requested information on seven parks including confirmation on park ownership and confirmation that the parks are of local recreational significance. MPRB staff indicated there is no additional information to transmit, therefore a second installation is not needed.
  - c. Discuss canal right-of-way easement Not a 4(f) issue as the easement has triggered Section 4(f) for the property. A separate meeting will be discussed to review the title work and easement, to be scheduled
  - d. Determine ownership of pedestrian bridges and East Cedar Beach project elements to be discussed today
  - e. Section 4(f) determinations preliminary Section 4(f) determinations will be made within the Draft Section 4(f) Evaluation Update to be published within the forthcoming SDEIS. Final Section 4(f) determinations will be made by FTA, reflecting consideration of comments on the preliminary determinations and on continued consultation with the Officials with Jurisdiction. Those final determinations will be included in the Final Section 4(f) Evaluation, which will be documented in the ROD.
- Edits/Comments to 2/13/2015 Meeting Notes

   Comments due by 3/11/15 (none received)
- 4. SPO staff described the Section 4(f) Properties within the City of Minneapolis and the Project Study Area that are proposed to have a preliminary *de minimis* Use determination in the Draft Section 4(f) Update that will be published in the SDEIS:
  - a. Easement for Canal Right-of-Way in the Kenilworth Channel (Refer to handout "Kenilworth Lagoon - Construction Access" exhibit)
    - i. SPO staff referenced the exhibit for limits of the channel easement, HCRRA property, BNSF property, and the Ground Rounds Historic District boundary that would be impacted by the project
    - ii. SPO described the 4(f) use would be within the HCRRA and BNSF-owned property and the MPRB easement, including permanent incorporation of piers in the channel from the new bridges constructed over the channel
    - iii. SPO staff noted that there will be a public notice in the SDEIS for the preliminary *de minimis* determination (concurrent with 45 day comment period on SDEIS)
    - iv. SPO staff noted that following preliminary public review FTA can ask for official concurrence from Officials with Jurisdiction (OWJ) on the *de minimis*



#### determination

- v. MPRB staff did not have any objections to the proposed preliminary *de minimis* use determination
- b. Cedar Lake Park East Cedar Beach (Refer to handout "East Cedar Beach Connection Construction Access" exhibit)
  - i. SPO staff referenced the exhibit illustrating the proposed project changes within and near East Cedar Beach and where proposed use of the park property would occur, including a new sidewalk roughly between the pro[posed 21<sup>st</sup> Station and the entrance to the trail to East Cedar Beach
  - ii. SPO staff noted that an approximately 8-foot sidewalk extension on the south side of the street would follow public street right-of-way then extend into park property, following existing curb lines
  - iii. SPO requested that MPRB clarify the ownership of sidewalk as it crosses into park property
    - A. Renay is following up on ownership but MPRB does not anticipate that determining ownership of the sidewalk will be an issue
  - iv. City staff noted that the proposed design of proposed bicycle and pedestrian improvements in the vicinity of East Cedar Beach does meet the City's expectation of the agreement in the July 2014 MOU, but the City has not yet discussed ownership of the sidewalk that would be constructed within park property
  - v. MPRB and City staff noted that based on winter maintenance practice, the MPRB would already be out plowing various trails
  - vi. MPRB noted that on the other side of 21<sup>st</sup> Street there is sidewalk in public right-of-way adjacent to park property and the City and MPRB would look into how that is currently handled? Perhaps new sidewalk segment could have the same arrangement.
  - vii. SPO staff noted that if the new sidewalk in the park is to be owned by MPRB, the impact would be a temporary occupancy because the end result is MPRB-owned property as part of the park
  - viii. Further, SPO noted that if some jurisdiction other than MPRB would own the sidewalk, it would be *de minimis* 
    - A. This is currently assumed for the SDEIS
  - ix. MPRB staff did not have any objections to the proposed preliminary *de minimis* use determination
- c. Cedar Lake Park Cedar Lake Junction (Refer to handout "North Cedar Lake Trail Bridge Construction Access" exhibit)
  - i. SPO staff referred to the exhibit illustrating the proposed project changes within and near Cedar Lake Junction and where proposed use of the park property would occur, specifically with the construction of a new pedestrian/trail overpass crossing existing freight tracks and proposed LRT tracks
  - ii. SPO staff noted that trail use within the park would be detoured/maintained during construction, generally illustrated in the exhibit, which shows that a



portion of existing trail network that extends to the east park boundary would be removed, likely relatively early in construction, and temporarily and then permanently replaced

- iii. The proposed new bridge that would carry the North Cedar Lake Trail would span the existing freight and the proposed LRT tracks
- iv. Width of bridge is greater than 12 feet (30% plans show dimension)
- v. MPRB staff agreed a preliminary *de minimis* is also applicable here, noting that:
  - A. Questions remain on ownership, cost to maintain, etc.
  - B. MPRB, the City and SPO will need to work through more detailed design for the bridge and the affected trails and trail connections
- vi. MPRB staff also note that there are some questions about current property ownership in the yellow hatched area on figure, noting that the:
  - A. Hardest part to determine is who actually owns the current trail and who has an easement with the crossings
  - B. Underlying ownership of hatched area is MPRB, Renay is looking into easements
    - Action: MPRB to review area for easements.
  - C. Meeting to discuss ownership in this area is also needed between the City and the MPRB
- vii. SPO requested any easements or documentation MPRB may have with TC&W that would be helpful for this review (for short segment of railroad tracks that are in park property)
  - A. In response, MPRB noted that is does not have additional documentation, but it has concerns about the railroad location – property line is currently right on tracks, not space for a clear zone, if one was needed it could impact vegetation in the area
  - B. SPO responded that it will continue to work with MPRB on their concern.
- viii. SPO staff noted that Met Council is developing a landscape plan for the Kenilworth Corridor that will be completed in coordination with the City and MPRB
- ix. MPRB staff did not have any objections to the proposed preliminary *de minimis* use determination, with the noted items listed under c.v.
- d. Bryn Mawr Park (Refer to handout "Luce Line Trail Bridge Construction Access" exhibit)

i.

- SPO staff referenced the exhibit illustrating the proposed project changes within and near Cedar Lake Junction and where proposed use of the park property would occur including:
  - A. Black hatched area proposed improvements within park property
  - B. Yellow hatched area proposed temporary construction limits with park property
  - C. Existing Luce Line trail bridge (currently owned by MnDOT with bridgehead in Bryn Mawr Park) will be demolished and removed
  - D. The proposed new Luce Line trail bridge alignment would also cross



over LRT and BNSF tracks, but it would follow alignment of park/BNSF right-of-way line to the east, before turning south to connect to the station and other trails

- E. Slight redesign of trail network would be needed to tie back in to the realigned Luce Line Trail as it crosses the new bridge.
- ii. SPO staff noted that temporarily accessing the bridge site during construction will be challenging (for equipment, staff, materials, etc.), and is proposed to be:
  - A. Access through park (from the park parking lot)
  - B. A laydown area east of and in the eastern portion of the cricket playing field (but not within the cricket field during cricket season)
- iii. SPO staff noted that all areas of the park that would be temporarily changed during construction would be restored to a condition as good as or better than before, can also incorporate mitigation in plan for park
- iv. MPRB staff asked of the timing when the access road would be needed?
  - A. SPO responded it would likely be needed for one construction season – discussion for when it would fit best with use of park needs to occur
- v. MPRB staff noted that it has funding set aside for the development of a master plan for this park
  - A. It would be beneficial if the access road would match the alignment of the future trail due to soil compaction
  - B. Timing of park improvements scheduled for 2018/2019
  - C. SPO and MPRB staff noted that final impacts and how things get laid out in the park can be coordinated with the master planning process and that the Project and MPRB will coordinate as project design continues and as the park master planning process continues
- vi. MPRB staff noted that a portion of Basset's Creek Trail (which extends north from the Luce Line Trail) won't be viable while the bridge is being built might be a possible location for access road
- vii. If MPRB owns the bridge on park board property, then the impact would be a temporary occupancy because there would be no change in park property ownership, which is required for a Section 4(f) use to occur
  - A. If someone else owns the bridge, it would be a *de minimis* impact
- viii. MPRB staff asked who would own the portion of the bridge not on park property?
  - A. SPO responded that MnDOT currently owns bridge, but they do not want to own the future bridge
  - B. Paul stated that for bridges that are entirely in a park, the bridge is owned by the park and the City does inspections
- ix. City and MPRB staff noted that they need to have conversations about ownership of proposed improvements within Cedar Lake Park at East Cedar Beach and Cedar Lake Junction and within Bryn Mawr Meadows Park (items b, c, and d, respectively, within agenda item 4)
- **x.** SPO staff noted that construction activities will be scheduled so they do not intrude on important park activities (applies to all park properties) and that



will be included within the mitigation sections of the Section 4(f) Evaluation

- xi. MPRB staff did not have any objections to the proposed preliminary *de minimis* use determination
- Section 4(f) Properties within the City of Minneapolis and the Project Study Area Properties with no 4(f) Use (Refer to handout "Segment E3 – Minneapolis – Cedar Lake Pkwy Crossing – Preliminary Engineering Plan, September 2014" exhibit):
  - a. Alcott Triangle
    - i. Within park and recreation area study area (350 feet from centerline)
    - ii. There would be no use or temporary occupancy of this park
    - iii. MPRB staff did not have any objections to the proposed no 4(f) Use for this property
  - b. Park Siding Park
    - i. Within park and recreation area study area (350 feet from centerline)
    - ii. No permanent incorporation of park property or temporary occupancy (although shown in Draft EIS)
    - iii. MPRB noted that it is no longer concerned about constructive use since LRT is in the tunnel in this segment
    - iv. MPRB staff did not have any objections to the proposed no 4(f) Use for this property
  - c. Lake of the Isles Park
    - i. The project would not be physically in the park
    - ii. Lake of Isles Park is a segment of the full regional park (Minneapolis Chain of Lakes Regional Park)
    - iii. SPO could not find a boundary for Cedar Lake Park in MPRB's comprehensive plan. MPRB provided the following clarification:
      - A. Cedar Lake Park is part of the Chain of Lakes Regional Park in the comprehensive plan map of regional parks
      - B. Cedar Lake Park boundary would follow property boundaries
    - iv. SPO may request GIS layer from MPRB depending on what data SPO has
    - v. MPRB is concerned about constructive use
      - A. In response, SPO staff noted that the definition of Constructive use is that there is no permanent incorporation of park property into the project, but the project has an adverse impact on park property that is substantial enough to cause substantial impairment of the park's qualifying activities, features and attributes
      - B. MPRB staff asked what would happen if the SDEIS says there is no 4(f) use, but there ends up being a constructive use?
        - a. SPO staff proposed a potential solution to this question at this location which is to treat this property as part of one park property, as described above (spanning several property parcels, including the easement area). The actual physical use would be at the channel, but effects would be considered throughout the



property

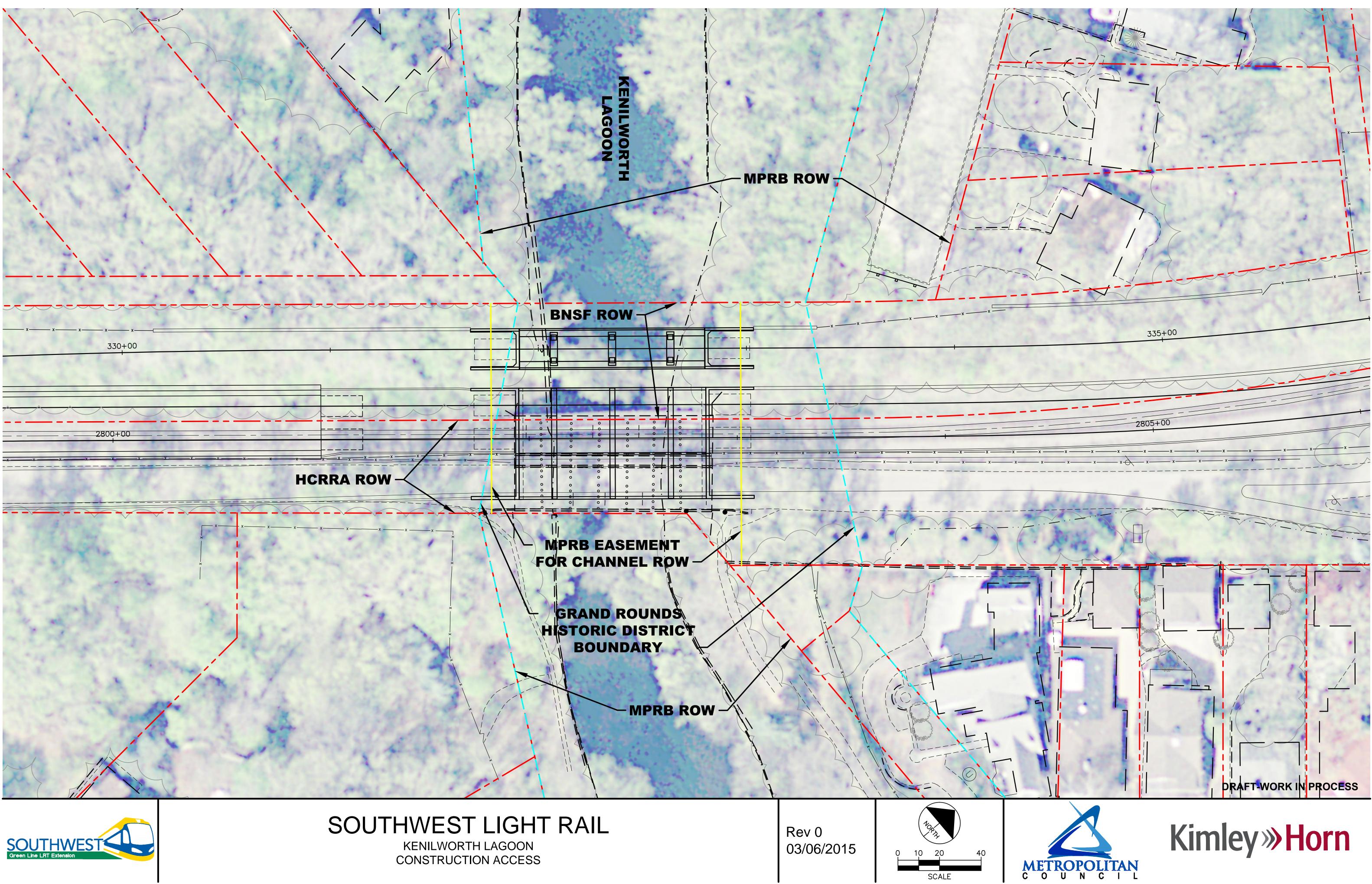
- b. SPO continued that then the issue of constructive use would not need to be considered under this approach as there would be a physical use of the Channel/Lagoon and the noise impacts would be considered along with the proposed physical use of the park property.
- c. SPO also continued that if the use is determined to be a *de minimis* use due to permanent incorporation of piers in the water, the mitigation process would be triggered that would consider visual, noise, and other impacts for the park beyond the pier locations
- d. SPO staff also noted that you can't have a *de minimis* constructive use that is, constructive use implies an adverse effect
- C. The group agreed with the proposed approach and agreed to call this area the Kenilworth Channel/Lagoon that is an element of the Minneapolis Chain of Lakes Regional Park this would capture all parcels of land within the park area, not all of which have unique names. This revised approach effectively modified details discussed under agenda item 4.A to reflect this agreed upon approach:
  - a. Lake of the Isles side of Minneapolis Chain of Lakes Regional Park (i.e., the wide lagoon and its banks that is east of the HCRRA right-of-way)
  - b. Cedar Lake side of Minneapolis Chain of Lakes Regional Park (the narrow channel west of the BNSF right-of-way)
  - c. Canal easement area within the BNSF and HCRRA rights-of-way.
- vi. SPO summarized that under this approach (to treat the Kenilworth Channel/Lagoon as a single park property under Section 4(f), Item 5c of this agenda (i.e., Lake of the Isles Park) gets included under Item 4.a (i.e., Kenilworth Lagoon/Channel) and will be a preliminary *de minimis* use – that is, the wide lagoon portion of the Lagoon is treated under 4.a as an element of the Kenilworth Channel/Lagoon which is an element of the Minneapolis Chain of Lakes Regional Park. Further, the Channel/Lagoon also includes the Canal Easement, and the narrow potion of the waterway to the west of the Kenilworth Corridor
- i. With incorporation of the incorporation of the single park property as a element of the Minneapolis Chain of Lakes Regional Park, MPRB staff did not have any objections to including this property under 4.a, thus having a proposed preliminary *de minimis* use determination

#### 2. Next Steps

- a. Consultation on Mitigation
  - i. Focus will shift to mitigation in future meetings, ownership questions will continue



ACTION ITEMS:	PERSON RESPONSIBLE:	DEADLINE:
Provide title work to MPRB for all areas impacting parks	SPO – Nani Jacobson	Complete – 3/3/15
MPRB to provide second set information, noted in their initial response, requested by SPO on 1/29/2015	MPRB	First installation – Complete – 2/16/2015 Remaining information – None – 3/6/15
Meeting to discuss canal ROW easement	All	March 13, 2015
Determine ownership of ped bridges and East Cedar Beach project elements	City, MPRB	City/MPRB to hold meetings and continue discussion; provide status at next meeting
Input on preliminary 4(f) determinations	MPRB and City	Complete – 3/6/15
Develop new Kenilworth Channel/Lagoon (as an element of the Chain of Lakes Regional Park) exhibit	SPO	TBD - March
Provide easements for Cedar Lake Park – Cedar Lake Junction area	MPRB - Renay	TBD







## MPRB ROW

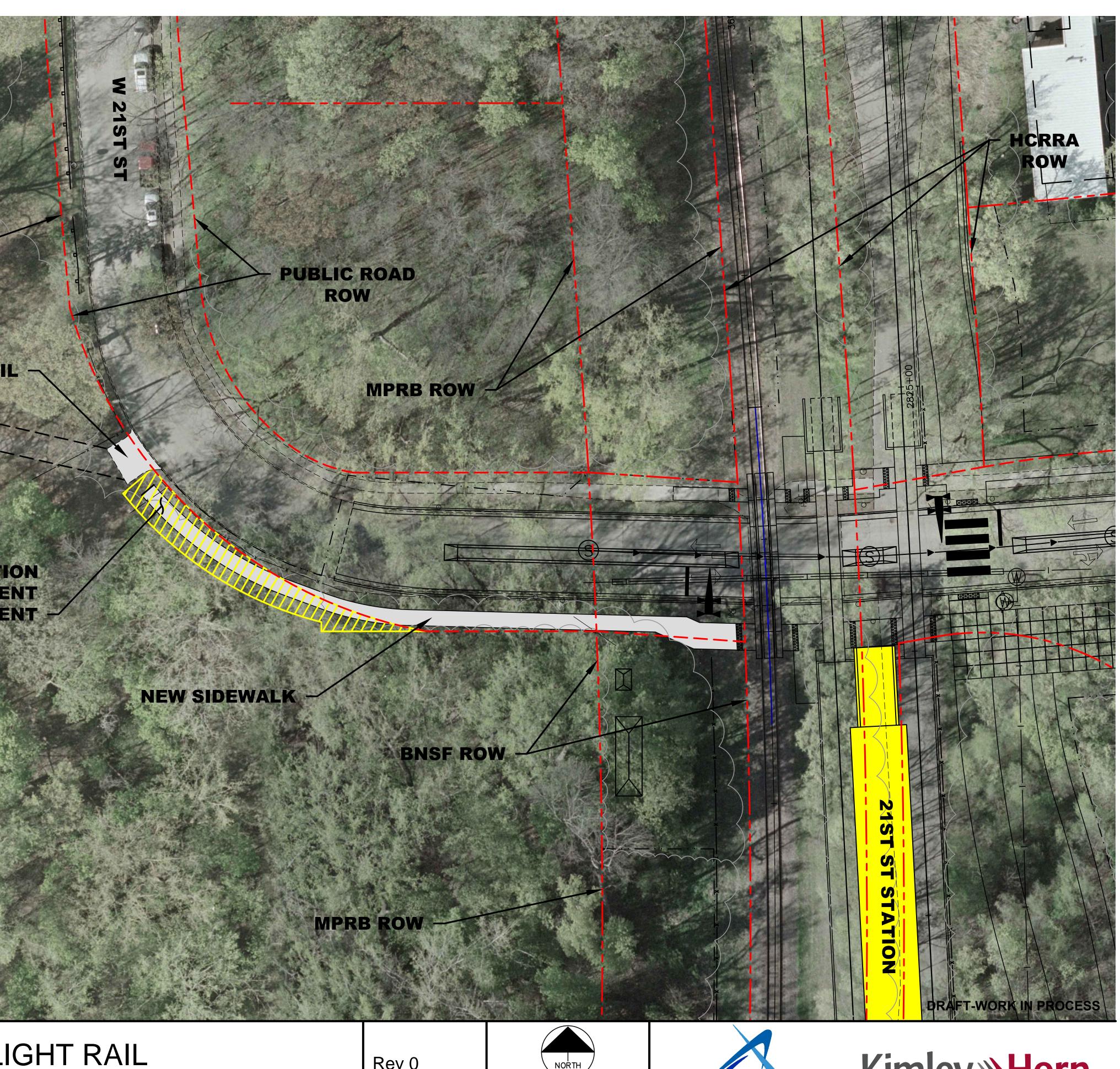
## **APPROXIMATE ALIGNMENT OF EXISTING TRAIL**

**ENTRANCE TO TRAIL** -

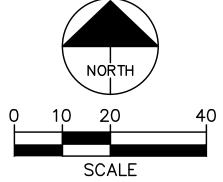
**TEMPORARY CONSTRUCTION AREA AND PERMANENT** MAINTENANCE EASEMENT





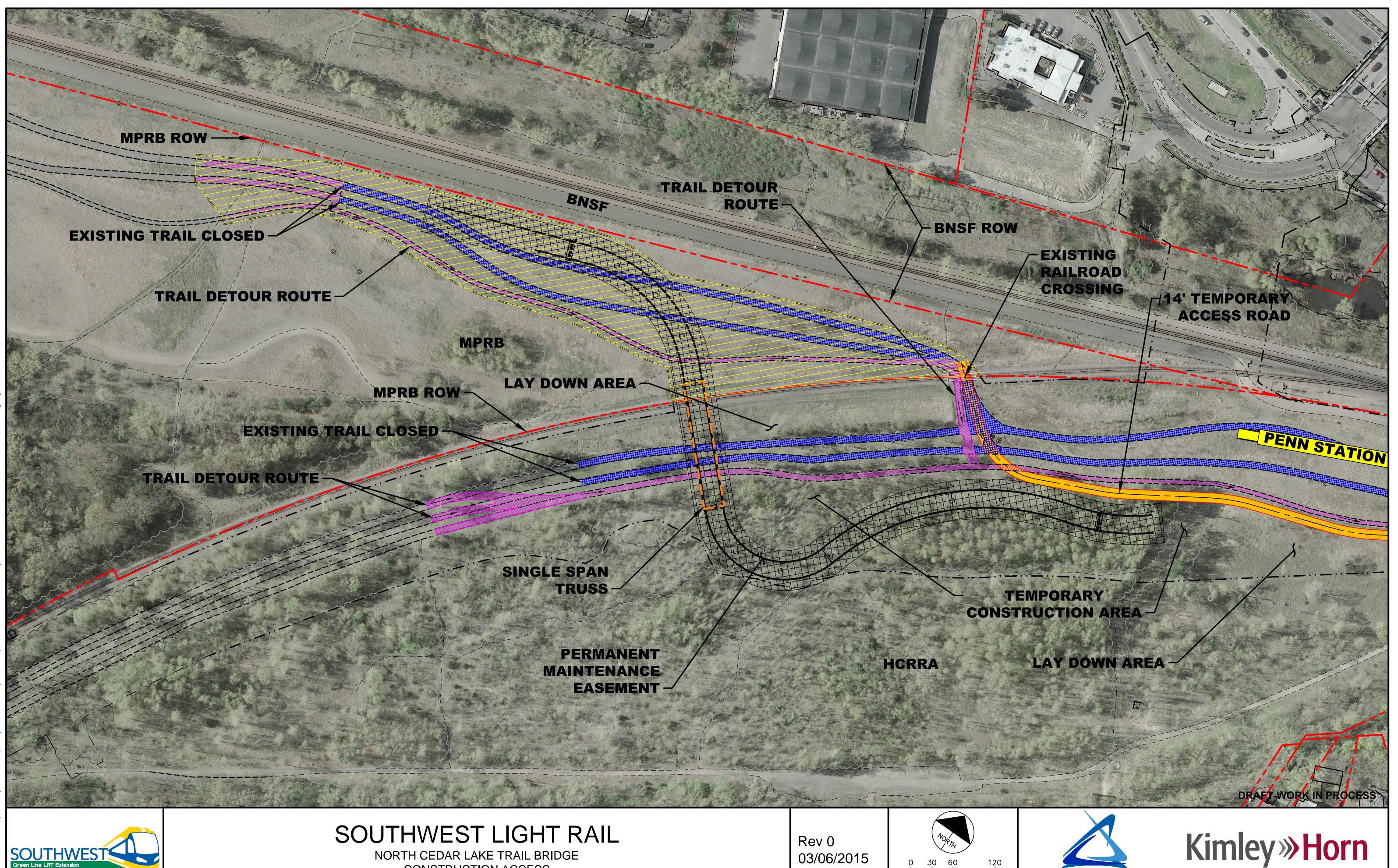


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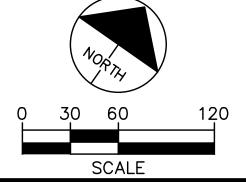
# Kimley »Horn



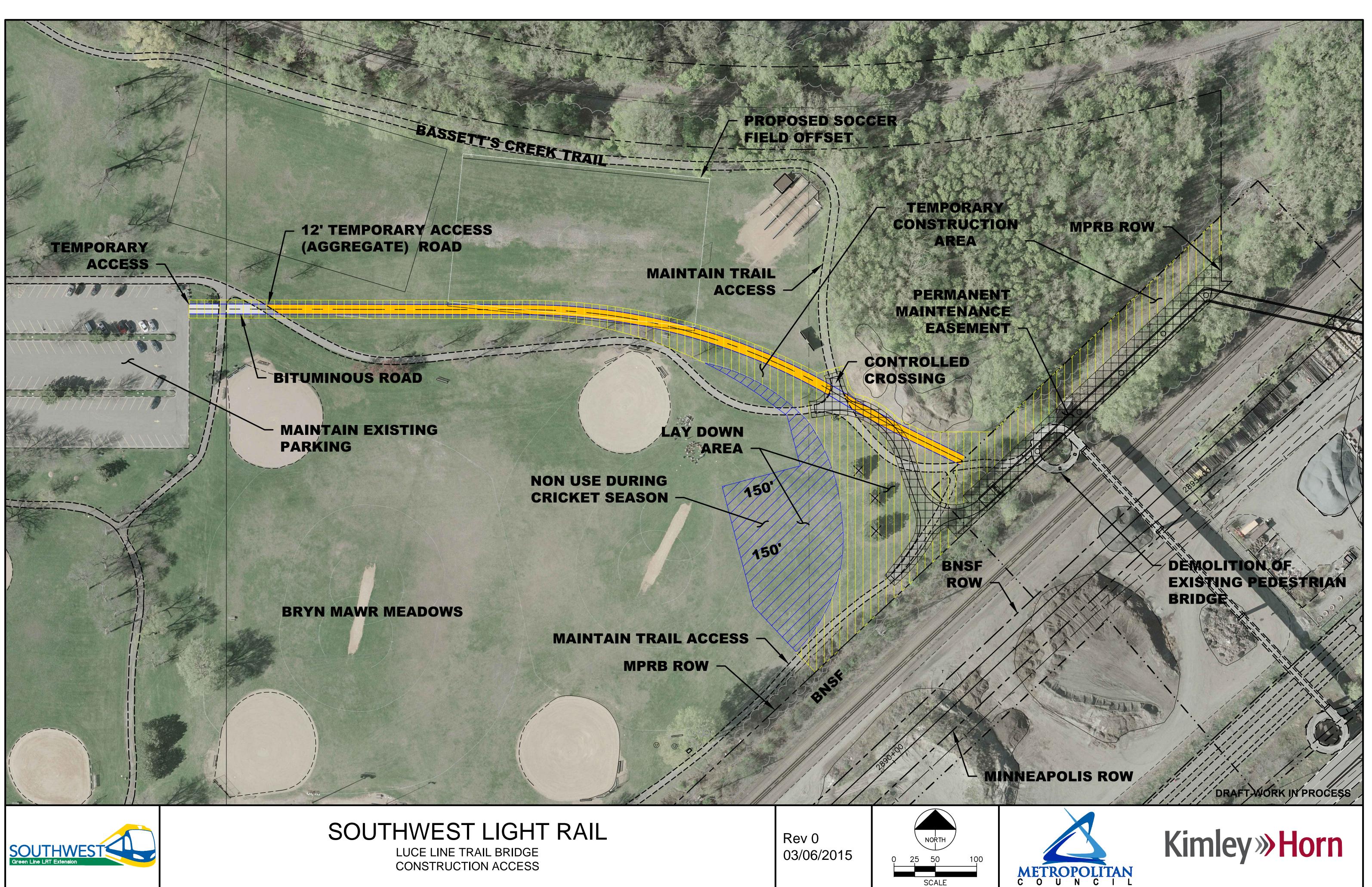


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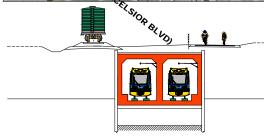


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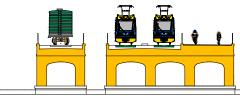


SCALE





TYPICAL SECTION AT TUNNEL



TYPICAL SECTION AT BRIDGE

## SOUTHWEST LRT ALIGNMENT

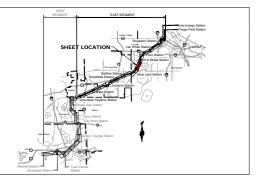
SEGMENT E3 - MINNEAPOLIS CEDAR LAKE PKWY CROSSING PRELIMINARY ENGINEERING PLAN

	CC
LRT TRACK AREA	
PEDESTRIAN / SIDEWALK AREA	
STATION PLATFORM	
TUNNEL	
ROADWAY	
TRAIL / BIKEWAY	
SURFACE PARKING	
BRIDGE	
RETAINING WALL	

SEPTEMBER 2014



#### COLOR LEGEND EXISTING SIGNALIZED INTERSECTION PROPOSED SIGNALIZED INTERSECTION TRACTION POWER SUBSTATION SYSTEMS BUILDING (DESIGN VARIES) GATE ARM TOTAL PROPERTY ACQUISITION PARTIAL PROPERTY ACQUSITION ---- RIGHT OF WAY ---- PROPERTY LINE TEMPORARY CONSTRUCTION EASEMENT





21

5. Kenilworth Channel – Tunnel Crossing Study, draft Memorandum of Study Findings Prepared for Minneapolis Park and Recreation Board, Minneapolis, Minnesota, March 5, 2015; Prepared by Brierley Associates This page intentionally left blank.



Kenilworth Channel – Tunnel Crossing Study Prepared for Minneapolis Park and Recreation Board Minneapolis, Minnesota March 5, 2015



March 5, 2015 File Number: 414044-000

Sent via email PDF format

Minneapolis Park & Recreation Board 2117 West River Road Minneapolis, MN

Attention: Michael Schroeder Assistant Superintendent for Planning

Subject: Kenilworth Channel – Tunnel Crossing Study Draft Memorandum of Study Findings

#### Mr. Schroeder:

Submitted herewith is our draft report detailing the results of an engineering Study performed by Brierley Associates Corporation (Brierley) of alternative crossing options at the Kenilworth Channel for the proposed Green Line extension of Metro Transit's Light Rail Transit system. The Study is a result of a team effort including Brierley, Barr Engineering Company, and David Evans Associates. The work has been performed pursuant to the Professional Services Agreement between Brierley and Minneapolis Park and Recreation Board, dated November 20, 2014 and the Amendment Number 1 to the PSA dated December 31, 2014.

On behalf of the Brierley/Barr/DEA team, we want to thank you for the opportunity to work with you on this project. Once your team has had an opportunity to review this DRAFT Study, we look forward to meeting with you to determine next steps and finalization of the Study. If we can be of further assistance, or if you have any questions, please contact this office.

Sincerely, BRIERLEY ASSOCIATES

Todd Christopherson, PE Great Lakes Region Manager

Gregg Sherry, PE Vice President

#### **Executive Summary**

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ATTACHED DOCUMENTS Attachment 1 Sail Brafile			

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APPENDIX A - LRT Alignment, Profile, and Operations - Technical Memorandum

(Appendix A prepared by David Evans Associates)

- **APPENDIX B** Visual Impacts
- APPENDIX C Noise and Vibration
- APPENDIX D Section 4(f) Impacts
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- APPENDIX F Surface Water Impacts
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- **APPENDIX H** Archeology Impacts
- **APPENDIX I Historical Impacts**

(Appendices B through I were prepared by Barr Engineering)



#### **EXECUTIVE SUMMARY**

The proposed Green Line extension of the Light Rail Transit (LRT) system will pass through the Minneapolis Chain of Lakes Regional Park, specifically, through the Kenilworth Corridor. The design of the project is approximately 30% complete and includes a bridge for the double LRT track to cross over the Kenilworth Channel. The Kenilworth Channel is a scenic and peaceful area that connects Cedar Lake to Lake of the Isles as part of the city's park system. The Channel is used for various activities year round and the Minneapolis Park & Recreation Board (MPRB) desires to minimize the impact of the planned LRT to the users of this area. While the project's designer, the Southwest Project Office (SPO), had previously considered a tunnel under the Kenilworth Channel, they later ruled out the tunnel as being not feasible due to its additional cost and perceived risk considerations.

The MPRB enlisted an independent engineering study by the Brierley Associates team to determine if an alternative to the bridge crossing could be developed as a feasible design option and to assess all crossing options to determine an option with the least impact on park resources. The Brierley team reviewed extensive engineering work previously prepared by the SPO and also developed independent studies of various alternatives to the planned bridge.

The Brierley team concluded that at least two tunnel options are feasible for crossing the Kenilworth Channel. The two options that are considered in detail with this Study are the original SPO "cut and cover" shallow tunnel design and a "jacked box" tunnel concept.

### 1. INTRODUCTION

Brierley Associates Corporation (Brierley) was contracted by the Minneapolis Park & Recreation Board (MPRB) in November, 2014 to conduct this Study to explore the feasibility of alternative crossing(s) of the Kenilworth Channel in lieu of the bridge that is currently planned by the Southwest LRT Project Office (SPO). MPRB did not task Brierley with <u>designing</u> a tunnel or other features of the LRT project; rather, MPRB asked Brierley to investigate alternative options for crossing the channel and determine feasibility of one or more viable options and to determine which of the feasible options creates the least impact on park resources.

#### 2. TEAM MEMBERS

Brierley Associates is a national consulting engineering firm with headquarters in Denver, Colorado. The firm has a Regional office located in Burnsville. Brierley specializes in underground engineering including design of tunnels, deep shafts, support of excavation, and other geostructural challenges. In order to provide a complete and responsive Study for the MPRB, Brierley augmented its team with Light Rail Transit (LRT) and Environmental Engineering expertise, respectively provided by the David Evans Associates and Barr Engineering firms. Barr Engineering is a regional engineering firm with headquarters in Edina and David Evans Associates is a national engineering firm with headquarters in Portland, Oregon.

During the initial phases of the Study, personnel from out of town offices of the team established a project office in Burnsville to facilitate better collaboration and communication for the team as well as with MPRB personnel.



# 3. SCOPE OF WORK

The Scope of Work for this Study was separated into three Phases. Phase 1 and 1A were authorized by MPRB with the initial PSA. Additional Scope of Work was authorized later by Amendment 1 to the PSA and is identified below as Phase 2.

### Phase 1

- 1. Gather and review key data: this task includes review of the draft EIS and other information prepared by the Southwest Project Office and provided by the MPRB. Information will be collected to emphasize review of the following:
  - a. Geotechnical
  - b. Hydrology/hydrogeology and water resources
  - c. Survey including LRT horizontal and vertical alignment
  - d. SWLRT proposed alignment
  - e. SWLRT design criteria
  - f. Cultural resources
  - g. Visual quality
  - h. Noise and Vibration
- 2. Meetings and Communications:
  - a. Kickoff meeting with project team and MPRB staff
  - b. Project communication including progress meetings and conferences calls
  - c. Other meetings with Southwest project office and other agencies as directed by MPRB staff.
- 3. Develop one or more alternative Crossing Options:
  - a. Analyze impacts of alternative option(s)
  - b. Prepare conceptual drawings of alternative option(s)
- 4. Coordinate with MPRB staff and project team to prepare criteria for developing a matrix to compare options. This matrix will facilitate a comparative analysis of impacts associated with the current surface alternative with those of one or more potential concept alternatives including tunneling.
  - a. Establish criteria
    - i. Engineering
    - ii. Cost
    - iii. Constructability
    - iv. Resource impacts
    - v. User impacts
  - b. Compare current bridge crossing with alternative option(s) for identified criteria
- 5. Analyze Feasibility of Alternative Option(s) based on established criteria identified in the matrix. Elements of feasibility may include:
  - Portal orientation, size and geometry as well LRT rail requirements relative to slope.
  - Limitations set forth by the owner/operator of the existing freight line
  - Areal extent of real-estate required to construct the portals
  - Tunnel geometry to meet the selected entry/exit portals
  - Subsurface conditions along the proposed project corridor
    - $\circ$  Geological characteristics
    - $\circ$  Groundwater levels and flow
  - Means of tunnel construction
  - Construction staging area



- Extent of land takings and easements required for construction and operation of the tunnel system
- Construction conflicts with existing underground and aboveground utilities
- •Electrical power into and out of a tunnel
- Management and disposal of construction derived waste and tunnel muck
- •Management and disposal of effluent generated by construction dewatering activities
- Mitigation and Monitoring of ground movement which has the potential to affect underground utilities, surface facilities and buildings.
- Construction of Cross Passages
- Final Lining System
- •Life/Fire/Safety within the completed tunnel
- 6. Prepare opinion of construction costs

For each crossing alternative and a probable means of construction identified a preliminary cost estimate for design and construction, including initial ground support, final lining design will be prepared. Other elements of this opinion of construction costs include electrical, mechanical, life/safety, architectural, signage/signalization and communications.

7. Identify additional investigations to assess prudence of alternative(s)

### Phase 1A

- 1. Respond to questions from MPRB about Phase 1 deliverables Alternative Option(s), comparison matrix, and feasibility/prudence analyses.
- 2. Coordinate with MPRB staff to identify further investigations that may be needed to assess feasibility and prudence for alternatives.
- 3. Refine and further develop one Alternative Crossing Option in response to questions and comments from MPRB.
- 4. Provide schematic constructability graphics and animation depicting the installation of an Alternative Option
- 5. Develop a Scope of Work and Schedule for Phase 2

### Phase 2

- 1. Verify schedule implications of two options and compare to baseline schedule provided by SPO
- 2. Confirm optimum constructability of options
- 3. Confirm water proofing during construction and for permanent condition
- 4. Visual Quality Assessment
- 5. Water Resources Surface Water

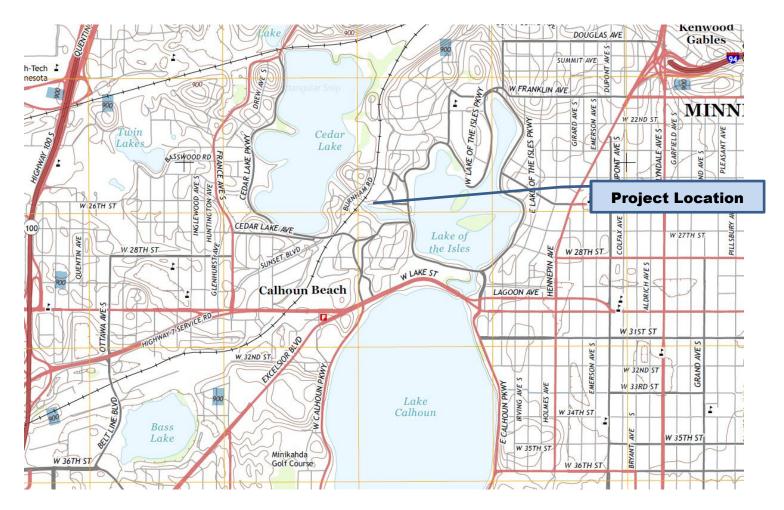


Minneapolis Park & Recreation Board Kenilworth Channel – Tunnel Crossing Study March 5, 2015 Page 4 of 12

- 6. Water Resources Ground Water
- 7. Noise and Vibration Analysis
- 8. Cultural Resources Archaeology
- 9. Cultural Resources Historical
- 10. FHWA 4(f) Impact
- 11. Review Light Rail operations as related to tunnel options in lieu of bridge
- 12. Project Management and coordination of a multi-disciplinary, multi-firm approach for Brierley Associates, Barr Engineering, and David Evans Associates.
- 13. Address additional feasibility issues, if identified during this study.

## 4. PROJECT LOCATION AND DESCRIPTION

The Project is located in Minneapolis, between Cedar Lake and Lake of the Isles as shown on the map below:





# 5. GROUND CONDITIONS

This discussion provides a brief description of the ground conditions for approximately 1500 linear feet of proposed tunnel between alignment station (Sta) 2797+00 to 2812+00. The southerly end of this reach starts at the approximate location of the north tunnel portal as described in the AET geotechnical report dated August 25, 2014; and includes the portion of the reach underlying the Cedar Lake-Lake of the Isles Channel, and extending an additional 900 ft to the north near the Burnham Road crossing.

As described in the AET report, the two major soil types to be considered for this tunnel reach include <u>Fill</u> materials; and <u>Alluvial</u> soils originating from glacial outwash deposits. There is a small pocket of Marsh Deposit (organic) soil between the Fill and Alluvial soils south of the Kenilworth Channel. It is likely that this pocket would be removed during construction and replaced, therefore it is not considered in the conceptual design described in this Study.

### Fill:

Across this portion of the tunnel reach the fill thickness varies from 7-ft to 25-ft, with an average thickness of 15 ft. The thickest fill areas are adjacent to the bridge crossing over the channel.

The fill materials generally comprise dark brown to brown to brown-gray Silty Sand and Sand with variable gravel and/or clay content; and with variable presence of organic fines, roots, wood, ash/cinders, occasional cobbles and brick fragments.

The fill soils range from loose to dense; SPT N-values ranging from 5 to 48 blows per foot (bpf) with an average of 17 bpf (medium dense).

### Alluvium:

Alluvial soils ("Coarse Alluvium" per AET report) comprise mostly brown to brown-gray to gray-brown, loose to very dense, fine to medium Sand and generally accompanied by, or interlayered with, variable Sandy Silt and/or Gravelly Sand. Occasional layers or lenses of "fine Alluvium" consisting of Silt and Sandy Silt were also observed. SPT N-values ranged from 8 to 80 bpf, with an average of 22 bpf. (Note: the highest blow counts of 80 and 48 bpf were noted in boring 1041 ST at approximate Sta 2810+00 which may be due to presence of large gravel).

3 to 5-ft thick medium dense gravel layers were observed in borings 1153ST and 1042ST south of the channel and at depths ranging from 24 to 40-ft below ground surface. The greatest potential for encountering cobbles was observed at boring 1006ST at the north side of the channel and at depths ranging from 25 to 40-ft below ground surface.

Also, in the vicinity of borings 1153ST and 1142ST (approx. Sta 2799+00 to 2801+20), at approximate depth of 15 to 20-ft below ground surface, a remnant layer of <u>Marsh deposits</u> is present consisting of soft to medium stiff peat and organic clay/silt.

Some of the deepest borings in this reach (1005ST and 1006St) were taken to depths of 141 to 181-ft; in these borings the "coarse alluvium" extended to depths of 125 ft and 175 ft respectively at which depths Till-like soils were encountered.

### Water/Groundwater:

Groundwater levels observed during drilling of the project boreholes in 2013 ranged from El 847 to 852 with an average of approx. <u>El 850.5</u>. Piezometric water levels observed in three wells installed within this reach ranged from El 849 to El 855, with an average of approx. <u>El 852.5</u>, over the period from October 2013 to August 2014.



Similarly, the water level in the Cedar Lake-Lake of the Isles Channel was measured over this same period and ranged from El 852 to El 856. The Channel is shown to extend to a depth equivalent to approximate El 850. Attachment 1 is a profile showing the soil types along the proposed alignment in this area.

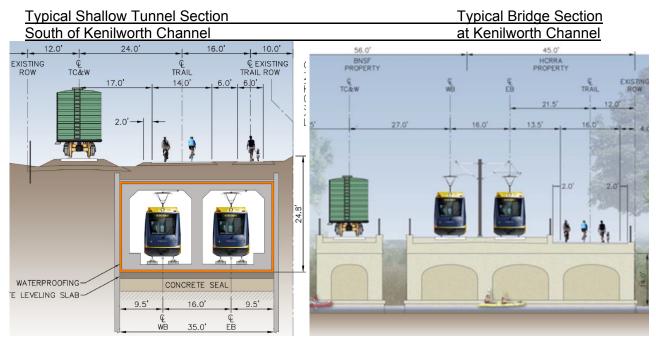
### **Tunnelman's Ground Classification**

Assuming that most of or the entire tunnel profile will be below the prevailing groundwater levels, the alluvial soils will behave as Fast Raveling to Running conditions.

# 6. CURRENT DESIGN FOR KENILWORTH CROSSING - LRT BRIDGE

The current design for the LRT Kenilworth Crossing is as shown in the preliminary design documents provided by SPO. The documents provided to our team for review were prepared by Kimley Horn for the SPO. The SPO design includes a new bridge structure as shown in drawings dated September 2014. The PDF document included 126 drawing pages and was titled – "East Volume 1 (Civil) Segment 3".

These plans indicate a shallow, cut and cover tunnel to the south of the Kenilworth Channel, however, the alignment daylights through a portal just south of the Kenilworth Channel and then crosses Kenilworth Channel by means of a bridge. These two schematics are illustrated below: (drawings by SPO – Kimley Horn)



It's our understanding that the tunnel was considered during the SPO early designs; however, the tunnel crossing was abandoned for various reasons related to cost and perceived additional risks.

## 7. ALTERNATIVE OPTIONS FOR KENILWORTH CROSSING - LRT TUNNEL

The Brierley team made a thorough review of the design work previously completed and made available by SPO. The material included geotechnical reports, preliminary plans, Basis of Design memorandum, and the SPO's own study of the Shallow Tunnel Under Channel. Our review of their aforementioned documents and



our own, independent analysis indicates that the Shallow Cut and Cover Tunnel concept is feasible and could be extended approximately 900 feet to the north in order to cross under the channel.

In addition to the Cut and Cover tunnel that we refer to as Option 1, we identified another option - Option 2 - which is a Jacked Box tunnel.

Both of the Tunnel Options we have considered below result in additional cost (over the current SPO bridge design) and slightly longer duration to construct. The Cost and Schedule considerations as compared to the current SPO bridge design are addressed later in Section 8 and 9, respectively.

### 7.1 Cut and Cover Tunnel – Alternative Option 1

The Cut and Cover method of shallow tunnel construction is very common and is usually the most practical and cost effective means of constructing a shallow tunnel. Because the entire tunnel cross section would be submerged below the water table at Kenilworth, special consideration is given to waterproofing the tunnel and also to ensuring that the weight of the tunnel itself plus the weight of the ground above the tunnel is greater than the uplift (buoyancy) force on the submerged tunnel.

The buoyancy calculation is relatively simple and for most tunnel designs does not control design. The SPO has provided a design that includes additional safety factor above what is necessary for buoyancy. The design features for uplift include additional concrete slab thickness and helical piles for "hold down" support below the tunnel. While we find that there is room for simplification of this design for schedule and cost savings, we have maintained their design for the sake of comparison between tunnel options 1 and 2 and the current SPO bridge design. Refinement of the design (value engineering) is a process that would likely be incorporated into final design by the SPO design team, regardless of which option is selected for the channel crossing.

As discussed in the attached Appendix A Memorandum by David Evans Associates (DEA), the horizontal alignment of the LRT rails is considered identical for this option to the alignment considered by SPO in their current design. The vertical alignment is nearly identical and is for all intents and purposes the same as considered by SPO in their "Shallow Tunnel Under Channel" Study dated March, 2014.

Waterproofing of the tunnel is a significant concern for any of the options whenever the structure or portions thereof are below the design water table. We concur with the waterproofing as developed by SPO for this option and believe it is a good solution for the cut and cover tunnel. The methodology, details, and construction sequence are as shown in the Basis of Design report. These methods provide a very robust solution to keeping the ground water out of the tunnel – both during construction and later when operational.

Because the concept of a cut and cover tunnel is common and because SPO has done a thorough study that we do not disagree with, we have not gone into greater detail identifying details, construction methods and sequence, etc.

### 7.2 Jacked Box Tunnel – Alternative Option 2

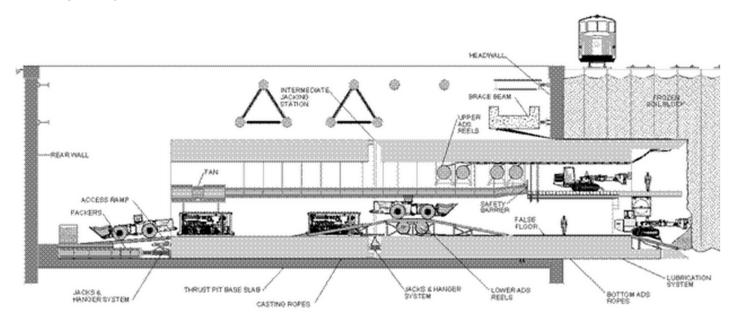
The Jacked Box Tunnel Option 2 presents a less common approach than Option 1; however it is nonetheless a sound and proven methodology for shallow tunnel construction. The method of Jacked Box tunnel construction is quite common in Europe and Asia and is beginning to gain popularity in the US. The Federal Highway Administration (FHWA) includes a section in their design manual for this method including the submerged construction condition that is present at Kenilworth Channel. Additional information for this method is available in Chapter 12 of the FHWA Tunnel Design Manual at:

http://www.fhwa.dot.gov/bridge/tunnel/pubs/nhi09010/12.cfm.

In addition, available Slide presentations made to MPRB at public meetings in January and February include photos and narratives of the method as used by Brierley Associates for a recently completed Jacked Box



project in Lynchburg, Virginia. The Virginia project was of similar cross sectional area as the Kenilworth tunnel. The sketch below is from the FHWA manual and shows a jacked box being pushed under an active rail line. This example uses ground freezing to control the ground at the face. Note that the sketch does not show the receiving pit beyond.



The Jacked Box method involves digging a pit on either side of the Kenilworth Channel and supporting the pit walls in similar fashion to the cut and cover method (sheet pile walls with bracing and bottom slab). The pits are identified as launching and receiving pits, respectively. The launching pit is larger in order to accommodate the construction of the tunnel box. For Kenilworth, the box will be approximately 205 feet in length and the pit must be at least that large to allow the box and clearances for construction. The receiving pit on the opposite side of the channel is significantly smaller. The jacking process is accomplished by hydraulic equipment and can be done either by pulling the box with high strength steel cables or pushing it with hydraulic rams. We have chosen the pulling method as the most effective for Kenilworth as it also provides improved alignment tolerances compared to the pushing method.

Controlling the ground during the tunneling method is critical. As mentioned previously, the alluvial soils present along with a submerged condition result in a "flowing ground" condition without ground support. Controlling the ground at the open face of the tunnel can be accomplished by ground modification methods such as freezing, grouting with either chemical or cement grouts, or dewatering. Dewatering is not practical due to the high permeability of the soil, the shallow design, and the presence of the channel water as a nearly infinite source of water. Ground freezing is a good option; however, consideration should be given to potential for freezing of portions of the channel water. Grouting of the soil was chosen as the best option for ground improvement. The grouting will provide a stable face at the leading edge of the tunnel during construction, minimize ground water intrusion during construction, and will also serve to impede ground water permanently.

Permanent waterproofing of the tunnel box is imperative to prevent water intrusion and ice damming during cold months. The methods of membrane installation that are considered for the cut and cover tunnel are not practical for the jacked box method. For the Jacked Box method of construction, the tunnel can be effectively waterproofed by a combination of several design features:

• Reinforcement to minimize cracking of concrete



- Water Stops at all construction joints
- A high quality, low permeability, concrete mix design
- A waterproofing admixture in the concrete that effectively fills in microscopic pores in the hardened concrete matrix, reducing permeability. The admixture will also provide a "selfhealing" mechanism for small cracks.
- A residual Prestress in the concrete can be developed in the longitudinal direction by standard post-tensioning methods. The Prestress force can eliminate cracking transverse to the tunnel alignment.
- A zone of grouted soil around the perimeter of the tunnel to reduce the permeability that will in turn significantly reduce the potential movement of ground water through the tunnel.

Final design and detailing using these methods will provide a dry tunnel installation.

The vertical alignment of this option is different from the Cut and Cover Option 1 Tunnel. Because the method is based on building a box and then jacking the box into place, there is a flat segment for the length of the box (205 feet.) Also, we've included additional cover between the bottom of channel and the top of the jacked box. With the flat portion and the additional depth for this method, David Evans Associates has created a vertical alignment that meets the SPO design criteria.

The north portal in this alignment is pushed further north and the U-section (transition from portal to on grade track) extends into the area below the existing Burnham Road bridge structure. We reviewed the as-built drawings for the Burnham Road Bridge and its foundations and we believe there is adequate width between bridge piers to accommodate the U section alongside the relocated freight rail. It is probably a tighter fit than desired, however, and we would recommend future final design consideration of shifting the east LRT line to the east side of the bridge pier. There is ample right of way in this area to accommodate this change in horizontal alignment if desired along with the trails to the east. Also, the City of Minneapolis intends to reconstruct the Burnham Road bridge, allowing further opportunity for coordination of LRT alignment.

## 8. COST CONSIDERATIONS

The cost of the two tunnel options was developed in order to compare the relative cost of each tunnel option with the current SPO bridge design. In order to be consistent and provide "apples to apples" comparisons, we first reviewed cost data provided by SPO for their previously considered shallow tunnel option. Because our Option 1 Cut and Cover Tunnel was nearly identical to the original tunnel crossing considered by SPO, we used the SPO provided cost estimate for this option as a basis for establishing assumptions and unit prices for our estimate of the Option 2 Jacked Box Tunnel.

Using the same unit prices for work scope items that are included in bridge and tunnel options, we developed independent verification of the costs. For work scope items that are unique to the Jacked Box Tunnel Option 2, we based our estimate on previous experience with similar, recent projects and also received informal cost estimates from contractors that are experienced in this type of construction (jacked box method, ground improvement, etc.).

Cost estimates were developed in current dollars. SPO staff then used a conversion for current dollar estimates to year-of-expenditure estimates which were provided to us for review and concurrence. The conversion formula accounts for estimated inflation and required Federal Transportation Administration design contingencies. We met again with SPO staff to review our estimate and methodology and then further refined our cost estimates which are presented in the following tables. The summary tables were provided by SPO.



MPRB OPTION 1 - CUT AND COVER SHALLO	W TUN	NEL	
	(\$M	BASE YR)	(\$M YOE)
Tunnel (South)	\$	(6.1)	\$ (12.4)
Tunnel (Under Channel)	\$	41.5	\$ 84.6
Other (LRT Channel Bridge Deduct, Add'l LRT DF Track)	\$	(0.4)	\$ (0.8)
ADD'L CAPITAL COST (A FROM SPO CURRENT DESIGN)	\$	35.0	\$ 71.4

ADD'L CAPITAL COST (& FROM SPO CURRENT DESIGN): \$60 M - \$75 M

MPRB OPTION 2 - JACKED BOX TUN	IEL		
	(\$M	BASE YR)	(\$M YOE)
Tunnel (South)	\$	(6.1)	\$ (12.4)
Tunnel (Under Channel)	\$	51.1	\$ 104.3
Other (LRT Channel Bridge Deduct, Add'I LRT DF Track)	\$	(0.4)	\$ (0.8)
ADD'L CAPITAL COST (A FROM SPO CURRENT DESIGN)	\$	44.6	\$ 91.1

ADD'L CAPITAL COST (& FROM SPO CURRENT DESIGN): \$80 M - \$95 M

The Delta costs identified above are costs above and beyond the SPO current bridge design.

One further consideration that may be significant in comparing costs of the current design and the two tunnel options is the <u>potential</u> need for reconsideration of Municipal Consent by the City of Minneapolis and Hennepin County created by the design change. After concurring with our team's estimated costs for tunnel options, SPO stated that changing the design is likely a significant change that will require going through the municipal consent process again. They estimate this will take an additional year including redesign time and approval processes. This cost of an additional delay for a \$1.6 Billion project is approximately \$45 – 50 million based upon inflation of about 3% annually. At the time of this report draft, the need for this additional approval process has not been confirmed.

## 9. SCHEDULE CONSIDERATIONS

The impact on project schedule was analyzed for both tunnel options and compared to the currently planned SPO schedule for the LRT Bridge option. As with the cost comparison in section 8 above, existing data was received from SPO and reviewed by the Study team. Due to the preliminary nature of the design in this stage of planning, the schedules are conceptual in nature and based upon numerous assumptions. Our analysis of the schedule was focused on the portion of the project between Cedar Lake Parkway and the Burnham Road Bridge.

The schedules for LRT Tunnel Options 1 and 2 were developed in bar chart form and are shown on Attachment 6. The duration for both options is about 4.5 months longer than the SPO LRT Bridge option. In meeting with the SPO team to review our schedule, it was determined that there is "float" or "slack" time available within their baseline schedule for the work identified for the Kenilworth crossing. This means that increasing the duration for this specific work (Crossing the Kenilworth Channel, whether by bridge or tunnel) will not necessarily increase the duration for the overall project. The slightly longer schedule for tunnel



construction does not impact critical path of the overall project that is determined by other elements of SWLRT project construction. Further detailed development of the design and schedule will provide the project team with opportunities to shift project tasks and plan for concurrent work such that the overall project can be completed without additional time for the Tunnel options.

In addition to reviewing the schedule impact for the tunnel options, we considered the impact to the channel itself in terms of construction activity and the need to periodically close the channel during construction. As show on the attached schedule, we quantified the estimated duration of channel closures for each option. Periods of complete channel closure were identified as well as periods of intermittent channel closure. Based on this analysis, the Jacked Box Option 2 provides the least impact to the use of the channel during construction.

One additional consideration for schedule that may have significant impact is the potential project delay caused by a change in design from bridge to tunnel. It is likely, according to SPO personnel, that the change in design is significant enough to require the Municipal Consent process to be completed again. Based on SPO estimate, the additional time required to redesign the project and then apply for and achieve municipal consent is about one year. As noted in Section \* Cost Considerations, the additional project cost if this is required is about \$45 – 50 million. Our team believes that the change in design is not significant enough to warrant going through this approval process a second time. At the time of this report draft, this issue has not been confirmed.

## 10. IMPACTS TO PARK RESOURCES

A significant effort as part of the Study was devoted to investigation of various impacts to the park resources. These studies were conducted by the Barr Engineering team on behalf of our team and are included in the appendices to this report. Based primarily on the visual and noise impacts, it can be concluded that the tunnel options present less impact to the park resource and in particular, the Jacked Box Option 2 presents the least impact as it provides less visual and noise impact once constructed and during construction, it provides for the fewest closure days for the channel.



# 11. SUMMARY AND CONCLUSIONS

Based upon our team's study of feasibility and prudence factors, the two tunnel options considered for crossing the Kenilworth Channel are both found to be feasible.

Tunnel Option 1, a shallow cut and cover tunnel, is virtually identical to the tunnel crossing that was considered and later abandoned by SPO. The contractor means and methods to be employed by this option will be already implemented with the planned 2,200 lineal foot shallow tunnel south of Kenilworth. Continuing this construction method another 900 feet to cross the Kenilworth Channel will result in additional time and cost that can be calculated and planned for. The method is common and proven and does not present additional unknown cost, schedule, or performance risks.

Tunnel Option 2, a jacked box tunnel, is less disruptive to the use of the channel during construction. It is slightly more expensive than Option 1. While this method is not as common in the US, it has been used extensively in other parts of the world and is becoming more common in the US. The FHWA design manual includes a section on this method for use in difficult, submerged conditions. The additional time and cost associated with this method are presented and there is no additional unknown risk, cost, or schedule impact beyond what is shown herein.

Based upon park (Kenilworth Channel) user impacts analyzed by Barr Engineering (attached Appendices), the tunnel options present a preferred alternative. Changing the design from the planned bridge crossing to one of the two tunnel options at this time can be accomplished with minor impact to the overall project schedule.



# Southwest Green Line LRT Extension Kenilworth Channel Crossing Tunnel Alternative

# LRT Alignment, Profile and Operations Technical Memorandum



March 5, 2015

Prepared for:

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# 1. Project Understanding

The Minneapolis Park & Recreation Board (MPRB) is concerned about the potential impacts to parklands under its jurisdiction of a light rail grade separation structure over the Kenilworth Crossing for the Southwest Green Line LRT Extension, proposed by the Metropolitan Council. The Kenilworth Channel provides a water course passage between Cedar Lake and Lake of the Isles. A grade separated structure (bridge) over the Kenilworth Crossing has the potential for noise, visual and other impacts to the park resources at the crossing. As a result of these potential impacts the MPRB engaged the study team to develop and assess the feasibility and prudence of extending the planned tunnel to the south of the Kenilworth Crossing so that the LRT line would pass under the Kenilworth Channel. The study team considered a range of design options for a light rail underpass of the Kenilworth Crossing and prepared conceptual designs and analysis for two options.

# 2. Design Criteria

The conceptual design of the retaining walls, crash walls, and pipe support system for the LRT underpass options was developed in accordance with the following manuals, guidelines, codes, and specifications:

- Southwest Green Line LRT Extension Design Criteria Manual, August 29, 2014, Metropolitan Council. This manual will be hereinafter referred to as the "SPO Design Criteria".
- *Manual for Railway Engineering*, 2010, American Railway Engineering and Maintenance-of-Way Association (AREMA).
- **NFPA 130,** Standard for Fixed Guideway Transit and Passenger Rail Systems, 2010 Edition, National Fire Protection Association (NFPA).

## 3. Design Speed

The design speed for the LRT is proposed to be 45 mph in the tunnel under Kenilworth Channel. This design speed is unchanged from the currently proposed SPO grade separation alternative over the channel.

# 4. Horizontal LRT Alignment

The horizontal LRT alignment in the tunnel under Kenilworth Crossing would follow the preliminary engineering alignment previously developed by SPO. The track center spacing would be 16'-0", which is unchanged from the SPO design. No changes are necessary to circular curve radii, spiral transition curve lengths or tangent lengths. The track under the channel is in tangent.

# 5. Vertical LRT Profile

The following are the design criteria limitations for lengths of vertical curves, tangent lengths between reversing vertical curves and tangential gradients. These values are taken from the SPO Design Criteria.

## 5.1. Vertical Curves, Tangents and Grade Design Criteria

### Vertical Curve Lengths

Per Section 3.3.3 of the SPO Design Criteria, minimum length of vertical curves (LVC) shall be:

- Desirable length  $LVC = 200 \times A$
- Acceptable length LVC = 100 x A

The absolute minimum length of vertical curves shall be determined by the following formulas, rounded up to the next even 10-ft. length, and not less than 100-ft.

- Crest curves  $LVC = (AV^2)/25$
- Sag curves  $LVC = (AV^2)/45$

Where A =  $(G_D-G_A)$  algebraic difference in gradients connected by the vertical curve, in percent,  $G_A$  is the approaching tangent and  $G_D$  is the departing tangent.

### **Tangent Lengths between Reversing Curves**

Per Section 3.3.2 of the SPO Design Criteria, minimum length of constant grade between vertical curves (Lg) shall be:

Lg = 3V

Lg = 100' (desirable minimum)

Lg = 50' (absolute minimum)

Where: Lg = Length of constant profile grade (ft.)

V = Design velocity (miles per hour)

### Gradients

Per Section 3.3.2 of the SPO Design Criteria, the following grade limitations apply:

- Maximum (sustained grade unlimited length) = 4.0%
- Maximum (sustained grade with up to 2500' between PVI's of vertical curves) = 6.0%
- Minimum (for drainage on direct fixation and embedded track) = 0.20%
- Minimum (for drainage on tie and ballasted track) = 0.00%

## 5.2. Cut and Cover Box Alternative

For the Cut and Cover Box tunnel alternative, refer to the tunnel profile graphic. The proposed gradients are:

Gradient	Slope	SPO Design Criteria Maximum <sup>1</sup> (%)	Algebraic Difference A = (G <sub>D</sub> -G <sub>A</sub> )
	0.200/		
G <sub>1</sub>	-0.30%		
			-4.70%
G <sub>2</sub>	-5.00%		
		6.00%	10.85%
G <sub>3</sub>	G <sub>3</sub> 5.85%		
			-5.65%
G <sub>4</sub>	0.20%		

<sup>1</sup> sustained grade up to 2500 ft. between PVIs of vertical curves

The proposed vertical curve lengths compared to SPO Design Criteria are:

	Vertical	SPO Design Criteria					
Vertical Curve No.	Curve Proposed Length (ft.)	Desirable Minimum Length (ft.) (200A)	Acceptable Minimum Length (ft.) (100A)	Absolute Minimum Length (ft.) (AV <sup>2</sup> /25)	Absolute Minimum Length (ft.) (AV <sup>2</sup> /45)		
VC1 (Crest)	VC1 (Crest) 390		470	390	-		
VC2 (Sag)	VC2 (Sag) 490		1090	-	490		
VC3 (Crest)	rest) 460 1130		570	460	-		

The proposed tangent lengths are:

	Tangant Drangad	SPO Design Criteria		
Tangent No.	Tangent Proposed Length (ft.)	Desired 3V =	Desired Minimum	
-	Length (it.)	3 x 45 mph (ft.)	(ft.)	
1	120	125	100	
2	336	135	100	

The choice of proposed gradients, vertical curve lengths and tangent lengths between vertical curves to develop the cut and cover tunnel profile were based on several factors. These included:

- To locate the deepest part of the cut and cover box near the center of the channel while maintaining a sufficient amount of earth cover over the tunnel box (8.1 ft.)
- To daylight to existing ground before or directly under the Burnham Road Overcrossing.

- Increasing the length of Tangent No. 1 would compromise the ability to daylight before or under the Burnham Road Overcrossing and potentially require retaining walls at the portal, which increases construction costs. The proposed length of Tangent No. 1 exceeds the SPO desired minimum length.
- The steepest profile grade reported by SPO elsewhere within the Minneapolis area LRT system is 5.85%.

## 5.3. Jacked Box Alternative

For the Jacked Box tunnel alternative, refer to the tunnel profile graphic. The proposed gradients are:

Gradient	Slope	SPO Design Criteria Maximum <sup>1</sup> (%)	Algebraic Difference A = (G <sub>D</sub> -G <sub>A</sub> )
G1	-0.30%		
			-5.10%
G <sub>2</sub>	-5.40%		
			5.60%
G₃	0.20%	6.00%	
			5.65%
G <sub>4</sub>	5.85%		
			-5.65%
G₅	0.20%		

<sup>1</sup> sustained grade up to 2500 ft. between PVI's of vertical curves

The proposed vertical curve lengths are:

	Vertical	SPO Design Criteria					
Vertical Curve No.	Curve Proposed Length (ft.)	Desirable Minimum Length (ft.) (200A)	Acceptable Minimum Length (ft.) (100A)	Absolute Minimum Length (ft.) (AV <sup>2</sup> /25)	Absolute Minimum Length (ft.) (AV <sup>2</sup> /45)		
VC1 (Crest)	420	1020	510	420	-		
VC2 (Sag)	VC2 (Sag) 260 1		560	-	260		
VC3 (Sag)	260	1130	570	-	260		
VC4 (Crest) 460 1130		570	460	-			

	Tangant Drangad	SPO Design Criteria		
Tangent No.	Tangent Proposed Length (ft.)	Desired 3V =	Desired Minimum	
	Length (it.)	3 x 45 mph (ft.)	(ft.)	
1	107			
2	205	135	100	
3	368			

The proposed tangent lengths are:

The choice of proposed gradients, vertical curve lengths and tangent lengths between curves to develop the cut and cover tunnel profile were based on several factors. These included:

- To locate the center of the box near the center of the channel while maintaining a sufficient amount of earth cover over the tunnel box (9-10 ft.) for jacking of the box structure.
- Jacking of the tunnel box structure requires a tangential surface under the creek. This surface is sloped for collection of drainage water.
- Due to the tangent tunnel section under the channel, the jacked box alternative will daylight approximately 250 feet north of the Burnham Road Overcrossing at the tunnel portal. Under the bridge, the track slab will be partially submerged in a "U" shaped concrete structure with retaining walls that diminish in height as the track profile approaches existing grade. In reviewing existing drawings for the existing bridge structure and its foundations, it appears this will fit between the bridge piers adequately along with the relocated freight line. The fit may be tighter than desired and an alternative Split Option may be explored during advanced design phases as noted below (Section 6).

# 6. Horizontal LRT Alignment Split Option at the Burnham Road Overcrossing

For the Jacked Box Alternative, one alternative to the current SPO horizontal alignment would be to split LRT track centerlines between Bent No. 2 under the Burnham Road Overcrossing. Dividing the track centerlines with one on each side of the bridge pier affords some alignment configuration options that could simplify construction of the "U" shaped structure under the bridge and decrease the proximity to the bridge piers. The LRT track centerlines diverge as the proposed alignment approaches the 21<sup>st</sup> Street Station to accommodate a center-loading platform.

# 7. Tunnel Operational Considerations

Operational considerations within the tunnel must take into account fire-life safety requirements contained in NFPA 130, Standard for Fixed Guideway Transit and Passenger Rail Systems. This document outlines the fire-life safety requirements for Stations, Trainways, Emergency Ventilation, Communication, Lighting and other safety requirements.

### 7.1. Emergency Egress Underground

### **Exit Stairs**

Per NFPA-130 Chapter 6, "Trainways," § 6.2.2.2, in underground or enclosed trainways, the maximum distance between exits shall not exceed 2,500 ft. The length of the tunnel (beginning approximately 700 ft. north of the proposed West Lake Station to the Burnham Road Overcrossing is almost 3,500 ft. in length). Therefore, at least one emergency exit would be required between tunnel portals. This emergency exit would likely consist of two stair towers (one for each LRT track) to provide an evacuation route to a suitable surface refuge location, such as an area adjacent to a roadway.

### **Cross-Passageways**

In lieu of exit stairs to the surface, NFPA Chapter 6, § 6.2.2.3, permits cross-passages where trainways in tunnels are divided by a minimum 2 hour-rated firewall or where trainways are in twin bores.

### 7.2. Emergency Ventilation

Per NFPA Chapter 7, "Emergency Ventilation System," mechanical emergency ventilation is required in underground or enclosed trainways greater in length than 1,000 ft. The currently proposed SPO tunnel addresses the need for mechanical emergency ventilation at the southern portal. Based on a tunnel ventilation analysis, additional emergency ventilation fans may be required to support the added tunnel length for the Kenilworth Crossing.

### 7.3. Drainage

The currently proposed SPO tunnel drains to the north and would collect in a sump at the northern tunnel portal. The addition of a proposed tunnel extension under the Kenilworth Crossing would move this sump collection point northward under the channel. A suitably-sized sump pump and drain box would be required at the low point of the tunnel profile.

## 7.4. Emergency Lighting & Fire Protection

Emergency lighting and fire protection are required in underground trainways. These requirements are detained in NFPA 101, "Life Safety Code," and NFPA 14, "Standard for the Installation of Standpipe and Hose Systems". These systems are required for the currently proposed SPO tunnel without the Kenilworth Crossing tunnel extension and therefore not discussed in this memorandum.

# **Tunnel Profile Graphics**



resourceful. naturally. engineering and environmental consultants

# Memorandum

To:	Todd Christopherson, Brierley Associates
From:	Eric Holt, Barr Engineering Co.
Subject:	Kenilworth Channel Alternatives Assessment: Visual Impacts
Date:	March 5, 2015
Project:	23271414.00
C:	Michael Schroeder (MPRB), Jim Herbert (Barr)

The purpose of this memorandum is to provide a summary of the evaluation that assesses and identifies the least impactful alternative for the Southwest Light Rail Transit (SWLRT) crossing of the Kenilworth Channel, a property owned by the Minneapolis Park and Recreation Board (MPRB). Whereas the focus on Phase 1 of the project was to demonstrate the feasibility of a tunnel alternative under the Kenilworth Channel, the intent of Phase 2 of the project is to address impacts of the alternatives for crossing the channel relative to the park and park resources. The Kenilworth Channel crossing alternatives evaluated include:

- Alternative 1: SWLRT Project Office (SPO) Bridge Option
- Alternative 2: Cut and Cover Tunnel (Tunnel Option 1)
- Alternative 3: Jacked Box Tunnel (Tunnel Option 2)

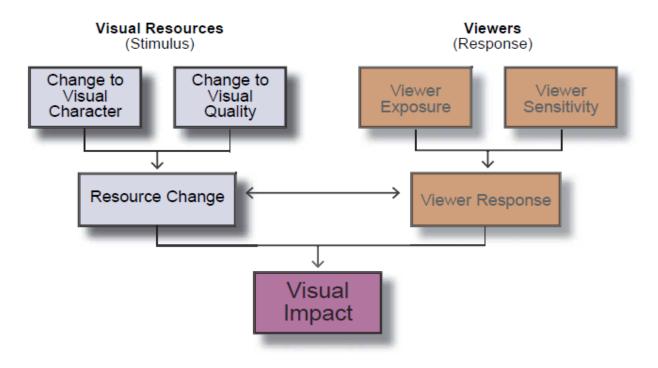
This memorandum is specifically related to the evaluation of the referenced focus area. The full visual impact assessment document is attached to this memorandum for reference.

# Methodology

This Visual Impact Assessment (VIA) generally follows the guidance outlined in the publication Visual Impact Assessment for Highway Projects published by the Federal Highway Administration (FHWA) in March 1981 and the Updated Guidelines as described in the December 2014 issue of the 'Successes in Stewardship' newsletter from FHWA, as well as the Moderate Level Visual Impact Assessment document template developed by the California Department of Transportation. The following steps were followed to assess the potential visual impacts of the proposed project alternatives:

- Define the project location and setting.
- Identify visual assessment units and key views.
- Analyze existing visual resources, resource change and viewer response.
- Depict (or describe) the visual appearance of project alternatives.
- Assess the visual impacts of project alternatives.
- Propose measures to mitigate visual impacts.

The visual impact assessment process is illustrated in the following diagram, and each step is described in greater detail in the attached VIA document.



# Identification

The study area is specifically focused on the intersection of the proposed SWLRT alignment, which runs along the existing Hennepin County freight rail and regional trail corridor, and the Kenilworth Channel, the MPRB-owned watercourse which connects Cedar Lake and Lake of the Isles. The landscape is characterized by open, maintained trail corridors lined with deciduous vegetation. These corridors are defined as the area of land or water that is visible from, adjacent to, and outside the regional trail and water trail and is determined by topography, vegetation, and viewing distance. The adjacent land use to the corridors is primarily urban, single-family residential housing, but also includes areas of public open space and parkland.

The project area has been divided into "outdoor rooms" or visual assessment units. Each visual assessment unit has its own visual character and visual quality. These visual assessment units are defined by the limits of the viewsheds of key views into and within the project area related to the Kenilworth Channel and Kenilworth Trail corridors. The following two visual assessment units and their associated Key Views (KV) have been identified below.



Visual impacts of the three channel crossing alternatives are assessed at each of these Key Views in the attached VIA document.

# Assumptions (or Considerations)

This opinion of least impactful alternative is based on several assumptions, which may change as the project develops. The significant assumptions used to complete this evaluation are summarized below.

- Descriptions of resource change related to the design and layout of each alternative are based on information made available by the Southwest LRT Project Office (SPO) and the preliminary tunnel engineering design by Brierley Associates.
- All resource change descriptions and visualizations related to the new Kenilworth Channel bridges are based on the 'Arched Pier Bridge Concept' provided by the SPO. It is assumed that this bridge design represent the 'worst case scenario' that provides a benchmark for assessing visual impacts. Alternative bridge designs are discussed in this study as a mitigation strategy and should be considered in future permitting and design phases of the SWLRT project.
- Visualizations used to depict the visual appearance of project alternatives are based on illustrative renderings and schematic plans of the Kenilworth Channel bridge provided by the SPO, as well as Google Street View imagery and on site investigations.

# Tools

This opinion of least impactful alterative is based on several qualitative and quantitative tools used in concert to assess visual impacts for each alternative at each Key View. These include the following:

- Narrative descriptions of resource change and visual impacts
- Illustrative depictions of resource change and visual impacts
- Worksheets that rate the degree of resource change and viewer response on a numerical scale

The results of these tools were compared for each alternative and evaluated for visual impacts to the users of the Kenilworth Channel based on available knowledge of the site and available information provided by MPRB and SPO. These narrative descriptions, illustrative depictions, and ratings worksheets can be found in the attached VIA document.

# **Results and Discussion**

The table below summarizes and compares the ratings for visual resource change, viewer response and permanent visual impacts between alternatives for each Key View.

Summary of Visual Impact Ratings by Key View							
VISUAL		ALT. 1: SPO Bridge Option			ALT. 2&3: MPRB Options 1&2		
ASSESSMENT UNIT	KEY VIEW (KV)	Resource Change	Viewer Response	Visual Impact	Resource Change	Viewer Response	Visual Impact
	1	MH	MH	MH	М	MH	MH
1-Kenilworth Channel	2	Μ	ML	Μ	ML	ML	ML
Chamler	3	MH	Μ	MH	Μ	Μ	Μ
2-Kenilworth	4	ML	Μ	Μ	ML	Μ	Μ
Trail Corridor	5	MH	М	MH	ML	М	Μ

For all Key Views in both visual assessment units identified in this study, permanent visual impacts of the proposed Alternatives 2 and 3 are less than or equal to permanent visual impacts of Alternative 1.

It is anticipated that temporary visual impacts to the Kenilworth Channel related to the construction of Alternative 3 would be less than those related to the construction of Alternative 1 and Alternative 2. Temporary impacts related to construction activity are discussed in greater detail in the attached VIA document.

# **Opinion of Least Impactful Alternative**

When temporary construction impacts are combined with permanent impacts to assess overall cumulative visual impacts, Alternative 3: Jacked Box Tunnel (Tunnel Option 2) is considered the least impactful alternative for the Kenilworth Channel LRT crossing.

# **Mitigation Strategy**

This section describes avoidance, minimization, and/or mitigation measures that should be considered to address specific visual impacts of the proposed alternatives in the Draft EIS and final design phases of the project. Mitigation treatments for visual impacts should be developed through discussion with affected communities, resource agencies, and stakeholders. Measures should be taken to ensure the design and construction of the selected alternative is sensitive to the existing visual quality of the corridor, its viewers, and key views.

Suggested visual mitigation measures include the following:

- Select context-sensitive materials for all bridge, LRT and train, and trail infrastructure visible to Kenilworth Trail and Kenilworth Channel water trail users. Priority should be given to considering form, line, texture, and color of the materials in order to blend these features into their surroundings in a visually harmonious and consistent manner
- Minimize scale of all new bridges over the Kenilworth Channel. Priority should be given to design structures that minimize bridge deck profile thickness and the number piers in order to maximize the clear span length over the channel corridor. This may also include separating the combined pedestrian/LRT bridge proposed in Alternative 1 into two separate bridges, allowing for the inclusion of a less massive pedestrian bridge. A visualization of a lightweight pedestrian/bicycle trail truss bridge as visual impact mitigation measure is included in the attached VIA document.
- Restore channel and bank plantings and walls to create a consistent shoreline along the Kenilworth Channel water trail
- Restore Kenilworth Trail corridor plantings to visually screen freight rail traffic and sound walls, screen walls, and retaining walls from pedestrians and cyclists where possible
- Restore Kenilworth Trail corridor plantings to visually screen LRT train traffic and associated aboveground infrastructure such as tunnel portal walls, fencing, and catenary poles from pedestrians and cyclists where possible
- Incorporate evergreen species into the vegetative screening to supplement deciduous vegetation buffers in leaf-off conditions

# Attachments

Visual Impact Assessment SWLRT Kenilworth Channel Crossing Alternatives

# Attachment 1:

# VISUAL IMPACT ASSESSMENT SWLRT Kenilworth Channel Crossing Alternatives

## I. PURPOSE OF STUDY

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the proposed project alternatives and propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the project area, measuring the amount of change that would occur as a result of the project, and predicting how the affected public would respond to or perceive those changes.

## **II. PROJECT DESCRIPTION**

Current plans for the Southwest Light Rail Transit Project (SWLRT) bring the alignment over the Kenilworth Channel, co-locating freight, light rail and trail in the Kenilworth corridor and requiring significant at-grade infrastructure in and around the Kenilworth Channel that will fundamentally and permanently affect and change park, recreation area, and historic property. As the agency with jurisdiction over the Kenilworth Channel, the MPRB Board of Commissioners passed a resolution and notified the SWLRT Project Office of the MPRB's concern about the project's effect on parkland and requested the SWLRT Project Office conduct preliminary engineering feasibility and cost analysis of tunneling under the Kenilworth Channel. The MPRB has stated its position that, based on SWLRT Project Office preliminary finding of feasibility, tunneling LRT under the Kenilworth Channel may be the only Section 4(f) prudent and feasible alternative.

This study will specifically address the visual impacts related to the infrastructure proposed for the project alternatives, including the removal, replacement, and expansion of bridges at the channel crossing, and the installation of retaining walls and safety fencing at the tunnel portal, as well as the trains, track, catenary poles and wires, signs, and other permanent elements related to the LRT fixed guideway. Temporary visual impacts related to construction methods and staging will also be discussed.

This VIA examines three alternatives, including both temporary construction impacts and permanent impacts. A no-build alternative is not considered in this assessment. The alternatives assessed in this study are:

- Alternative 1: SWLRT Project Office (SPO) Bridge Option
- Alternative 2: Cut and Cover Tunnel (Tunnel Option 1)
- Alternative 3: Jacked Box Tunnel (Tunnel Option 2)

For the purposes of this VIA, permanent visual impacts of Alternatives 2 and 3 on the Kenilworth Channel are considered to be identical and will be discussed as such. Temporary visual impacts related to the construction methods particular to Alternatives 2 and 3 are considered to have differing impacts and will be discussed individually.

## **III. PROJECT LOCATION AND SETTING**

The study area location and setting provide the context for determining the type and severity of changes to the existing visual environment. The terms *visual character* and *visual quality* are defined below and are used to further describe the visual environment.

The study area is located within Segment 3 of the SWLRT alignment between the 21<sup>st</sup> Street Station and the West Lake Station in the Cedar-Isles-Dean neighborhood of the City of Minneapolis in Hennepin County, Minnesota. The study area is specifically focused on the intersection of the proposed SWLRT alignment, which runs along the existing Hennepin County freight rail and regional trail corridor, and the Kenilworth Channel, the MPRB-owned watercourse which connects Cedar Lake and Lake of the Isles. The landscape is characterized by open, maintained trail corridors lined with deciduous vegetation. These corridors are defined as the area of land or water that is visible from, adjacent to, and outside the regional trail and water trail and is determined by topography, vegetation, and viewing distance. The adjacent land use to the corridors is primarily urban, single-family residential housing, but also includes areas of public open space and parkland.

The Kenilworth Channel has been determined by the MPRB to be a FTA Section 4(f) resource due to its use as a public park, recreation area, and historic site. This VIA is intended to complement the Section 4(f) resource impact assessment study submitted with this report.

## **IV. ASSESSMENT METHOD**

This VIA generally follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in March 1981 and the Updated Guidelines as described in the December 2014 issue of the 'Successes in Stewardship' newsletter from FHWA, as well as the Moderate Level Visual Impact Assessment document template developed by the California Department of Transportation.

The following steps were followed to assess the potential visual impacts of the proposed project:

- A. Define the project location and setting.
- B. Identify visual assessment units and key views.
- C. Analyze existing visual resources, resource change and viewer response.
- D. Depict (or describe) the visual appearance of project alternatives.
- E. Assess the visual impacts of project alternatives.
- F. Propose measures to mitigate visual impacts.

Resource change assumptions related to the design and layout of each alternative are based on information made available by the Southwest LRT Project Office (SPO) and the preliminary tunnel engineering design by Brierley Associates. All resource change descriptions and visualizations related to the new Kenilworth Channel bridges are based on the 'Arched Pier Bridge Concept' provided by the SPO. It is assumed that this bridge design represents the 'worst case scenario' that provides a benchmark for assessing visual impacts. Alternative bridge designs are discussed in this study as a mitigation strategy and should be considered in future permitting and design phases of the SWLRT project.

Visualizations used to depict the visual appearance of project alternatives are based on illustrative renderings and schematic plans of the Kenilworth Channel bridge provided by the SPO, as well as Google Street View imagery, and on site investigations.

## **V. VISUAL ASSESSMENT UNITS AND KEY VIEWS**

The project area has been divided into "outdoor rooms" or *visual assessment units*. Each visual assessment unit has its own visual character and visual quality. These visual assessment units are defined by the limits of the viewsheds of key views into and within the project area related to the Kenilworth Channel and Kenilworth Trail corridors. For this project, the following two visual assessment units and their associated Key Views (KV) have been identified:

### • Visual Assessment Unit 1: Kenilworth Channel Corridor

Defined by viewshed limits of Key View 1, looking westerly from within the Kenilworth Channel towards the trail and freight rail bridge, to Key View 2, looking easterly into the Kenilworth Channel from the Burnham Road channel bridge. Key View 3, looking westerly from the Kenilworth Trail Bridge down into the Kenilworth Channel, is also considered in this visual assessment unit.

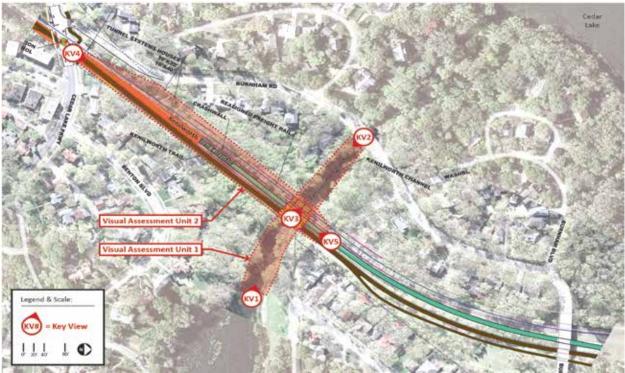
### • Visual Assessment Unit 2: Kenilworth Trail Corridor

Defined by viewshed limits of Key View 4, looking northerly from within the corridor from Cedar Lake Parkway towards the trail and freight rail bridges, to Key View 5, looking southerly down the corridor from the north side of the Kenilworth Trail Bridge over the Kenilworth Channel.

The figures below illustrate the visual assessment units and key views for the project, shown in the context of existing conditions and the design alternatives.



**Visual Assessment Units Map Showing Existing Conditions** 



Visual Assessment Units Map Showing Proposed Design Alternative 1: SPO Bridge Option



Visual Assessment Units Map Showing Proposed Design Alternatives 2&3: Tunnel Options 1 & 2. Because detailed alignments and plan drawings were not prepared for this study, this figure is based on the previous SPO Short Tunnel Alignment alternative.

Visual Impact Assessment for SWLRT Alternative Crossing of the Kenilworth Channel

## **VI. VISUAL RESOURCES AND RESOURCE CHANGE**

*Resource change* is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project area before and after the construction of the proposed project. Resource change is one of the two major variables in the equation that determines visual impacts (the other is *viewer response*, discussed below in *Section VII Viewers and Viewer Response*).

### **Visual Resources**

Visual resources of the project setting are defined and identified below by assessing visual character and visual quality in the project area.

### **VISUAL CHARACTER**

Visual character includes attributes such as form, line, color, and texture, and is used to describe, not evaluate; that is these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator. For this project the following attributes were considered:

Form - visual mass or shape Line - edges or linear definition Dominance - position, size, or contrast

Scale - apparent size as it relates to the surroundings

The visual character of the proposed project alternatives will be somewhat compatible with the existing visual character of both Visual Assessment Units within the project area for all project alternatives considered. However, the degree of compatibility differs between Alternative 1 and Alternatives 2 and 3, and as seen from different Key Views.

### **VISUAL QUALITY**

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project area. Public attitudes validate the assessed level of quality and predict how changes to the project area can affect these attitudes. This process helps identify specific methods for addressing each visual impact that may occur as a result of the project. The three criteria for evaluating visual quality are defined below:

**Vividness** is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.

**Intactness** is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.

**Unity** is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.

The visual quality of the existing Visual Assessment Units within the project area will be altered by all proposed project alternatives. The degree to which the visual quality is altered varies between Alternative 1 and Alternatives 2 and 3, and as seen from different Key Views.

## **Resource Change**

### Existing Conditions: Visual Assessment Unit 1 – Kenilworth Channel Corridor

Shallow sloping banks and mature vegetation line the channel corridor for the length of the project area, creating an enclosed form and screening views to and from adjacent residential areas and parklands. The majority of the vegetation located along the corridor is deciduous, so screening is diminished during seasonal leaf-off conditions. The reflectivity of the water surface reinforces the linearity of the channel corridor, which is nearly symmetrical vertically and horizontally. The overhanging tree limbs and bridge piers and decking further reinforces the tunnel-like appearance of the corridor. This unified visual corridor is interrupted by the dominating scale and form of the bridge structures, which create a more vivid visual experience. The sunken channel is punctuated by rhythmic contrast of light and shadow, and the rectilinear form of bridge infrastructure becomes a defining part of the visual unity of the channel corridor. The bridge infrastructure combines with the surrounding vegetation creating a visual quality that is vivid though not very intact, though the dark-colored, minimally-scaled bridge materials blend well with the surrounding vegetation in a way that unifies the scene.

### Existing Conditions: Visual Assessment Unit 2 – Kenilworth Trail Corridor

Mature vegetation buffers the gently curving corridor for the length of the project area, creating an enclosed form and screening views to and from adjacent residential areas and parklands. The majority of the vegetation located along the corridor is deciduous, so screening is diminished during seasonal leafoff conditions. Freight trains of varying length travel in the corridor during the daytime and at night. Paved walking and biking trails parallel the freight rails, reinforcing the linearity of the corridor. At the Kenilworth Channel crossing, the trail crossing is defined by large open bridge decks punctuated by vertical, open railings and fencing which separate the rail and trail sections. Views from the bridge into the channel are relatively open and invite passersby to pause and look down the channel corridor, creating a vivid visual experience at this intersection. The bridge and trail infrastructure combine with the surrounding vegetation to set a visual precedent that is vivid though not very intact, though the dark colored, minimally-scaled bridge materials blend well with the surrounding vegetation in a way that unifies the scene.

### Proposed Alternative 1: SPO Bridge Option

The Kenilworth Channel Corridor will be impacted due to the temporary demolition and removal of the existing bridge structure, as well as the permanent installation of a new freight rail bridge and an expanded trail bridge that will also accommodate the LRT tracks. These new massive concrete bridges will more than double the existing the scale of the bridges over the channel, fully enclosing the water trail and shading the channel from sunlight for approximately 80', with a 9' gap between the two bridges. This massive bridge deck will also screen the west view of the channel from the pedestrian bridge above, limiting views into the channel resource. The form and materials of the proposed bridges, although more consistent with other bridges in the adjacent parklands, will contrast greatly with the surrounding vegetation and landform. The addition of intermittent LRT trains crossing the bridge every 5-10 minutes will distract water trail users and greatly impact the visual quality of the scene.

The Kenilworth Trail Corridor will be widened to accommodate the co-located LRT and freight rail tracks and the regional trails. The resulting loss of vegetation will create a more expansive, open visual corridor, allowing users to see farther down the corridor. The corridor will also become less intact as disparate visual elements such as LRT tunnel portal walls, fencing, overhead lines, and other infrastructure are introduced. The tunnel portal itself will be installed adjacent to the south side of the channel, and be highly visible from viewers on the pedestrian bridge. And the LRT trains running every 5-10 minutes through the project area will be increase the disturbance to the existing visual unity of the area.

### Proposed Alternatives 2 and 3: Tunnel Options 1 and 2

The Kenilworth Channel Corridor will be impacted due to the temporary demolition and removal of the existing bridge structure, as well as the permanent installation of a new freight rail bridge and rebuilt, single-use trail bridge. The new freight and trail bridges will be approximately 26' wide and set 40' apart, thereby allowing sunlight and views from the pedestrian bridge to penetrate down into the channel between the bridges. The form and materials of the proposed bridges, although more consistent with other bridges in the adjacent parklands, will contrast greatly with the surrounding vegetation and landform.

The Kenilworth Trail Corridor will be widened to accommodate the co-located LRT and freight rail tracks and the regional trails. The resulting loss of vegetation will create a more expansive, open visual corridor, allowing users to see farther down the corridor. The corridor will also become less intact as disparate visual elements such as LRT tunnel portal walls, fencing and overhead lines, and other infrastructure are introduced. The tunnel portal will be installed far enough away from the Kenilworth Channel that, combined with the curving corridor, it will be screened from view from the channel trail bridge. In this location the portal infrastructure will have a greater impact on viewers from the Burnham Road Bridge over the trail corridor. The LRT trains running every 5-10 minutes through the project areas will be a high impact disturbance to the existing visual unity of the area.

Resource changes specific to each Key View are discussed and rated in *Section VIII: Visual Impacts*.

## **VII. VIEWERS AND VIEWER RESPONSE**

The population affected by the project is composed of *viewers*. Viewers are people whose views of the landscape may be altered by the proposed project—either because the landscape itself has changed or their perception of the landscape has changed.

Viewers, or more specifically the response viewers have to changes in their visual environment, are one of two variables that determine the extent of visual impacts that will be caused by the construction and operation of the proposed project. The other variable is the change to visual resources discussed earlier in *Section VII Visual Resources and Resource Change*.

## **Types of Viewers**

There are two major types of viewer groups considered in this study: Kenilworth Channel water trail users and Kenilworth Regional Trail users. A third group of viewers impacted by the proposed alternatives, Kenilworth Channel neighbors, are not considered in this study. Each viewer group has their own particular level of *viewer exposure* and *viewer sensitivity*, resulting in distinct and predictable visual concerns for each group which help to predict their responses to visual changes.

### Kenilworth Channel Users

Channel Users include water trail users, people who have views *from* the channel *towards* the channel bridges at the project area, and Burnham Road bridge users that have views *from* the bridge down *into* the channel. For this project the following channel users were considered:

- Paddlers (summer use on the water trail)
- Skiers (winter use on the water trail)
- Pedestrians (winter use on the water trail, all seasons on the Burnham Bridge)
- Drivers (all seasons on the Burnham Bridge)

### **Kenilworth Trail Users**

Trail Users are people who have views *from* the regional trail corridor, *towards* the channel bridges and *into* the channel, including views from the Cedar Lake Parkway intersection with the trail. For this project the following trail users were considered:

- Pedestrians (all seasons)
- Cyclists (all seasons)
- Drivers (all seasons)

### **Viewer Response**

Viewer response is a measure or prediction of the viewer's reaction to changes in the visual environment and has two dimensions as previously mentioned, viewer exposure and viewer sensitivity.

### VIEWER EXPOSURE

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. *Location* relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure.

*Quantity* refers to how many people see the object. The more people who can see an object or the greater frequency an object is seen, the more exposure the object has to viewers. *Duration* refers to how long a viewer is able to keep an object in view. The longer an object can be kept in view, the more exposure. High viewer exposure helps predict that viewers will have a response to a visual change.

#### Kenilworth Channel Users

Viewer exposure for water trail users is considered moderate due the quantities of summer and winter users of the water trail, the long duration of views of the channel bridges (due to the long, linear viewshed corridor and the relatively slow-moving paddlers and skiers), and the adjacent location of the water trail to the channel bridges (users must pass the channel bridges). Viewer exposure for pedestrians and drivers crossing the Burnham Road Bridge over the channel is considered low, due to the length of the viewshed and the short duration of the view.

#### **Kenilworth Trail Users**

Viewer exposure for Kenilworth Trail users is moderate due the quantities of summer and winter users of the water trail, the mixed duration of views of the channel from the trail (due to the curving viewshed corridor and the varied speeds of the cyclist and pedestrian users), and the adjacent location of the water trail to the channel bridges (users view the channel from above while crossing the channel bridges). Cyclists should have a lower viewer exposure than pedestrians due to the decreased duration of view.

#### **VIEWER SENSITIVITY**

Viewer sensitivity is a measure of the viewer's recognition of a particular object. It has three attributes: activity, awareness, and local values. *Activity* relates to the preoccupation of viewers—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings. The more they are actually observing their surroundings, the more sensitivity viewers will have of changes to visual resources. *Awareness* relates to the focus of view—the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change. *Local values* and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers will be more sensitive to visible changes. High viewer sensitivity helps predict that viewers will have a high concern for any visual change.

### **Kenilworth Channel Users**

Viewer sensitivity for water trail users is considered high because low-impact recreational activities such as paddling and cross-country skiing allow users to be fully engaged in their surroundings. The long, linear viewshed corridor also focuses users' awareness on the channel bridges as a specific focal point. And water trail users who engage in these low-impact recreational activities typically value the quietude and calm beauty of unspoiled natural areas, and will be highly sensitive to visual impacts from transportation infrastructure. Viewer sensitivity for pedestrians and drivers crossing the Burnham Road Bridge over the channel is considered moderately-low, due to the viewers' awareness of the channel viewshed and the length of the viewshed.

#### **Kenilworth Trail Users**

Viewer sensitivity for regional trail users is considered moderate, because while walking allows users to be fully engaged in their surroundings, cycling on the busy trail will require users to be more preoccupied with the activity at hand. The curving viewshed corridor also will lead users' awareness further down the corridor, but not necessarily focus users on the channel bridges as a specific focal point. And, relative to water trail users, most regional trail users are destination oriented in intent, and are using the trail for exercise or commuting, rather than to experience solitude in nature, and will be therefore be less sensitive to visual impacts from transportation infrastructure.

#### **GROUP VIEWER RESPONSE**

The narrative descriptions of viewer exposure and viewer sensitivity for each viewer group were merged to establish the overall viewer response of each group.

#### Kenilworth Channel Water Trail Users

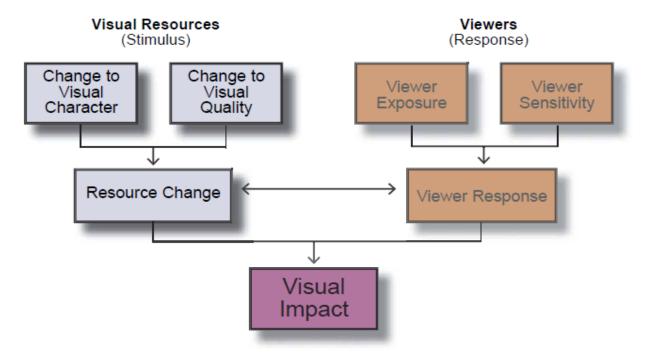
Group viewer response for water trail users is considered moderate-low to high. Viewer response varies for each Key View. See TABLE 2: Summary of Key View Narrative Ratings.

#### Kenilworth Regional Trail Users

Group viewer response for regional trail users is considered moderate. Viewer response varies for each Key View. See TABLE 2: Summary of Key View Narrative Ratings.

### **VIII. VISUAL IMPACT**

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. These impacts can be beneficial or detrimental. Cumulative impacts and temporary impacts due to the contractor's operations are also considered. A generalized visual impact assessment process is illustrated in the following diagram, and each step is described in greater detail below.



Assess Change to Visual Character – Since visual character is descriptive and nonevaluative, change alone is assessed at this stage. The change likely to be caused by the project is assessed according to the visual attributes of objects (Pattern Elements) and the relationships between those objects (Pattern Character) in the visual environment before and after the project is constructed. A two sided "pendulum" scale (3 to 0 to 3, with 5 units of change possible) is used to measure con-

Change to Visual Character						
Amount of Change (Δ = E-P)						
3	60%	High				
2.5	50%	Moderately High				
2	40%	Moderate				
1.5	30%	Moderately Low				
1	20%	Low				

trasting qualities in each category. For example, the existing and proposed viewshed would each be assessed for the qualities "curvilinear" and "rectilinear" under the category "line" in the pattern elements analysis. The amount of change between the existing and proposed viewshed for each category is determined, then the degree of change is expressed as a percentage of maximum change possible. The overall level of change to visual character is then assigned a value that ranges from low to high. Assess Change to Visual Quality – The second step of the process is to compare the visual quality of the existing resources with projected visual quality after the project is constructed. Existing and proposed intactness, unity and vividness are scored from one to five (five being highest). The amount of change in quality between the existing and proposed viewshed for each category is determined (with four units of change possible), then

Change to Visual Quality					
Amount of Change $(\Delta = E-P)$ Degree of Change $(\% = \Delta / 4)$ Level of Change					
2.4	60%	High			
2.0	50%	Moderately High			
1.6	40%	Moderate			
1.2	30%	Moderately Low			
0.8	20%	Low			

the degree of change is expressed as a percentage of maximum change possible. The overall level of change to visual quality is then assigned a value that ranges from low to high.

Assess View Response - Viewer response to changes in the visual environment is predicted by using existing viewer exposure and viewer sensitivity values, which are assumed to remain constant before and after the project is implemented. The viewer response to project changes is the average of viewer exposure and viewer sensitivity to the project.

Viewer Response				
Averaged Response Score Level of Response				
4.5 - 5.0 High				
3.5 - 4.4	Moderately High			
2.5 - 3.4	Moderate			
1.5 - 2.4	Moderately Low			
0 - 1.4	Low			

The resulting level of visual impact is determined by averaging the degree of resource change with the extent to which people are likely to be affected by the change (viewer response). The table below provides a reference for determining levels of visual impact by combining resource change and viewer response.

	Viewer Response (VR)								
		Low (L)	Moderate- Low (ML)	Moderate (M)	Moderate- High (MH)	High (H)			
(RC)	Low (L)	L	ML	ML	М	М			
Change (RC)	Moderate- Low (ML)	ML	ML	М	М	MH			
	Moderate (M)	ML	М	М	MH	MH			
Resource	Moderate- High (MH)	М	М	MH	MH	Н			
	High (H)	М	MH	MH	Н	Н			

Levels of visual impact are defined as:

Low (L) - Low negative change to existing visual resources, and low viewer response to that change. May or may not require mitigation.

Moderately Low (ML) – Low negative change to the visual resource with a moderate viewer response, or moderate negative change to the resource with a low viewer response. Impact can be mitigated using conventional practices.

Moderate (M) - Moderate negative change to the visual resource with moderate viewer response. Impact can be mitigated within five years using conventional practices.

Moderately High (MH) - Moderate negative visual resource change with high viewer response or high negative visual resource change with moderate viewer response. Extraordinary mitigation practices may be required. Landscape treatment required will generally take longer than five years to mitigate.

High (H) - A high level of negative change to the resource or a high level of viewer response to visual change such that extraordinary architectural design and landscape treatment may not mitigate the impacts below a high level. An alternative project design may be required to avoid high negative impacts.

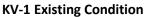
## Visual Impacts by Visual Assessment Unit and Alternative

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key views associated with visual assessment units that would most clearly demonstrate the change in the project's visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the project considering exposure and sensitivity. In addition, these key views will be analyzed for each proposed alternative. This VIA does not consider the potential impacts of a No-Build Alternative.

The following section describes, illustrates, and quantifies permanent visual impacts to each Key view by visual assessment unit. Temporary visual impacts due to construction activity are discussed in *Section IX. Visual Impact Summary*.

## VISUAL ASSESSMENT UNIT 1: KENILWORTH CHANNEL CORRIDOR

**KEY VIEW (KV) 1** – Looking westerly from within the channel towards the trail and freight rail bridges. This view is representative of a water trail user, such as a canoe or kayak paddler.





The existing visual condition for Key View 1 is that of an enclosed, linear viewshed corridor, defined by the parallel vegetated banks of the channel which act as converging lines, leading the viewer to the focal point of the Burnham Road bridge in the background. The existing trail and freight rail bridge in the foreground is a dominant, contrasting form that divides and frames the view of the channel corridor. The water surface reflects the enclosure of the vegetative canopy and bridge pilings, and reinforces the focus on the viewshed terminus. The form and color of the bridge is somewhat contrasting with the color and texture of the water and foliage, but is consistent with the line, form, and color of the tree trunks and limbs lining the banks.

### Viewer Response

Viewer response at Key View 1 to the proposed design alternatives is characterized as moderately-high due to the pronounced degree of viewer exposure and viewer sensitivity of water trail users passing through the channel and under the proposed bridge design (in Alternative 1 – SPO Bridge Option). The LRT guideway infrastructure and frequent train traffic on the bridge will also greatly impact viewers in this location.



## KV-1 Proposed Condition – Alternative 1: SPO Bridge Option

### **Resource Change**

In Alternative 1, the visual condition for Key View 1 is that of an enclosed, linear viewshed corridor defined by the parallel vegetated banks of the channel which act as converging lines, leading the viewer to the focal point of the Burnham Road bridge in the background. The water surface reflects the enclosure of the vegetative canopy and bridge pilings, and reinforces the focus on the viewshed terminus.

The combined trail and LRT bridge in the foreground divides and frames the view of the channel corridor. The monumental scale of this bridge dominates the view, and shades the channel from sunlight. The new freight rail bridge in the middle ground, adjacent to the trail and LRT bridge, further extends the visual scale of the structures within the channel. The form and color of the bridges also contrast greatly with the color and texture of the surrounding water and foliage. And LRT train traffic creates even greater dissonance in the visual character. These discordant elements result in reduced unity and intactness of the visual quality, and a more vivid, memorable experience for trail users due to the combined factors of the sheer size of the bridge structure and the visible train traffic overhead.

Overall resource change for Alternative 1 at Key View 1 is characterized as moderately-high.

## Visual Impact

Based on resource change and viewer response, the overall visual impact of Alternatives 2 and 3 at Key View 1 is characterized as moderately-high.

### KV-1 Proposed Condition – Alternatives 2&3: Tunnel Options 1&2



### **Resource Change**

In Alternatives 2 and 3, the visual condition for Key View 1 is that of an enclosed, linear viewshed corridor defined by the parallel vegetated banks of the channel which act as converging lines, leading the viewer to the focal point of the Burnham Road bridge in the background. The water surface reflects the enclosure of the vegetative canopy and bridge piers, and reinforces the focus on the viewshed terminus.

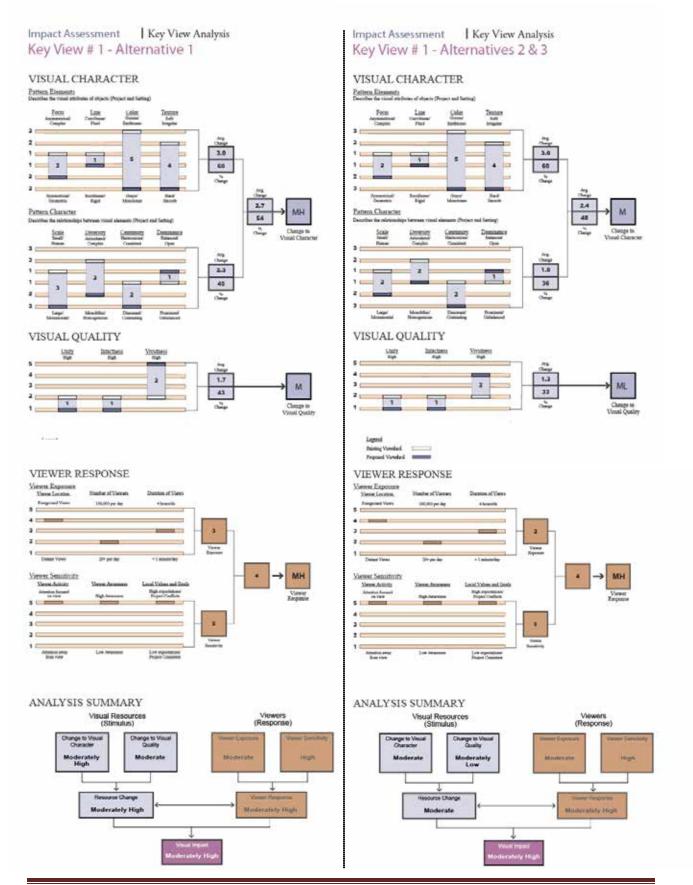
The trail bridge in the foreground divides and frames the view of the channel corridor. The monumental scale of this bridge dominates the view, and shades the channel from sunlight, but to a lesser degree than the combined trail and LRT bridge proposed in Alternative 1. The new freight rail bridge in the middle ground is spaced further away from the trail bridge, reducing the perception of these bridges as a homogenous, monolithic structure and allowing light into the channel. The form and color of the bridges does contrast greatly with the color and texture of the surrounding water and foliage. The lack of LRT train traffic over the bridge also allows for greater harmony in the visual character and higher degrees of intactness of the visual quality than Alternative 1.

Overall resource change for Alternatives 2 and 3 at Key View 1 is characterized as moderate.

### Visual Impact

Based on resource change and viewer response, the overall visual impact of Alternatives 2 and 3 at Key View 1 is characterized as moderately-high.

See next page for visual impact ratings worksheets for Key View 1.



Visual Impact Assessment for SWLRT Alternative Crossing of the Kenilworth Channel

**KEY VIEW (KV) 2** – Looking easterly into the channel from the Burnham Road channel bridge. This view is representative of a bridge user, such as a driver or pedestrian.

### **KV-2 Existing Condition**



The existing visual condition for Key View 2 is an enclosed, linear viewshed corridor defined by the parallel vegetated banks of the channel which act as converging lines, leading the viewer to the focal point of the trail and freight rail bridge in the background. The water surface acts as a mirror, reflecting the enclosure of the vegetative canopy, and reinforcing the focus on the viewshed terminus. The bridge at the terminus is set far into the background of the view, so that it has a relatively low impact on both visual character and visual quality. At this scale, the form and color of the bridge structure blends with the color and texture of the water and foliage, resulting in a harmonious, intact view of the channel.

### **Viewer Response**

Viewer response at Key View 2 to the proposed design alternatives is characterized as moderately-low due to the relatively low degree of viewer exposure and viewer sensitivity resulting from the great distance between Key View 2 and the proposed impacts.

### KV-2 Proposed Condition – Alternative 1: SPO Bridge Option



#### **Resource Change**

In Alternative 1, the visual condition for Key View 2 is that of an enclosed, linear viewshed corridor defined by the parallel vegetated banks of the channel which act as converging lines, leading the viewer to the focal point of the new freight rail bridge and combined Kenilworth Trail pedestrian/ LRT bridge in the background. The water surface reflects the enclosure of the vegetative canopy and multiple bridge pilings, and reinforces the focus on this viewshed terminus.

The form and color of the new bridges contrast with the color and texture of the surrounding water and vegetation, and the LRT train traffic creates even greater dissonance in the visual character. These discordant elements result in reduced unity and intactness of visual quality, and a more vivid, memorable experience for users of the Burnham Road Bridge.

Overall resource change for Alternative 1 at Key View 2 is characterized as moderate.

### Visual Impact

Based on resource change and viewer response, the overall visual impact of Alternative 1 at Key View 2 is characterized as moderate.

### KV-2 Proposed Condition – Alternatives 2&3: Tunnel Options 1&2



### **Resource Change**

In Alternatives 2 and 3, the visual condition for Key View 1 is that of an enclosed, linear viewshed corridor defined by the parallel vegetated banks of the channel which act as converging lines, leading the viewer to the focal point of the new freight rail bridge and separate Kenilworth Trail pedestrian bridge in the background. The water surface reflects the enclosure of the vegetative canopy and bridge pilings, and reinforces the focus on the viewshed terminus.

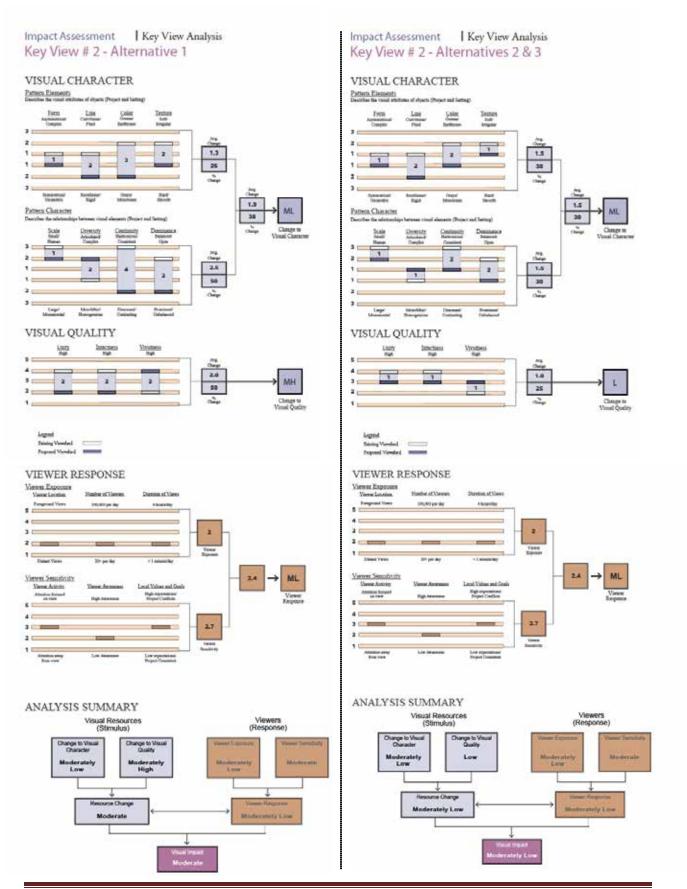
The form and color of the new bridges contrast with the color and texture of the surrounding water and vegetation, through the complexity of the bridge forms are less than in Alternative 1 due to the lesser number of bridge piers, and the new freight rail bridge in the middle ground is spaced further away from the trail bridge, reducing the perception of these bridges as a homogenous, monolithic structure, as compared to Alternative 1. The lack of LRT train traffic over the bridge also allows for greater harmony in the visual character and higher degrees of intactness of the visual quality than Alternative 1.

Overall resource change for Alternatives 2 and 3 at Key View 1 is characterized as moderately-low.

### **Visual Impact**

Based on resource change and viewer response, the overall visual impact of Alternatives 2 and 3 at Key View 2 is characterized as moderately-low.

See next page for visual impact ratings worksheets for Key View 2.



Visual Impact Assessment for SWLRT Alternative Crossing of the Kenilworth Channel

**KEY VIEW (KV) 3** – Looking westerly from the Kenilworth Trail Bridge down into the channel.



The existing visual condition for Key View 3 is an enclosed, linear viewshed corridor defined by the parallel vegetated banks of the channel which act as converging lines, leading the viewer to the focal point of the trail and freight rail bridge in the background, as seen through an articulated foreground screen of chain-link fencing, freight bridge deck, and guardrail. The complexity of the foreground bridge infrastructure restricts views into the vegetated channel beyond, and reduces the overall visual quality of the existing view.

## **Viewer Response**

Viewer response at Key View 3 to the proposed design alternatives is characterized as moderate based on the combination of the number of viewers, the relatively low duration of views of the majority of Kenilworth Trail users who bike and jog across the channel, and the moderate degree of viewer awareness of views beyond the fencing. KV-3 Proposed Condition – Alternative 1: SPO Bridge Option



### **Resource Change**

In Alternative 1, the dominance of the foreground bridge infrastructure over the distant view of the vegetated channel is intensified, due to the expansive foreground screen of fencing and bridge decking of the new combined LRT and Kenilworth Trail pedestrian bridge, and the new freight rail bridge deck beyond. LRT train traffic in the immediate foreground adds further complexity and dissonance to the visual character, and reduces the unity and intactness of the existing view. The LRT train traffic also greatly increases the vividness of the visual quality for Key View 3.

Overall resource change for Alternative 1 at Key View 3 is characterized as moderately-high.

### **Visual Impact**

Based on resource change and viewer response, the overall visual impact of Alternative 1 at Key View 3 is characterized as moderately-high.

KV-3 Proposed Condition – Alternatives 2&3: Tunnel Options 1&2



## **Resource Change**

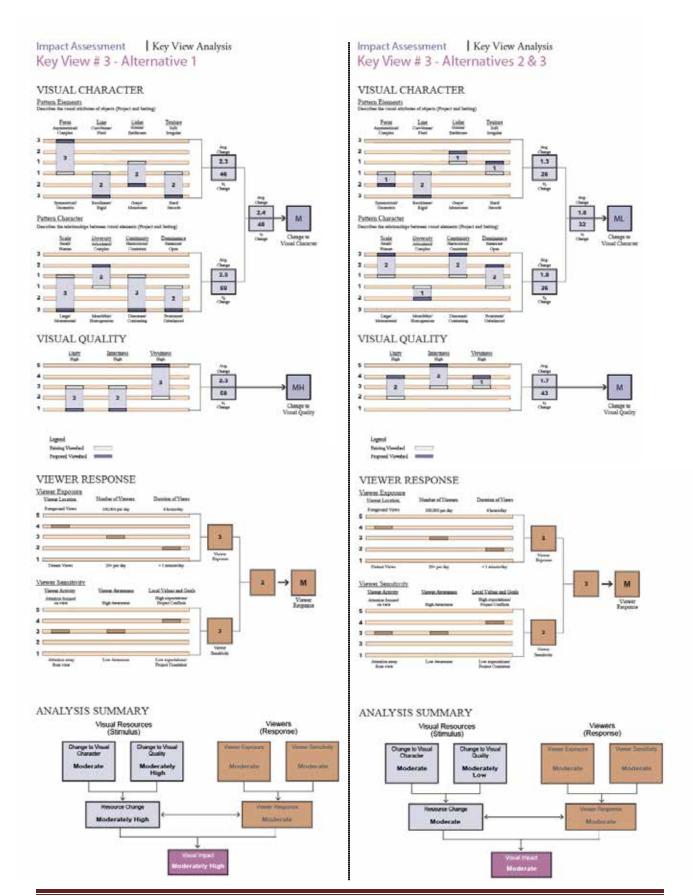
In Alternatives 2 and 3, the dominance of the foreground bridge infrastructure over the distant view of the vegetated channel is minimized, due to the reduction of complex foreground elements. The low, decorative fencing and wide spacing between the new pedestrian bridge and the new freight rail bridge deck beyond allow foreground views into the Kenilworth channel. Although the form and color of the freight rail bridge does contrast greatly with the color and texture of the surrounding water and vegetation, the lack of LRT train traffic in the foreground allows for greater harmony in the visual character and higher degrees of intactness of the visual quality than Alternative 1.

Overall resource change for Alternatives 2 and 3 at Key View 3 is characterized as moderate.

### Visual Impact

Based on resource change and viewer response, the overall visual impact of Alternatives 2 and 3 at Key View 3 is characterized as moderate.

See next page for visual impact ratings worksheets for Key View 3.



Visual Impact Assessment for SWLRT Alternative Crossing of the Kenilworth Channel

## VISUAL ASSESSMENT UNIT 2: KENILWORTH TRAIL CORRIDOR

**KEY VIEW (KV) 4** – Looking northerly within the corridor from Cedar Lake Parkway towards the trail and freight rail bridges.

## **KV-4 Existing Condition**



The existing visual condition for Key View 4 is an enclosed, linear viewshed corridor defined by the parallel vegetated walls of the corridor and parallel trail and freight rail, which act as converging lines, leading the view to the focal point of the trail and freight rail bridge in the background. Signage and other freestanding rail and trail amenities in the foreground add complexity and reduce the overall visual quality of the existing view.

## Viewer Response

Viewer response at Key View 4 to the proposed design alternatives is characterized as moderate. This is based on the combination of a high number of viewers with a high degree of awareness focuses on the project area at the end of the corridor viewshed, with the relatively long distance of the viewshed from the project area.

KV-4 Proposed Condition – Alternative 1: SPO Bridge Option



#### **Resource Change**

In Alternative 1, the realignment of the freight rail causes the vegetated corridor to be widened, opening views farther down the corridor, and increasing the prominence of the bridge crossings at the Kenil-worth Channel. Sound walls, crash walls, and fencing and catenary poles related to the LRT tunnel portal in the middle ground are contrasting visual elements that increase the dissonance of the visual character. These changes also result in reduced unity and intactness of the visual quality and viewers will be highly aware of the tunnel portal, adding to the vividness of the view. However, most of these impacts are minimized due to the relatively long distance of these resources changes from Key View 4.

Overall resource change for Alternative 1 at Key View 4 is characterized as moderately-low.

#### Visual Impact

Based on resource change and viewer response, the overall visual impact of Alternative 1 at Key View 4 is characterized as moderate.

KV-4 Proposed Condition – Alternatives 2&3: Tunnel Options 1&2



### **Resource Change**

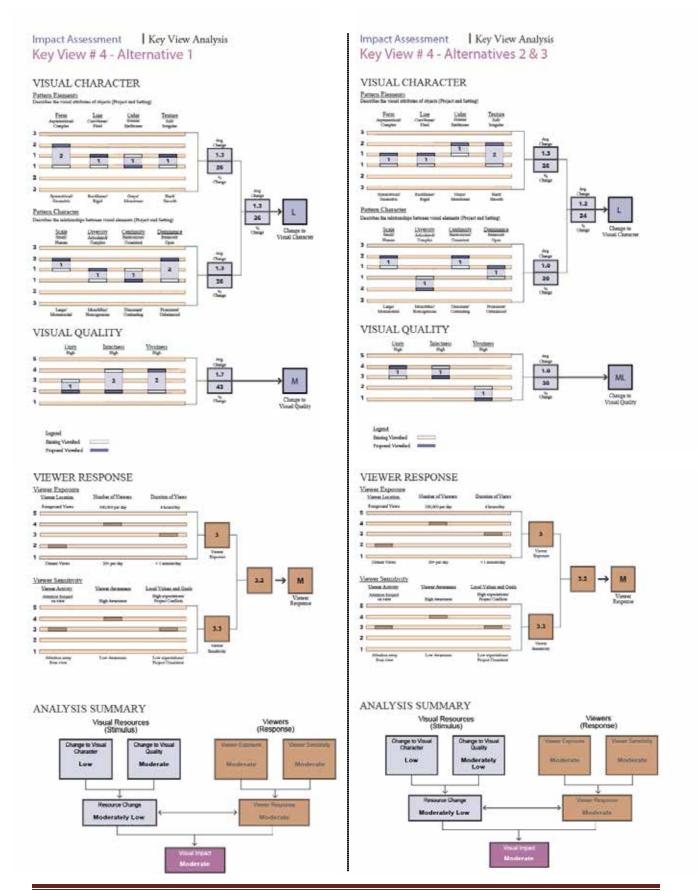
In Alternatives 2 and 3, the realignment of the freight rail causes the vegetated corridor to be widened; opening views farther down the corridor, but the lack of the visually contrasting LRT tunnel portal infrastructure could allow the wide median between the freight rail and the Kenilworth Trail to be vegetated. This planting could screen the channel bridges and freight rail sound walls from view, reducing the openness and perceived width of the trail corridor. These changes result in an increased unity and a reduced vividness in visual quality.

Overall resource change for Alternatives 2 and 3 at Key View 4 is characterized as moderately-low.

#### **Visual Impact**

Based on resource change and viewer response, the overall visual impact of Alternatives 2 and 3 at Key View 4 is characterized as moderate.

See next page for visual impact ratings worksheets for Key View 4.



Visual Impact Assessment for SWLRT Alternative Crossing of the Kenilworth Channel

**KEY VIEW (KV) 5** – Looking southerly into the corridor from the Burnham Road trail bridge.



**KV-5 Existing Condition** 

The existing visual condition for Key View 5 is an enclosed, linear viewshed corridor defined by the parallel vegetated walls of the corridor and parallel trail and freight rail tracks and railings, which act as converging lines, leading the view to a focal point in the distance. Signage and other freestanding rail and trail amenities in the foreground add complexity reduces the overall visual quality of the existing view. Though the view is adjacent to the Kenilworth Channel bridge, the channel itself is obscured by the bridge infrastructure.

## Viewer Response

Viewer response at Key View 5 to the proposed design alternatives is characterized as moderate, based on the combination of the number of viewers, the duration of view, and the focus of the view down the channel corridor, resulting in a low awareness of the Kenilworth Channel.

KV-5 Proposed Condition – Alternative 1: SPO Bridge Option



### **Resource Change**

In Alternative 1, the realignment of the freight rail causes the vegetated corridor to be widened, opening views farther down the corridor. The dominance of the foreground bridge infrastructure over the distant view of the vegetated channel is intensified, due to the expansive foreground screen of fencing and bridge decking of the new combined LRT and Kenilworth Trail pedestrian bridge. LRT train traffic and catenary poles in the foreground and the LRT tunnel portal in the background, which dominates the viewshed terminus, add further complexity and dissonance to the visual character, and reduce the unity and intactness of the visual quality.

Overall resource change for Alternative 1 at Key View 5 is characterized as moderately-high.

#### **Visual Impact**

Based on resource change and viewer response, the overall visual impact of Alternative 1 at Key View 5 is characterized as moderately-high.

KV-5 Proposed Condition – Alternatives 2&3: Tunnel Options 1&2



### **Resource Change**

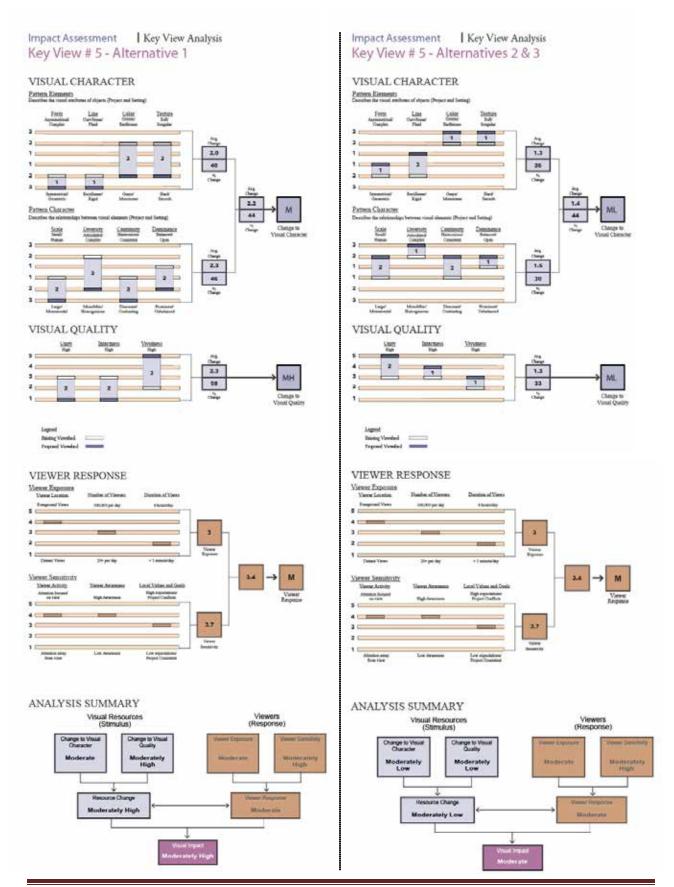
In Alternatives 2 and 3, the realignment of the freight rail causes the vegetated corridor to be widened, opening views farther down the corridor. The dominance of the foreground bridge infrastructure is minimized in this alternative, and the low, decorative fencing and wide opening between the new pedestrian bridge and the new freight rail bridge allow foreground views into the Kenilworth channel. Although the form and color of the freight rail bridge does contrast greatly with the color and texture of the surrounding water and vegetation, the lack of LRT train traffic in the foreground allows for greater harmony in the visual character and higher degrees of intactness of the visual quality than Alternative 1. Also, the lack of LRT tunnel portal infrastructure could allow the wide median between the freight rail and the Kenilworth Trail to be vegetated. This planting would screens the freight rail and sound walls from view, reducing the openness and perceived width of the trail corridor.

Overall resource change for Alternatives 2 and 3 at Key View 3 is characterized as moderately-low.

### **Visual Impact**

Based on resource change and viewer response, the overall visual impact of Alternatives 2 and 3 at Key View 5 is characterized as moderate.

See next page for visual impact ratings worksheets for Key View 5.



Visual Impact Assessment for SWLRT Alternative Crossing of the Kenilworth Channel

## **IX. VISUAL IMPACT SUMMARY**

## **Permanent Visual Impacts**

The table below summarizes and compares the ratings for visual resource change, viewer response and permanent visual impacts between alternatives for each key view.

Summary of Visual Impact Ratings by Key View								
VISUAL ASSESSMENT UNIT		ALT. 1: SPO Bridge Option			ALT. 2&3: Tunnel Options 1&2			
	KEY VIEW (KV)	Resource Change	Viewer Response	Visual Impact	Resource Change	Viewer Response	Visual Impact	
1-Kenilworth Channel	1	MH	MH	MH	М	MH	MH	
	2	М	ML	М	ML	ML	ML	
	3	MH	М	MH	М	Μ	М	
2-Kenilworth Trail Corridor	4	ML	М	Μ	ML	Μ	Μ	
	5	MH	М	MH	ML	Μ	Μ	

## **Temporary Construction Visual Impacts**

Temporary visual impacts are anticipated for each of the proposed alternative due to contractor operations such as material hauling and staging, equipment access, night lighting, dust, temporary structures and the duration of construction. However, the degree to which these activities impact the visual quality of the Kenilworth Channel vary between the different construction methods proposed for each alternative. Based on bridge construction methods described by the Southwest Project Office (for Alternative 1) and tunnel construction methods described by Brierley Associates (for Alternatives 2 & 3), potential temporary visual impacts related to these activities are described below.

It is anticipated that the Kenilworth Trail will be closed for the duration of the construction, so visual impacts to trail users (KV-3 and KV-5) are not considered. The Kenilworth Channel water trail (KV-1) will be closed intermittently during bridge demolition and construction, but views into the channel from the Burnham Road Bridge (KV-2) will be mostly unobstructed for the entire duration of construction.

Temporary visual impacts include activity and debris related to construction access and staging between the Kenilworth Channel and Cedar Lake Parkway, as well as demolition of existing vegetation along the west side of the Kenilworth Trail corridor to accommodate the new freight rail alignment that would be visible to Cedar Lake Parkway users (KV-4) and to a lesser degree Kenilworth Channel users (KV-1 and KV-2).

Bridge demolition, construction, and resulting shoreline disturbance at the Kenilworth Channel will be highly visible to channel water trail users (KV-1). Due to the expansive bridge structure proposed for the combined LRT and Kenilworth Trail pedestrian bridge, the duration of bridge construction for Alternative 1 is expected to be longer than the duration of bridge construction for Alternatives 2 and 3.

Visual Impact Assessment for SWLRT Alternative Crossing of the Kenilworth Channel

Alternative 1 also requires a temporary causeway for construction access across the channel between the existing bridge demolition and new bridge construction. This will prolong the visual impacts to channel users (KV-1).

Tunneling methods used in Alternatives 2 and 3 will both result in some temporary visual impacts to the Kenilworth Channel. Alternative 2, the 'cut and cover' tunnel method, will rely on the installation of temporary sheet pile across the channel, restricting access through the channel for the duration of the construction period, while Alternative 3, the 'jacked box' tunnel method, will burrow under the channel, allowing the water trail to remain open during the construction timeline with intermittent closures for bridge construction, ground improvement, and site restoration. Access pits and jacking equipment adjacent to the channel may be visible to channel water trail users.

It is anticipated that temporary visual impacts to the Kenilworth Channel related to the construction of Alternative 3 would be less than those related to the construction of Alternative 1 and Alternative 2.

## X. SUGGESTED MITIGATION MEASURES

This section describes avoidance, minimization, and/or mitigation measures that should be considered to address specific visual impacts of the proposed alternatives in the Draft EIS and final design phases of the project. Mitigation treatments for visual impacts should be developed through discussion with affected communities, resource agencies, and stakeholders. Measures should be taken to ensure the design and construction of the selected alternative is sensitive to the existing visual quality of the corridor, its viewers, and key views.

Suggested visual mitigation measures include the following:

- Select context-sensitive materials for all bridge, train, and trail infrastructure visible to Kenilworth Trail and Kenilworth Channel water trail users. Priority should be given to considering form, line, texture, and color of the materials in order to blend these features into their surroundings in a visually harmonious and consistent manner
- Minimize scale of all new bridges over the Kenilworth Channel. Priority should be given to the
  design of structures that minimize bridge deck profile thickness and the number of piers in order
  to maximize the clear span length over the channel corridor. This may also include separating
  the combined pedestrian/LRT bridge proposed in Alternative 1 into two separate bridges, allowing for the inclusion of a less massive pedestrian bridge. A visualization of a lightweight pedestrian truss bridge as visual impact mitigation measure is shown below.
- Restore channel and bank plantings and walls to create a consistent shoreline along the Kenilworth Channel water trail
- Restore Kenilworth Trail corridor plantings to visually screen freight rail traffic and sound walls, screen walls, and retaining walls from pedestrians and cyclists where possible
- Restore Kenilworth Trail corridor plantings to visually screen LRT train traffic and associated above-ground infrastructure such as tunnel portal walls, fencing, and catenary poles from pedestrians and cyclists where possible
- Incorporate evergreen species into the vegetative screening to supplement deciduous vegetation buffers in leaf-off conditions



Depiction of a 'lightweight' pedestrian truss bridge used as a visual impact mitigation measure for the Kenilworth Channel crossing.

## **XI. CONCLUSIONS**

For all Key Views in both visual assessment units identified in this study, permanent visual impacts of the proposed Alternatives 2 and 3 are less than or equal to permanent visual impacts of Alternative 1.

When temporary construction impacts are combined with permanent impacts to assess overall cumulative visual impacts, **Alternative 3: Jacked Box Tunnel (Tunnel Option 2) is considered the least impactful alternative** for the Kenilworth Channel LRT crossing.



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## Memorandum

To: Todd Christopherson, Brierley Associates
From: Andrew Skoglund, Barr Engineering Co.
Subject: Kenilworth Channel Alternatives Assessment: Noise and Vibration Impacts
Date: March 5, 2015
Project: 23271414.00
c: Michael Schroeder (MPRB), Jim Herbert (Barr)

The purpose of this memorandum is to provide a summary of the evaluation that assesses and identifies the least impactful alternative for the Southwest Light Rail Transit (SWLRT) crossing of the Kenilworth Channel, a property owned by the Minneapolis Park and Recreation Board (MPRB). Whereas the focus on Phase 1 of the project was to demonstrate the feasibility of a tunnel alternative under the Kenilworth Channel, the intent of Phase 2 of the project is to address impacts of the alternatives for crossing the channel relative to the park and park resources. The Kenilworth Channel crossing alternatives evaluated include:

- SWLRT Project Office (SPO) Bridge Option
- Cut and Cover Tunnel (Tunnel Option 1)
- Jacked Box Tunnel (Tunnel Option 2)

This memorandum is specifically related to the evaluation of the referenced focus area.

## Identification

Assessment of Noise and Vibration impacts to the Kenilworth Channel were the primary focus of the assessment.

# Methodology

David Braslau Associates was retained to assist with the calculation of potential operational noise impacts. The evaluation used the methods described in Federal Transit Administration (FTA) guidance, <u>Transit</u> <u>Noise and Vibration Impact Assessment (May 2006)</u>. Details of this analysis are summarized in this memo and further described in the attached memorandum from David Braslau Associates.

Construction and vibration impacts were assessed at a high level with reference to FTA guidelines.

## Assumptions

This opinion of least impactful alternative is based on several assumptions, which may change as the

project develops. The significant assumptions used to complete this evaluation are summarized below:

- Number of LRT Trains per day: 198 daytime trains (7am 10 pm). Equivalent to 13.2 trains per hour (15 hours of 'daytime')
- 3 car trains
- Welded, not embedded track
- Operations on the bridge considered aerial structure relative to the channel
- No intervening rows of buildings
- Travel speed through channel segment: 45 mph
- Impact differences between Tunnel Option 1 and Option 2 were assumed to be minimal relative to the channel given the relative location of the portal for the tunnel options.
- Background levels were derived from Location 30 in the 2012 Draft Environmental Impact Statement (DEIS) ( $L_{dn} = 55 \text{ dBA}$ ,  $L_{eq(h)} = 54 \text{ dBA}$ ). These levels were monitored at street level, and may be higher than levels experienced within the channel [Day Night Average Sound Level ( $L_{dn}$ ); Hourly equivalent Continuous Sound Level ( $L_{eq(h)}$ ); decibel (dBA)].

## Tools

This opinion of least impactful alternative relied on the FTA Noise impact assessment spreadsheet for calculation of impact contours. Short term noise impacts from trains crossing the bridge were derived using methods described in the FTA manual. Details of the analysis methods are described in the attached memorandum from David Braslau Associates.

The modeled outputs were compared for each alternative and evaluated for impacts to the users of the Kenilworth Channel based on available knowledge of the site and available information provided by MPRB and SPO. Additional noise analysis information was provided by SPO/FTA after the bulk of the

assessment was performed, but did not include Leq levels for the location 30 monitoring site, thus no revised background data for channel impact has been incorporated.

# **Results and Discussion**

Channel noise impacts for the bridge option were modeled to exceed FTA Category 1 "severe" thresholds as far as 102 feet from the line. Initial calculations used for the February 4, 2015 MPRB presentation had yielded a distance of 97 feet, upon further review revised calculations went forward with 102 feet.

Moderate Category 1 impacts were modeled to occur as far as 255 feet from the line. The baseline noise level is founded on 2010 monitoring in the neighborhood adjacent to the channel, as documented in the 2012 DEIS. Noise levels within the channel are expected to be lower, given the shielding from local noise sources provided by the depth of the channel corridor. Noise impacts from either tunnel option are not projected to exceed the severe or moderate impact thresholds at the channel.

Estimated levels for an individual train passby on the bridge option are 80 dBA at a distance of 90 feet from the bridge. Within 90 feet there is some shielding provided by the bridges themselves, which may result in a variety of complex interactions. Potential impacts within this distance were not evaluated given the additional complexity, uncertainty of final bridge design, and time available for analysis. Noise levels farther away in the channel may remain as high as 75 dBA on the water 400 feet from the bridge during passby of a train. The attached memo from David Braslau Associates details the calculations used to reach these values.

Construction noise is expected to be of mixed impact between scenarios. All potential options include the driving of pilings in the area. The bridge option would include pilings driven for the bridges, as well as along the tunnel alignment to the southwest. The cut and cover tunnel options would require piling along the tunnel alignment as well as across the channel area. The jacked-box tunnel option would require pilings throughout the tunnel alignment, with the exception of the channel area. Pile-driving impacts would occur over a longer period for the tunnel options. Offsetting this variation would be some of the equipment used in construction of the tunnel options operating within the cut for the tunnel, below grade. Sub-grade operation of equipment would provide an effective barrier for construction equipment noise.

Vibration impacts to the channel are not expected to be significant for any of the options. Vibration impacts to outdoor users, while potentially perceptible, are generally not associated with annoyance. Per the FTA guidance, "... train vibration may be perceptible to people who are outdoors, but it is very rare for outdoor vibration to cause complaints." Vibration from operations in a tunnel would be expected to be of lower magnitude at the surface than from at-grade operations, in large part due to the additional distance between source and receiver.

# **Opinion of Least Impactful Alternative**

The tunnel options are expected to be the least impactful alternatives. The bridge option is expected to have lower construction noise impact, but significantly higher operational impact. There may be minor variation in construction impact between the two tunnel options, but detailed evaluation of construction noise would require additional construction detail that is outside the scope of the currently available design information. Impacts of the tunnel options in operation are expected to be comparable, and clearly less impactful than the bridge option.

# **Mitigation Strategy**

FTA guidance recommends implementation of mitigation options for severely impacted receivers. An overview of mitigation strategies is detailed in the noise factsheet assembled by SPO<sup>1</sup>. The tunnel options can also be considered mitigation of the bridge option. Additionally there are several options identified in the SPO factsheet relative to source controls such as wheel and rail modifications, path control such as barriers or walls, and receiver controls such as additional insulation (less relevant to an outdoor user).

# Attachments:

Memo from David Braslau Associates (March 5, 2015) Figure 1 – Comparison of Tunnel and Bridge Noise Contours

<sup>&</sup>lt;sup>1</sup> <u>http://metrocouncil.org/Transportation/Projects/Current-Projects/Southwest-LRT/Environmental/Noise-and-Vibration.aspx</u> (Retrieved February 18, 2015)

<sup>\\</sup>barr.com\projects\Mpls\23 MN\27\23271414 SWLRT Kenilworth Channel Alt\WorkFiles\Tech Memos\AppC\_Noise & Vibration\AppC\_FINAL\_Noise\_and\_Vibration\_03-05-2015.docx

## **APPENDIX C – Noise and Vibration Impacts: Attachment 1**

david braslau b associates, incorporated

6603 Queen Ave So. • Suite N • Richfield, MN 55423 telephone: 612-331-4571 • fax: 612-331-4572

#### **MEMORANDUM**

To: Andy Skoglund, Barr Engineering Co.
From: David Braslau, David Braslau Associates
Subject: Kenilworth Channel Alternatives Assessment – Noise Impacts
Date: March 5, 2015
Project: 23/27-1414

The purpose of this memorandum is to provide a summary of the evaluation of potential noise benefits and impacts associated with the proposed tunnel extension under the Kenilworth Channel. This assessment is limited to the area near the Channel and is based upon information derived from existing documentation or information provided by Barr Engineering Co.

## **IDENTIFICATION**

This memorandum addresses potential changes in community noise near the proposed SWLRT corridor between Lake of the Isles and Cedar Lake in the Kennilworth neighborhood in Minneapolis. Specifically, noise levels on the water either side of the proposed bridge alternative benefited by the tunnel extension. Noise levels under the bridge itself will depend upon the specific bridge construction but could represent sudden increases in sound level.

The study area of interest is shown on the aerial in **Exhibit 1** which compares the current proposal and alternative with tunnel extension under the Kenilworth Channel.

## METHODOLOGY

### Determination of background level.

Background sound levels (specifically the Leq(h) or hourly equivalent sound level) are based upon data from Appendix H of the DEIS for the SWLRT project. Location of Noise Monitoring Site 30 which was used to establish the background level in the area is identified on **Exhibit 2**. Monitoring results are presented on **Exhibit 3**.

#### Evaluation of potential noise level benefits from the proposed tunnel extension

The improvement of the level of noise impact as determined by the Federal Transit Administration in the document <u>Transit Noise and Vibration Impact Assessment (May 2006)</u> is examined here. Quantitative prediction of sound level from rail traffic that will be eliminated with the tunnel extension is made with the Noise Impact Assessment Worksheet from the FTA that is derived from equations and methods contained in the above document. **Exhibit 4** identifies the land used categories evaluated for impact by the FTA. Note that Land Use 1 covers quiet and serene areas which would apply to the channel area in this assessment.

#### Evaluation of potential noise impact of the proposed bridge over the Channel.

The potential noise impact on the water either side of the proposed bridges is estimated based on the maximum pass-by sound level (based upon Table F-1 of the FTA document and design travel speed of 45 mph for trains at this location

## ASSUMPTIONS

The following assumptions have been made for this assessment:

- Number of trains: 198 daytime hours (7 am to 10 pm): 60 nighttime hours (10 pm to 7 am)
- 3 x 94 foot cars per train: total train length 282 ft
- Welded track; not embedded
- Travel speed through segment: 45 mph

No account has been taken of vegetative shielding, although existing foliage may not be dense enough to provide even 1 dBA reduction in 100 feet.

Shielding by rows of houses is not considered to be a factor up to 250 feet from the track.

An Leq(h) background sound level of 54 dBA was assumed for the recreation area impact, based on the monitored level at Site 30 (see **Exhibit 3)** although this could be lower on the channel itself as noted on a photograph of the channel on **Exhibit 5**.

## TOOLS

For noise impacts/benefits from daily train operations, the FTA Noise Impact Assessment Spreadsheet was used to predict the level of impact and distance of impact contours from the track. The FTA manual also served as a reference. The FTA method for evaluating level of impact is shown on the chart on **Exhibit 6.** 

For noise impacts from passing trains on the bridge over the channel, Table F-1 of the FTA manual was used to determine the maximum pass-by level, and EXCEL spreadsheet calculations estimated the sound level time history on the water either side of the bridge None of these impacts would occur with extension of the tunnel underneath the channel.

## **RESULTS AND DISCUSSION**

## Typical Hourly Sound Level Impact on the Channel with a Bridge

The impact on Land Use 1 area is based upon the daytime hourly level or Leq(h). The table below shows a severe noise impact extending 102 feet from the track where the channel surface is not shielded by the bridge structure itself and a moderate noise impact extending 255 feet from track. No impact is predicted 255 feet and greater from the track.

Project Results Summary	102 ft	150 ft	200 ft	255 ft	300 ft
Existing Leqh:	54 dBA	54 dBA	54 dBA	54 dBA	54 dBA
Total Project Leqh:	61 dBA	58 dBA	56 dBA 55 dBA		54 dBA
Total Noise Exposure:	62 dBA	60 dBA	58 dBA	57 dBA	57 dBA
Increase:	8 dB	6 dB	4 dB	3 dB	3 dB
Impact?:	Severe	Moderate	Moderate	Moderate	None

Estimated contours reflecting the level of impact are presented on Exhibit 7.

## Train Pass-by Sound Level Impact on the Channel with a Bridge

An estimate of a maximum pass-by level is based upon the equation in Figure F-1 from the FTA Manual which is included here as **Exhibit 8**. The bridge cross section in **Exhibit 9** shows that train sound levels at the water level, unimpeded by barrier shielding by the bridge, can occur as

close as 90 feet from the bridge. Because of the track line source and water (or ice) surface, the level will drop less than 4.5 dBA per doubling of distance, probably at the 3 to 3.5 dBA level.

Also shown on the exhibit is an estimated sound level time history 90 feet from the bridge at water level of a train pass-by. The sound level rise and decay may be faster than that shown due to possible terrain shielding at water level. This shows a fairly sudden rise in sound level above an assumed 50 dBA ambient level to maximum level 80 dBA. This could possibly decrease to 74 or 75 dBA on the water 400 feet from the bridge.

## **OPINION OF LEAST IMPACTFUL ALTERNATIVE**

Based upon the simple analysis presented here, the extended tunnel will have the least impact on sound levels on the water in the Kenilworth Channel.

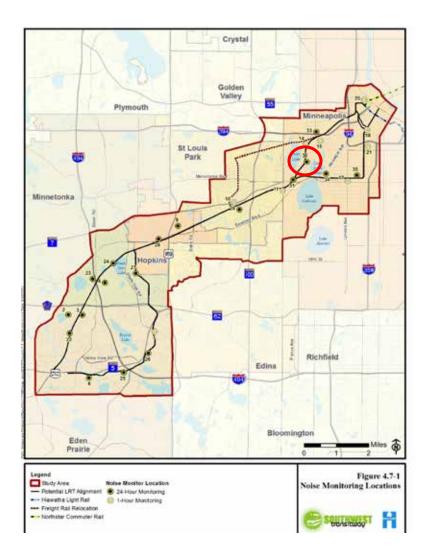
## MITIGATION STRATEGY

The tunnel extension is a very effective noise mitigation strategy for recreation activity at water (or ice) level along the Kenilworth Channel and the area near the Channel.



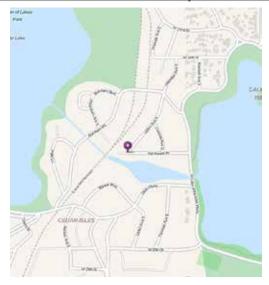
0 100 200 ft

## EXHIBIT 1 COMPARISON OF TUNNEL ALTERNATIVES



## EXHIBIT 2 LOCATION OF MONITORING SITE 30

Site	Measurement Location Description	Start of Measurement		Meas. Time (hrs)	Noise Exposure (dBA)	
No.		Date	Time	(ms)	Leq	Ldn
30	Kenilworth Place and South Upton Avenue: This site is at a single-family residence next to Lake of the Isles Park in Minneapolis. Airplane noise and local street traffic are the dominant noise sources. The noise of several CT&W train pass-by events was removed from the measurement data. This location is representative of noise-sensitive land use in the Kenwood Neighborhood, away from major thoroughfares.	3/29/2010	16:00	24	54 <sup>(s,c)</sup>	55 <sup>(c)</sup>



## EXHIBIT 3 MONITORED SOUND LVELS AT SITE 30

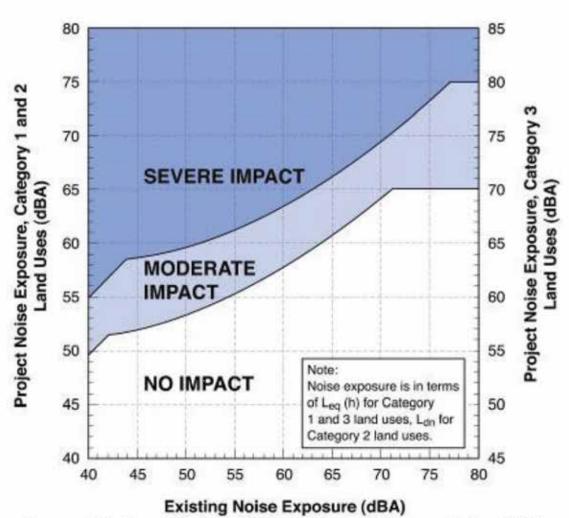
Table 3-2. Land Use Categories and Metrics for Transit Noise Impact Criteria						
Land Use Category	Noise Metric (dBA)	Description of Land Use Category				
1	Outdoor L <sub>eq</sub> (h)*	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Also included are recording studios and concert halls.				
2	Outdoor L <sub>dn</sub>	Residences and buildings where people normally sleep. This category includes homes, hospitals and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.				
3	Outdoor L <sub>eq</sub> (h)*	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds and recreational facilities can also be considered to be in this category. Certain historical sites and parks are also included.				

### EXHIBIT 4 LAND USE CATEGORY USED TO EVALUATE IMPACTS

While no specific ambient level data are available on the channel itself, it should be noted that the ambient level was monitored at street level and not at water level in the channel. As can be seen from the photo below the channel would be additionally shielded from noise at street level, so that the impacts here are likely to be greater than those based upon the monitored data.



EXHIBIT 5 PHOTO OF THE EXISTING BRIDGE OVER THE CHANNEL



### FIGURE 4.6-2 FTA NOISE IMPACT CRITERIA

Source: FTA, "Transit Noise and Vibration Impact Assessment" (May 2006)

### EXHIBIT 6 BASIS FOR FTA IMPACT CRITERIA



EXHIBIT 7 PROJECTED NOISE CONTOURS

Source	Equation
Locomotives	$L_{\max,lo\cos} = SEL_{lo\cos} + 10\log\left(\frac{S}{50}\right) - 10\log\left(\frac{L}{50}\right) + 10\log(2\alpha) - 3.3$
Rail Cars	$L_{\max, cars} = SEL_{cars} + 10 \log \left(\frac{S}{50}\right) - 10 \log \left(\frac{L}{50}\right) + 10 \log \left[2 \propto + \sin(2 \propto)\right] - 3.3$
Total Train	$L_{\max,total} = \max[L_{\max,lo\cos}orL_{\max,cars}]$
D = closest distance	e between receiver and source, in feet
L = total length of	measured group of locomotive(s) or rail car(s), in feet
S = vehicle speed,	in miles per hour
$\infty = \arctan\left(\frac{L}{2D}\right),$	in radians

### EXHIBIT 8 TABLE F-1 FROM FTA MANUAL FOR CALCULATNG MAXIMUM PASS-BY LEVEL

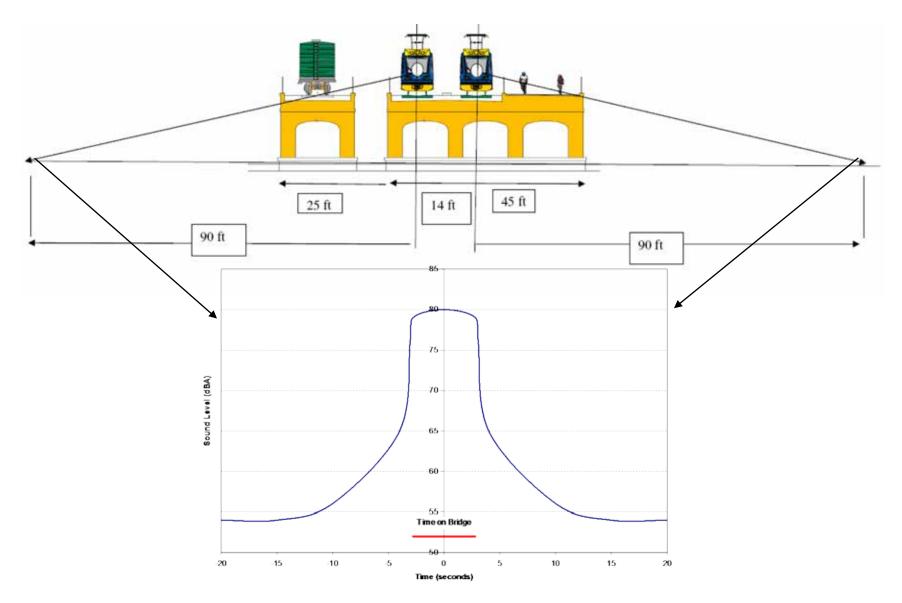


EXHIBIT 9 BRIDGE CROSS SECTION AND ESTIMATE PASS-BY TIME HISTORY ON WATER







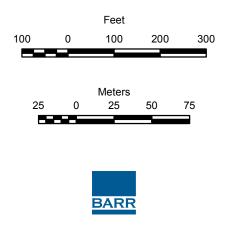


Figure 1

COMPARISON OF BRIDGE AND TUNNEL NOISE CONTOURS Kenilworth Channel Alternatives Assessment Minneapolis Park and Recreation Board Minneapolis, MN



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## Memorandum

To:	Todd Christopherson, Brierley Associates
From:	Courtnay Bot, Barr Engineering Co.
Subject:	Kenilworth Channel Alternatives Assessment: Section 4(f) Impacts
Date:	March 5, 2015
Project:	23271414.00
C:	Michael Schroeder (MPRB), Jim Herbert (Barr)

The purpose of this memorandum is to provide a summary of the evaluation that assesses and identifies the least impactful alternative for the Southwest Light Rail Transit (SWLRT) crossing of the Kenilworth Channel, a property owned by the Minneapolis Park and Recreation Board (MPRB). Whereas the focus on Phase 1 of the project was to demonstrate the feasibility of a tunnel alternative under the Kenilworth Channel, the intent of Phase 2 of the project is to address impacts of the alternatives for crossing the channel, relative to the park and park resources. The Kenilworth Channel crossing alternatives evaluated include:

- SWLRT Project Office (SPO) Bridge Option
- Cut and Cover Tunnel (Tunnel Option 1)
- Jacked Box Tunnel (Tunnel Option 2)

This memorandum is specifically related to the evaluation of the referenced focus area.

## Identification

Section 4(f) is a U.S. Department of Transportation law intended to prevent conversion of "specific types" of property to transportation use. Specific types of property include publicly owned land of a park, recreation area or wildlife and waterfowl refuge, or land of historic site with national, state or local significance. Significance is determined by the national, state or local officials having jurisdiction over the resource. The desired outcome of a potential project's effects on Section 4(f) resources is that the project does not result in a net change in the existing amenities (uses) available for the users of the resource.

MPRB owns and has jurisdiction over the Kenilworth Channel, which it identifies as a Section 4(f) resource. The following is a list of the Section 4(f) resource uses:

- Canoeing/kayaking
- Fishing
- Ice Skating/skiing
- Biking/walking/running [a Three Rivers Park District permitted use on Hennepin County Regional Railroad Authority (HCRRA) property]
- Passive Uses

## Methodology

The Federal Highway Administration (FHWA) method for completing a Section 4(f) evaluation was referenced for purposes of this assessment. The steps in the Section 4(f) evaluation are as follows:

- 1) Document the proposed project and its purpose and need
- 2) Compile Section 4(f) resource information
- 3) List and map Section 4(f) resources
- 4) Understand ownership/jurisdiction
- 5) List and map the amenities or characteristics of the resources
- 6) Identify the types of impacts that may occur to each amenity or characteristic and categorize as temporary, direct or constructive.
- For public parks and publicly owned recreation areas, the distance used to assess noise impacts (constructive use) is 350 feet (Federal Transportation Agency [FTA] unobstructed screening distance).
- 8) Identify avoidance alternatives
- 9) Identify minimization and mitigation measures
- 10) Coordinate with the party having jurisdiction over the Section 4(f) resource

Barr Engineering Co. (Barr) used the elements of the FHWA Section 4(f) evaluation for this assessment; however, a complete Section 4(f) evaluation was not completed by Barr. The limited the scope of the

assessment included each of the elements identified above with the exception of item 1, which has already been established by the SPO.

## Assumptions (or Considerations)

Focusing, as requested by the MPRB, on the Kenilworth Channel as the Section 4(f) resource, the Brierley Associates (Brierley) team assessed the SPO Bridge and SWLRT tunnel options by going through the FHWA Section 4(f) methodology laid out above in a step-by-step manner.

1) Document the proposed project and its purpose and need

MPRB did not challenge the purpose and need provided in the DEIS. Please refer to DEIS for information regarding the purpose and need of the proposed project.

2) Compile Section 4(f) resource information

The Brierley team was retained to review Section 4(f) resources under its jurisdiction; as such, this review was limited to the Kenilworth Channel. A map of the resource is attached (Figure 1). Note: the Three Rivers Park District trail (on HCRRA property) over the channel has been discussed throughout this evaluation but was not the primary focus of the Section 4(f) resource assessment.

3) List and map Section 4(f) resources

This review focused primarily on the Kenilworth Channel; however, the Three Rivers Park District trail (on HCRRA property) over the channel has been noted in this assessment. See Figure 1 (attached) for the Kenilworth Channel Section 4(f) resource.

4) Understand ownership/jurisdiction

In working with the MPRB, it was confirmed that the boundary on Figure 1 delineates the extent of the MPRB's ownership and jurisdiction over the Kenilworth Channel. MPRB has an easement for the channel directly under the bridge.

5) List and map the amenities or characteristics of the resources

The Kenilworth Channel provides a connection between Cedar Lake and Lake of the Isles in MPRB's Chain of Lakes Regional Park and hosts a variety of active and passive public uses. The open water of the Kenilworth Channel allows canoeists and kayakers access to the northernmost portion of the Chain of Lakes Regional Park, Cedar Lake. The channel also serves as a public fishing amenity. In frozen conditions, the channel serves as a trail for cross country

skiers and ice skaters. The quiet, grassed areas along the banks of the channel offer opportunities for passive recreation in an otherwise developed/metropolitan setting. Figure 1 includes notes demonstrating the areas used by the various Section 4(f) users.

The amenities include: frozen or open water in the channel, grass areas along the channel, fish in the channel, quietude of the channel, overall visual experience of the natural passage between to waterbodies.

6) Identify the types of impacts that may occur to each amenity or characteristic and categorize as temporary, direct or constructive.

Per FHWA, a use or impact can result from:

- Temporary Use generally viewed as short-term impacts only experienced during the construction phase
- Direct/Permanent land from Section 4(f) resource is permanently removed from its present use and is incorporated into the transportation network
- Constructive due to the proximity of the transportation use, the impact is so significant that it impairs amenities of the 4(f) resource.

Generally, temporary uses of the Kenilworth Channel would include closure or impeded access, construction equipment noise, and visual impacts during construction. A user will need to be present in order for there to be an impact. Direct/permanent uses of the resource would include the introduction of additional obstructions in the channel. Constructive uses of the Kenilworth Channel are primarily limited to operational noise and visual effects – impacts that do not physically alter the Section 4(f) resource.

Based on the Noise/Vibration technical memo prepared for this project, vibration impacts to the channel are not expected to be significant. In addition, removal of trees and vegetation are not expected to result in significant impacts to the Section 4(f) resource. Disturbed vegetation would be re-planted to match the surrounding vegetation upon construction completion and hardscape features would be softened through the project's landscaping plan.

Table 1 identifies the types of impacts that occur to each amenity or characteristic (which have be described by use/user – e.g., canoe/kayak). Note: Table 1 includes constructive impacts under the permanent impacts section (constructive impacts remain to be visual, shade/shadow, noise).

7) For public parks and publicly owned recreation areas, the distance used to assess noise impacts (constructive use) is 350 feet (FTA unobstructed screening distance).

Figure 2 identifies the 350 foot setback used to assess constructive noise impacts.

8) Identify avoidance alternatives

Per FHWA's Section 4(f) policy paper, review of avoidance alternatives should include the following considerations:

- No Build
- Location
- Alternative Actions
- Alignment Shifts
- Design Changes

The scope of the Brierley team's review during Phase I of the assessment was limited to design changes. It was determined that both alternatives are feasible.

A complete avoidance alternative (no build alternative) was not included in the Phase I assessment as MPRB recognizes the SWLRT's purpose and need cannot be met without construction of a build alternative. Additionally, MPRB accepts that SPO completed an analysis of the location, alternative actions and alignment shift alternatives (as documented in the DEIS).

During Phase 2 of the assessment, Barr evaluated each of the environmental factors to assist in the environmental aspect of the review of impacts for the build alternatives (Item 3 of FHWA's review, see below). The SPO Bridge Option, Cut Cover Tunnel Option 1 and Jacked Box Tunnel Option 2 were compared noting that, per the FHWA Section 4(f) policy paper, an alternative is not prudent if:

- 1. It compromises the project to a degree that it is unreasonable to proceed in light of the project's stated purpose and need (i.e., the alternative doesn't address the purpose and need of the project);
- 2. It results in unacceptable safety or operational problems;
- 3. After reasonable mitigation, it still causes severe social, economic, or environmental impacts; severe disruption to established communities; severe or disproportionate impacts to minority or low-income populations; or severe impacts to environmental resources protected under other Federal statutes;

- 4. It results in additional construction, maintenance, or operational costs of extraordinary magnitude;
- 5. It causes other unique problems or unusual factors; or
- 6. It involves multiple factors as outlined above that, while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.
- 9) Identify minimization and mitigation measures

The Brierley team offers Table 1 as a demonstration of the minimized impacts associated with the Jacked Box Tunnel Option 2 compared to the SPO Bridge Option and Cut Cover Tunnel Option 1. Mitigation, specific to the most significant permanent impacts – noise/vibration and visual, is discussed in the Mitigation section below.

10) Coordinate with the party having jurisdiction over the Section 4(f) resource The work completed by the Brierley team has all been completed on behalf of the MPRB, which has jurisdiction over the Kenilworth Channel.

### Tools

The Federal Highway Administration (FHWA) model for Section 4(f) evaluation (per the FHWA Section 4(f) Policy Paper) was used as a tool for this assessment. A complete Section 4(f) was not completed as a part of this assessment.

## **Results and Discussion**

It is unrefuted that the Kenilworth Channel is a Section 4(f) resource and the MPRB has jurisdiction over this resource.

Additionally, it is unrefuted that it is feasible to construct the SWLRT in a manner that minimizes and mitigates impacts to the Section 4(f) resource.

The most significant impacts, as identified in Table 1 involve the temporary noise/vibration and visual impacts during construction and the permanent noise and visual impacts. A user will need to be present in order for there to be an impact. Significance is determined by the national, state or local officials having jurisdiction over the resource. In this case, this is the MPRB. For more detailed discussion, refer to the Noise and Vibration Impacts and Visual Impacts technical memorandums.

The project proposer intending to use the Kenilworth Channel for the SWLRT project must demonstrate that there is:

- No feasible and prudent alternative to the Section 4(f) use AND
- The action includes all possible planning to minimize the use.

## **Opinion of Least Impactful Alternative**

The tunnel options will have the least impact on the Section 4(f) resource (the Kenilworth Channel). Of the two tunnel options considered in this assessment, Jacked Box Option 2 has the least impact on the Kenilworth Channel – the subject Section 4(f) resource.

## **Mitigation Strategy**

Mitigation is offered for the permanent visual impacts. The selection of the build alternative with the least temporary/least significant temporary construction impacts offers mitigation for the temporary construction impacts.

- Incorporate minimal pedestrian bridge design (i.e., clear span) versus building a bridge with more substantial deck, rails and the addition of piers in the channel.
- Incorporate a freight bridge that minimizes bridge deck, rail and piers.
- Integrate a landscaping plan that returns that reduces the intrusion of new hardscapes (e.g., concrete surfaces)

### References

FHWA (July 20, 2012), Section 4(f) Policy Paper

### Attachments:

- Table 1 Section 4(f) Matrix
- Figure 1 Section 4(f) Resource and Amenities Map
- Figure 2 350-foot Setback for Noise Impacts

	Temporary impacts				Permanent impacts					
	Access	Noise	Channel Obstruction	Visual	Access	Noise	Channel Obstruction		Shade/ Shadow	R/W
SPO Bridge Option Canoe/Kayak	impeded access for safety purposes during construction	and bridge construction; duration of construction noise impacts is expected to be shorter than with	temporary in-channel obstructions during existing bridge demolition and pier construction of new bridge(s)	significant impacts during construction, including staging areas, with construction of bridge(s) over channel	no change from existing conditions	operational noise would exceed FTA severe thresholds within 102 feet from LRT line and would exceed FTA moderate thresholds within 225 feet from the LRT line; impact expected to be severe due to proximity of pedestrian bridge to LRT bridge. Impacts proximate to the bridge are somewhat reduced due to the shielding qualities of the bridge structure.	determined based on number of		reduced natural light minimizes the outdoor experience; dependent on sizing/spacing of new bridges	none
Fishing	impeded access for safety purposes during construction	noise would be limited to overhead effects associated with pile driving and bridge construction; duration of construction noise impacts is expected to be shorter than with	temporary in-channel obstructions existing	significant impacts during construction, including staging areas, with construction of bridge(s) over channel	no change from existing conditions	operational noise would exceed FTA severe thresholds within 102 feet from LRT line and would exceed FTA moderate thresholds within 225 feet from the LRT line; impact expected to be severe due to proximity of pedestrian bridge to LRT bridge. Impacts proximate to the bridge are somewhat reduced due to the shielding qualities of the bridge structure.	for this user, compared to the canoe/kayak,	degree of impact will be based on bridge design and materials, including bridge spacing	none	none
Ice Skating/Skiing	degree of severity dependent on construction method and timing	of construction noise impacts is expected to be shorter than with	temporary in-channel obstructions during existing bridge demolition and pier construction of new bridge(s)	significant impacts during construction, including staging areas, with construction of bridge(s) over channel	no change from existing conditions	operational noise would exceed FTA severe thresholds within 102 feet from LRT line and would exceed FTA moderate thresholds within 225 feet from the LRT line; impact expected to be severe due to proximity of pedestrian bridge to LRT bridge. Impacts proximate to the bridge are somewhat reduced due to the shielding qualities of the bridge structure.	however, extent to be determined based on number	degree of impact will be based on bridge design and materials, including	shade/shadow based on bridge(s) to be constructed could affect visibility and also impact accumulation of snow needed for users to pass through the channel	none



	Temporary impacts					Permanent impacts					
	Access	Noise	Channel Obstruction	Visual	Access	Noise	Channel Obstruction	Visual	Shade/ Shadow	R/W	
Biking/Walking/Running	5 5	noise would be limited to effects associated with adjacent bridge construction; duration of construction noise impacts is expected to be shorter than with tunnel options	not applicable to trail users	significant impacts during construction, including staging areas	be on a new	operational noise would exceed FTA severe thresholds within 102 feet from LRT line and would exceed FTA moderate thresholds within 225 feet from the LRT line; impact expected to be severe due to proximity of pedestrian bridge to LRT bridge.	none	user will have direct views of LRT infrastructure and LRT vehicles	none	none	
	impeded access for safety purposes during construction, staging may take place atop adjacent	noise would be limited to effects associated with adjacent bridge construction; duration of construction noise impacts is expected to be shorter than with	not applicable to passive	significant impacts during construction, including staging areas, with construction on bridge(s)	no change from existing	operational noise would exceed FTA severe thresholds within 102 feet from LRT line and would exceed FTA moderate thresholds within 225 feet from the LRT line; impact expected to be severe to moderate due to proximity of passive use areas to LRT		degree of impact will be based on bridge design and materials, including			
Passive Use	grassy, passive use areas.	tunnel options	uses	over channel	conditions	bridge.	none	bridge spacing	none	none	



	Temporary impacts						Permane	nt impacts		
	Access	Noise	Channel Obstruction	Visual	Access	Noise	Channel Obstruction	Visual	Shade/ Shadow	R/W
Cut and Cover Tunnel (	Tunnel Option 1)									
Canoe/Kayak	limited times during construction of the rail	during portions of the construction there will be noise disturbance, especially during pile driving for tunnel and bridges.	complete closure for duration of construction (approx 6 months)	none - users would not be present during construction as the channel would be closed	no change from existing conditions	no change from existing conditions	new and separate bridges would be constructed for rail and trail, but design has not been determined.		freight rail and trail bridges would result in shadowing, but less impact than Bridge Option.	no change from existing conditions
Fishing	limited times during construction of the rail	during portions of the construction there will be noise disturbance, especially during pile driving for tunnel and bridges.	complete closure for duration of construction (approx 6 months)	none - users would not be present during construction as the channel would be closed	no change from existing conditions	no change from existing conditions	new and separate bridges would be constructed for rail and trail, but design has not been determined.		freight rail and trail bridges would result in shadowing, but less impact than Bridge Option.	no change from existing conditions
Ice Skating/Skiing	limited times during	during portions of the construction there will be noise disturbance, especially during pile driving for tunnel and bridges.	complete closure for duration of construction (approx 6 months)	none - users would not be present during construction as the channel would be closed	no change from existing conditions	no change from existing conditions	new and separate bridges would be constructed for rail and trail, but design has not been determined.		freight rail and trail bridges would result in shadowing, but less impact than Bridge Option.	no change from existing conditions
Biking/Walking/Running	reconfiguration of bridges	none - users would not be present during construction as there would be no pedestrian bridge		none - users would not be present during construction as there would be no pedestrian bridge	bridge separated	no change from existing conditions	new and separate bridges would be constructed for rail and trail, but design has not been determined.		freight rail and trail bridges would result in shadowing, but less impact than Bridge Option.	no change from existing conditions
Passive Use	for construction staging on adjacent grassy,	during portions of the construction there will be noise disturbance, especially during pile driving for tunnel and bridges.	may be closed during certain portions of construction	if user is present, construction equipment and activities would be visible	no change from existing conditions	no change from existing conditions	no impact on passive use	no LRT infrastructure visible from channel or banks	no impact on passive use.	no change from existing conditions

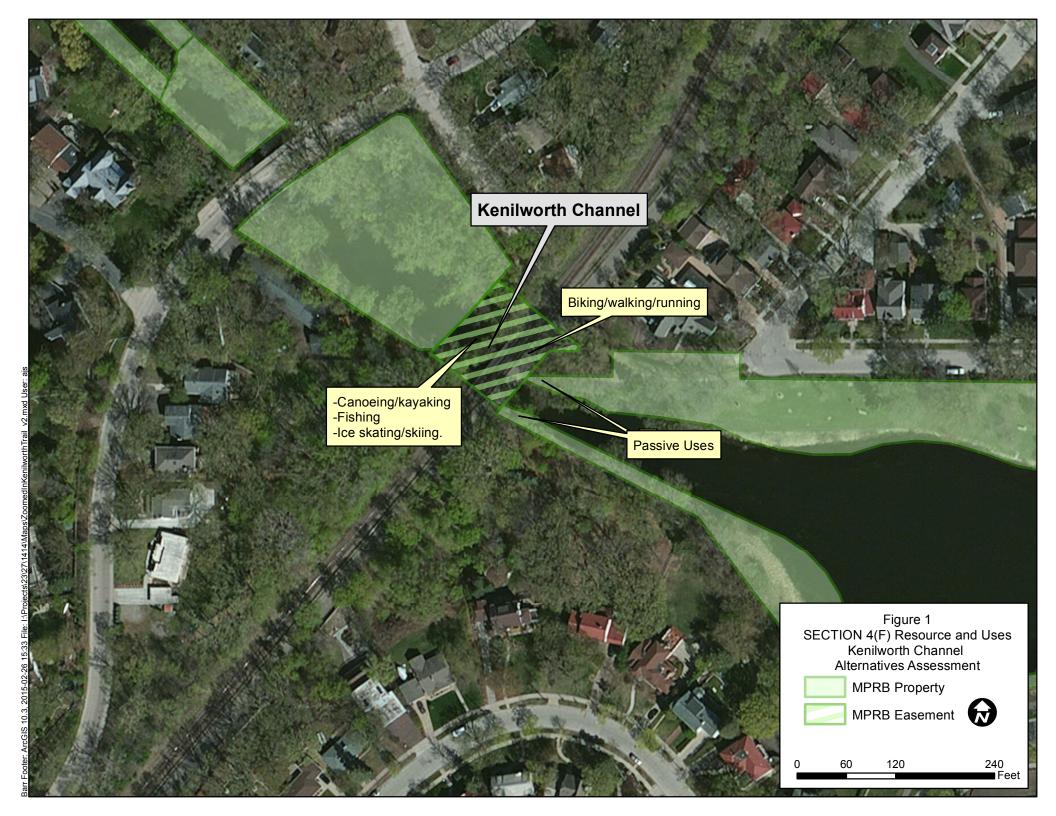


	Temporary impacts					Permanent impacts					
	Access	Noise	Channel Obstruction	Visual	Access	Noise	Channel Obstruction	Visual	Shade/ Shadow	R/W	
Jacked Box Tunnel (Tur	nnel Option 2)										
Canoe/Kayak	access may be closed for certain construction activities, but would generally remain open	during portions of the construction there will be noise disturbance, especially during pile driving. For launching and jacking pits and for bridges; construction activity would generally occur in locations below surrounding grade so construction noise may be limited.	certain construction	if user is present, construction equipment and activities may be visible, but significant work would be performed in the launching pit, which will be obscured due to its location below surrounding grade.		no change from existing conditions	new and separate bridges would be constructed for rail and trail, but design has not been determined.		freight rail and trail bridges would result in shadowing, but less impact than Bridge Option.	no change from existing condition	
Fishing	access may be closed for certain construction activities, but would generally remain open	during portions of the construction there will be noise disturbance, especially during pile driving. For launching and jacking pits and for bridges; construction activity would generally occur in locations below surrounding grade so construction noise may be limited.	certain construction	if user is present, construction equipment and activities may be visible, but significant work would be performed in the launching pit, which will be obscured due to its location below surrounding grade.		no change from existing conditions	new and separate bridges would be constructed for rail and trail, but design has not been determined.		freight rail and trail bridges would result in shadowing, but less impact than Bridge Option.	no change from existing conditions	
Ice Skating/Skiing	access may be closed for certain construction activities, but would generally remain open	during portions of the construction there will be noise disturbance, especially during pile driving. For launching and jacking pits and for bridges; construction activity would generally occur in locations below surrounding grade so construction noise may be limited.	certain construction	if user is present, construction equipment and activities may be visible, but significant work would be performed in the launching pit, which will be obscured due to its location below surrounding grade.		no change from existing conditions	new and separate bridges would be constructed for rail and trail, but design has not been determined.		freight rail and trail bridges would result in shadowing, but less impact than Bridge Option.	no change from existing condition	
Biking/Walking/Running	impeded access during construction (trail would be closed) and potential reconfiguration of bridges above channel	none - users would not be present during construction as there would be no pedestrian bridge		if user is present, construction equipment and activities may be visible, but significant work would be performed in the launching pit, which will be obscured due to its location below surrounding grade.	be on a new bridge separated	no change from existing conditions	new and separate bridges would be constructed for rail and trail, but design has not been determined.	no LRT infrastructure visible from channel or banks	freight rail and trail bridges would result in shadowing, but less impact than Bridge Option.	no change from existing conditions	



	Temporary impacts				Permanent impacts					
	Access	Noise	Channel Obstruction	Visual	Access	Noise	Channel Obstruction	Visual	Shade/ Shadow	R/W
Jacked Box Tunnel (Tu	nnel Option 2)									no change from existing conditions
				if user is present,						
		during portions of the construction there will be noise disturbance,		construction equipment and activities may be						
	access may be impeded	especially during pile driving. For launching and jacking pits and for		visible, but significant work would be performed in the						
	access may be impeded for construction staging	bridges; construction activity would generally occur in locations below	may be closed during	launching pit, which will be obscured due to its	no change			no LRT infrastructure		
Passive Use	on adjacent grassy, passive use areas	surrounding grade so construction noise may be limited.	construction	location below surrounding grade.	from existing conditions	no change from existing conditions	no impact on passive use.	visible from channel or banks	no impact on passive use.	none









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### Memorandum

To:	Todd Christopherson, Brierley Associates
From:	Ray Wuolo, Barr Engineering Co.
Subject:	Kenilworth Channel Alternatives Assessment: Groundwater Impacts
Date:	March 5, 2015
Project:	23271414.00
C:	Michael Schroeder (MPRB), Jim Herbert (Barr)

The purpose of this memorandum is to provide a summary of the evaluation that assesses and identifies the least impactful alternative for the Southwest Light Rail Transit (SWLRT) crossing of the Kenilworth Channel, a property owned by the Minneapolis Park and Recreation Board (MPRB). Whereas the focus on Phase 1 of the project was to demonstrate the feasibility of a tunnel alternative under the Kenilworth Channel, the intent of Phase 2 of the project is to address impacts of the alternatives for crossing the channel, relative to the park and park resources. The Kenilworth Channel crossing alternatives evaluated include:

- SWLRT Project Office (SPO) Bridge Option
- Cut and Cover Tunnel (Tunnel Option 1)
- Jacked Box Tunnel (Tunnel Option 2)

This memorandum is specifically related to the evaluation of the potential impacts to groundwater. More specifically, it addresses the potential effects of construction dewatering for a tunnel and the effects of a tunnel (post-construction) on groundwater elevations, groundwater flow direction; and interaction with nearby surface-water bodies.

### Identification

A shallow tunnel that is constructed underneath the Kenilworth Channel between Cedar Lake and Lake of the Isles (either by cut and cover or jacked box tunnel construction methods) will involve work below the water table during construction and a tunnel feature below the water table after construction. Both construction and post-construction conditions may involve dewatering (groundwater pumping) and/or groundwater seepage into structures below the water table, depending on the construction method. Construction dewatering and post-construction groundwater seepage involves the removal of groundwater by pumping and therefore has the potential to affect groundwater elevations, groundwater interaction with surface-water bodies, and the local water balance. Furthermore, post-construction, the tunnel feature and associated piling walls have the potential to disrupt the natural flow of groundwater in the area.

# Methodology

Predicting the effects of tunnel dewatering on groundwater and groundwater-lake interaction requires the use of a computer model of groundwater flow that includes site-specific features, regional geologic and hydrologic features, and is calibrated to existing groundwater conditions. The model must have sufficient local detail to account for the depth of the tunnel construction features, as well as the tunnel after it is constructed.

The model was used to simulate existing conditions with respect to groundwater levels, groundwater flow directions, and interaction between groundwater and the surface-water features (e.g., Cedar Lake, Lake of the Isles, Lake Calhoun, and the Kenilworth Channel). The effects of constructing the jacked box tunnel on groundwater and surface waters were then evaluated because this alternative involves the deepest incursion into the water table and would therefore have the greatest construction-related hydrology effects. The effects of the constructed tunnel on groundwater flow direction and rate were then evaluated.

## Assumptions

This opinion of least impactful alternative is based on several assumptions, which may change as the project develops. The significant assumptions used to complete this evaluation are summarized below:

- .For the jacked box tunnel alternative, the jacking pit and the launching pit were assumed to be constructed concurrently and to bottom elevation of approximately 813 feet above mean sea level, with sheet piling extending down to elevation 810 feet above mean sea level. The width and length of the two pits are as assumed by Brierley Associates in their conceptual drawings.
- Steady-state groundwater conditions are assumed to be achieved during the construction phase. Based on experience, this very likely will occur but if it does not, the modeling predictions will represent a maximum "worst-case" effect.

- The cut and cover tunnel alternative would be evaluated only if substantial impacts are predicted for the jacked box tunnel alternative (which is deeper and therefore more likely to induce greater groundwater and surface water impacts). As discussed below in this memo, evaluation of the cut and cover alternative was deemed unnecessary, based on the results of the modeling of the jacked box tunnel alternative.
- Lake water levels are assumed to be at average conditions.
- The hydraulic conductivity (permeability) of the geologic materials and the lake and channel sediments are assumed to be as derived from the calibration of the Metro Model 3 and were not changed as a part of this evaluation.
- Seepage and dewatering rates for the tunnel construction are dependent on how well the pit floor and walls are sealed. Because the amount of sealing is an unknown, several different assumptions of the sealing effectiveness were evaluated. Flow between the joints of a sheet-pile wall does not follow Darcy's Law but the overall wall's resistance to seepage can be represented as an equivalent permeability. These varying sealing conditions are represented as hydraulic conductivity (permeability) of the walls and floors in the simulations.
- For tunnel jacking, the soil between the launching and jacking pits (i.e. underneath the channel) will be pre-conditioned to lower the permeability of the soils prior to jacking through some method, such as grouting. For purposes of this evaluation, the resulting permeability was assumed to be equal to the permeability of the walls/floors in the pits.

### Tools

To perform the evaluations, a local-scale groundwater-flow model of the Chain of Lakes region was constructed using the USGS groundwater modeling code MODFLOW-NWT (Niswonger et al., 2011). The local-scale model was extracted from the Metropolitan Council's regional 11-County metropolitan groundwater-flow model, Metro Model 3 (Metropolitan Council, 2014) through a process called "telescoping mesh refinement", or TMR. Metro Model 3 includes all major water features in the 11-County metro area, as well as all major aquifers, aquitards, pumping wells, and groundwater recharge. The TMR groundwater-flow model is of much smaller areal extent than the regional model but retains all of the geologic, hydrologic, and surface-water features of the regional model, as well as the regional groundwater flow effects, which are represented in the boundary conditions at the edges of the TMR model. Using a local-scale TMR model allows for the inclusion of more-detailed features than the regional

model can easily account for and problem-specific conditions, such as increased layering in the shallow aquifer. The extent of the TMR model in the context of the regional Metro Model 3 is shown on Figure 1.

For purposes of this evaluation, the local-scale model required further refinement. Refinements to the model include:

- decreased finite-difference grid-cell size to improve numerical accuracy and account for detailed features of tunnel alternatives;
- the addition of two more layers in the surficial aquifer to account for the depth of the tunnel and construction features (bringing the total number of layers representing the surficial aquifer in the area to four;
- refinement of the shapes of model features that represent Cedar Lake, Lake of the Isle, Lake Calhoun, and the Kenilworth Channel;
- modifications to values of hydraulic conductivity in the model to better account for the information obtain from soil boings performed in the area.

None of these refinements required re-calibration of the model. Model features for the local-scale model are shown on Figure 2.

The jacking pit and the launching pit were represented by the Drain Package in MODFLOW. The Drain Package requires specification of the hydraulic conductivity (permeability) of the walls and floor of the drain and the water elevation maintained in the drain. The water elevation in the two pits was assumed to be equal to the elevation of the proposed slab at the bottom of the pits (818 feet above mean sea level). The permeability of the floor and walls was assumed to be equal. The following permeability values were evaluated:  $1 \times 10^{-5}$  cm/s;  $1 \times 10^{-4}$  cm/s;  $1 \times 10^{-3}$  cm/s; and  $1 \times 10^{-2}$  cm/s. A permeability of  $1 \times 10^{-5}$  cm/s (0.03 ft/day) is a value that is typically used for unsealed sheet piling. Therefore these ranges likely represent the high end of what would be expected for permeability and thus, are conservative (i.e. tend toward the 'worst-case'' conditions).

After construction of the tunnel (either a jacked box tunnel or a cut and cover tunnel), it is assumed that groundwater seepage into the tunnel will be negligible (less than a five gallons per minute). The completed tunnel would not result in any induced seepage from surface-water bodies or cause

groundwater drawdown. However, the tunnel might act as a buried obstruction to groundwater flow, causing changes in groundwater flow conditions and underground communication between the lakes. To evaluate this, the completed tunnel was simulated in the groundwater-flow model as an impermeable barrier with a length equal to the portion of tunnel below the water table and a depth equal to the bottom of the sheet piling or tunnel floor (whichever is deepest at any particular point). The groundwater particle tracking code MODPATH (Pollack, 2012) was used in conjunction with MODFLOW-NWT to predict the direction of groundwater flow with and without the tunnel. A comparison of these flow paths was then undertaken to determine the effect of the tunnel on groundwater flow direction.

The model outputs were compared for each alternative and evaluated for impacts to the users of the Kenilworth Channel based on available knowledge of the site and available information provided by MPRB and SPO.

### **Results and Discussion**

### Effects of Tunnel Construction Dewatering

The model's predictions for the effects of dewatering for the jacked box tunnel are shown on Figure 3. The predicted values for a permeability of 1 x  $10^{-5}$  cm/s and 1 x  $10^{-4}$  cm/s represent a condition in which the piling walls are not well-sealed (i.e., a worst-case condition). Results for a permeability value of 1 x  $10^{-3}$  cm/s and 1 x  $10^{-2}$  cm/s are extreme cases that are more indicative of construction methods with little seepage control.

Based on these results, it would be reasonable to expect dewatering rates during construction of less than 250 gallons per minute and very small (less than 50 gallons per minute) induced seepage from the nearby lakes and the Kenilworth Channel. It is assumed that pumped water during construction would be either infiltrated into the ground in the vicinity of the construction or directed back into the channel. With either method of water handling, the overall water balance of the Chain of Lakes would be unaffected. Lake levels would not be affected with this level of predicted seepage.

A similar modeling analysis for a cut and cover tunnel option was not performed but the results are expected to be similar or less than those predicted for the jacked box tunnel option.

### Effects of Tunnel on Groundwater Flow

The regional groundwater-flow direction in the vicinity of Lake of the Isle and Cedar Lake is approximately west to east, toward the Mississippi River. This approximate west to east groundwater-flow direction is generally true for both the Quaternary (unconsolidated) aquifer(s) and bedrock aquifers, such as the Prairie du Chien-Jordan aquifer and the Tunnel City-Wonawac aquifer. The Quaternary aquifer is generally composed of sand and gravel, with discontinuous layers of clayey silt and organic deposits, such as wetland and peat deposits. In the vicinity of Lake of the Isle, Cedar Lake, and Lake Calhoun, these Quaternary deposits are up to 160-feet deep and fill a north-south trending buried bedrock valley.

The lakes and other hydrologic features in the vicinity of the Kenilworth Channel are surface expressions of the water table and influence the local direction of groundwater flow, particularly in the upper 50 feet of the saturated sand-and-gravel aquifer. Infiltrating precipitation provides local recharge to the aquifer and also affects local groundwater-flow direction, particularly in the upper 60 feet of the aquifer. Within these upper deposits, local groundwater-flow direction turn south-to-north between Cedar Lake and Lake of the Isle and then swing around to the east along the north side of Lake of the Isles, as shown in the model simulation of groundwater-direction on Figure 4.

The effects of the completed jacked box tunnel on shallow groundwater-flow direction are shown on Figure 5. Only those portions of the tunnel that extend below the water table were included as no-flow barriers. The depth of the tunnel's no-flow barrier condition extends to an elevation of approximately 810 feet below mean sea level for the jacked box tunnel sections in order to accommodate the construction sheet piling.

The results of the model simulations predict that the placement of the jacked box tunnel will have a very small effect on groundwater flow direction and rate in the close vicinity of the tunnel (within about 100 feet of the tunnel) and will not affect the overall groundwater flow directions in either the shallow or deep portions of the Quaternary sand-and-gravel aquifer. These results also provide evidence that a tunnel at this location would not impede the groundwater connections between the nearby lakes. These findings are due to (1) the very small cross-sectional thickness of the tunnel (@ 30-feet below the water table) compared to the overall saturated thickness of the sand-and-gravel aquifer (@ 150-feet thick); (2) the small hydraulic gradient (slope of the water table); and (3) the orientation of the tunnel in the

approximate direction of shallow groundwater flow (thereby further minimizing the cross sectional portion of the tunnel with respect to groundwater flow).

Based on the findings of the simulation of the jacked box tunnel, a similar simulation for a cut and cover tunnel was deemed to be unnecessary as this type of tunnel would have slightly less cross-sectional area. Therefore, these findings for the jacked box tunnel are applicable to a cut and cover constructed tunnel, as well.

## **Opinion of Least Impactful Alternative**

Neither the bridge alternative nor either type of tunnel construction are judged to have adverse impacts on water-table elevation, seepage between groundwater and the nearby lakes, or groundwater-direction and rate. Proposed construction methodologies for the jacked box tunnel and the cut and cover tunnel will be protective of groundwater conditions, even if seepage rates into the excavations below the water table are greater than what would typically be expected using the proposed construction methods.

While bridge construction would not be expected to require dewatering, the footings, pilings and/or foundations for the bridge piers would likely be below the water table; it is not correct to say that a bridge alternative would have "no impact". However, construction and post-construction effects on groundwater conditions for the bridge alternative, the cut and cover tunnel alternative, and the jacked box tunnel alternative are all negligible and the risks are deemed to be low and manageable. Therefore, there is no meaningful differentiation between the three alternatives in terms of impacts on groundwater.

## **Mitigation Strategy**

For the tunnel construction, the proposed methods to minimize seepage into excavations below the water table are standard mitigation strategies. They include:

• Installation of interlocking sheet-pile walls around the excavations. Interlocking sheet-pile walls have an effective permeability of approximately 1 x 10<sup>-5</sup> cm/s. The modeling results indicate that reducing this permeability further would likely not be necessary to control impacts to groundwater but additional methods to further reduce seepage through the sheet pile walls, such as the application of asphalt to the joints and injection grouting near the joints can make these walls practically impermeable.

- Excavation of the below-water table pits in "the wet" and installation of a poured concrete or mud floor. Conceptual construction methods would require a floor with a sufficient thickness and density to offset buoyancy forces and minimize seepage through the floor. A poured floor will provide a good seal between the floor and the sheet-pile walls.
- SPO's proposed conceptual construction method of using cells to perform cut and cover construction below the water table includes several elements to minimize seepage during construction. The groundwater modeling suggests that some of the methods proposed by SPO to reduce seepage to essentially zero may not be necessary in terms of the relative impact on groundwater conditions and lake seepage.
- The conceptual use of grouting or freezing to prepare the ground beneath the Kenilworth Channel before jacking the tunnel section should substantially control and minimize seepage and dewatering rates. Grouting is an effective and permanent means of reducing the natural permeability of the soils. Ground freezing is not permanent but has been proven to be effective at substantially reducing permeability of soils during construction.
- As tunnels age, there is a potential for some settlement and cracking of the tunnel walls, which may
  result in seepage into the tunnel. Various means are available to reduce seepage, such as crack
  sealing and grout injection. However, a more prudent approach will be to plan for some seepage into
  the tunnel and include sumps and small pumps to handle seepage, along with inflowing runoff from
  precipitation.

## **References Cited**

- Metropolitan Council. 2014. Twin Cities Metropolitan Area Regional Groundwater Flow Model, Version 3.0. Prepared by Barr Engineering. Metropolitan Council: Saint Paul, MN.
- Niswonger, R.G., Panday, Sorab, and Ibaraki, Motomu, 2011, MODFLOW-NWT, A Newton formulation for MODFLOW-2005: U.S. Geological Survey Techniques and Methods 6-A37, 44 p.
- Pollock, D.W., 2012, User guide for MODPATH version 6—A particle-tracking model for MODFLOW: U.S. Geological Survey Techniques and Methods, book 6, chap. A41, 58 p.

# Attachments

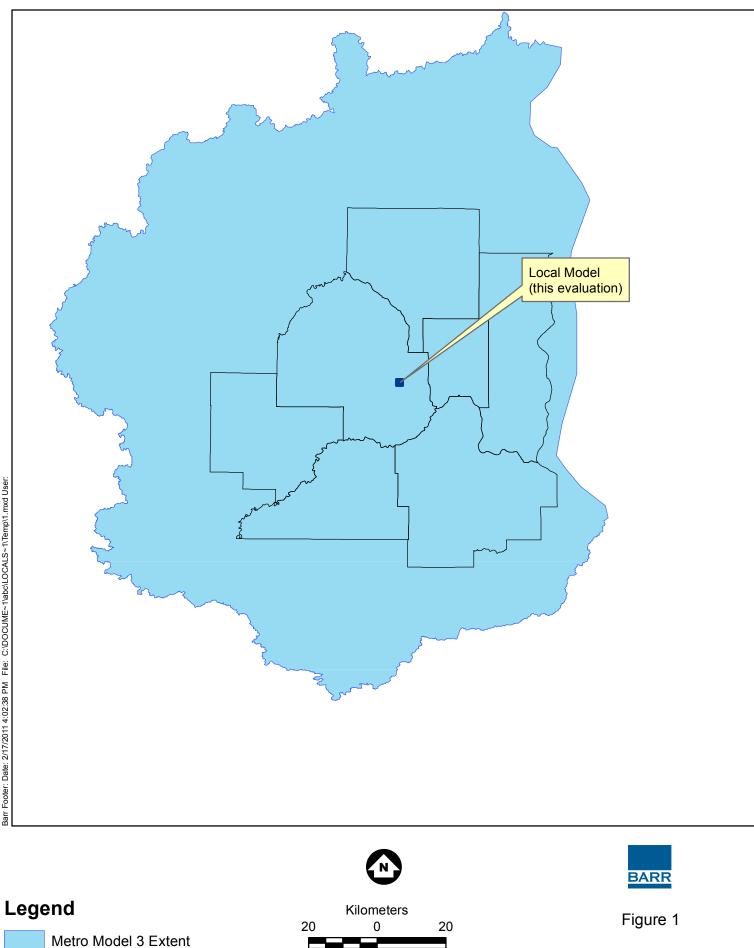
Figure 1

Figure 2

Figure 3

Figure 4

Figure 5



Miles

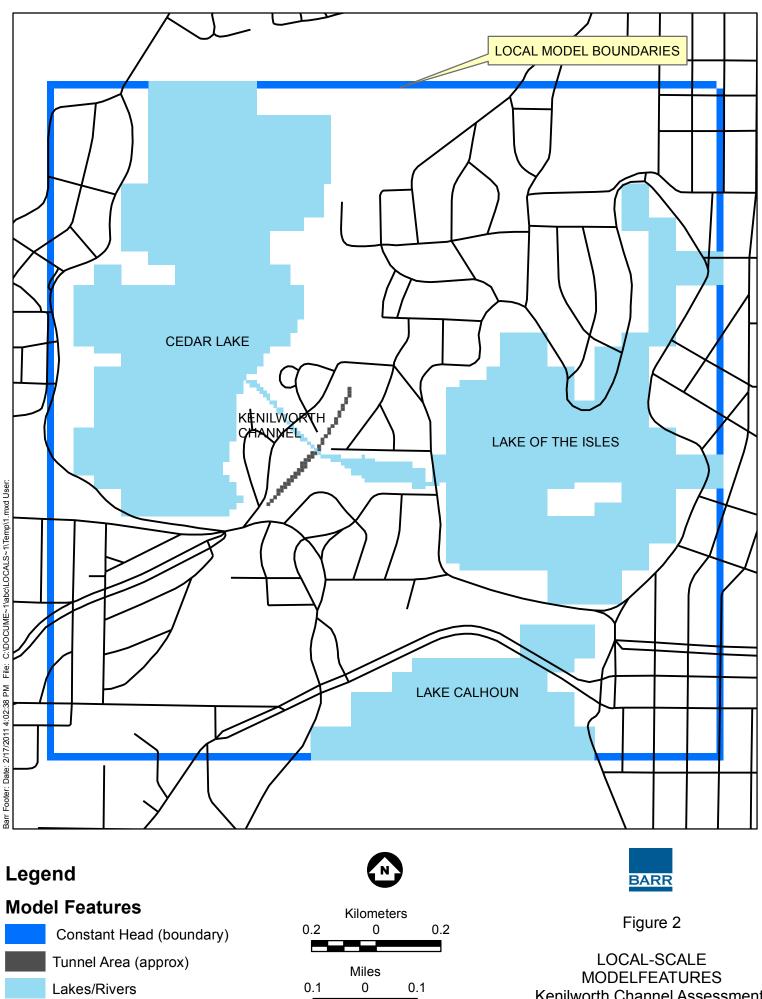
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EXTENT OF GROUNDWATER MODEL DOMAIN Kenilworth Channel Assessment MPRB, Minneapolis, MN

Local Model Extent (this evaluation)



Kenilworth Channel Assessment MPRB, Minneapolis, MN

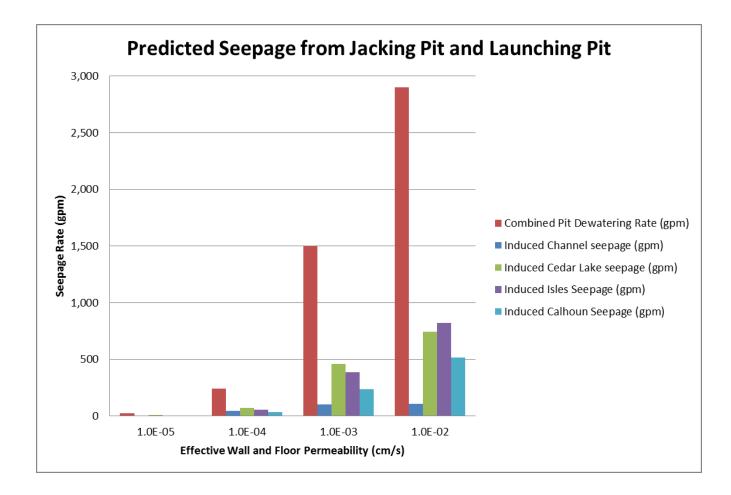
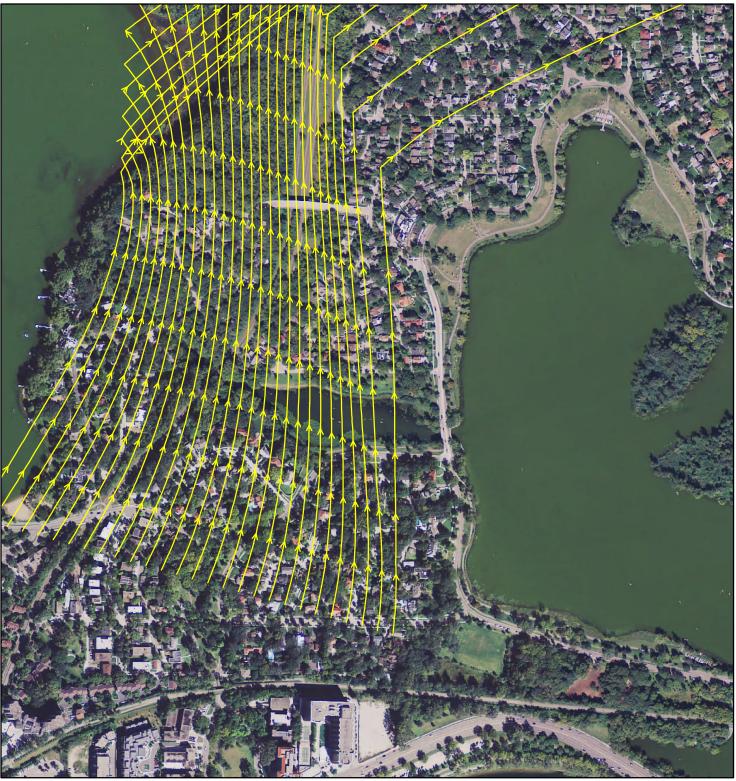




Figure 3

PREDICTED DEWATERING RATES AND INDUCED SEEPAGE FROM LAKES FOR JACKED TUNNEL CONSTRUCTION Kenilworth Channel Assessment MPRB, Minneapolis, MN



Shallow groundwater flow paths for depths to 60 feet below ground surface



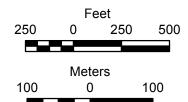
Figure 4

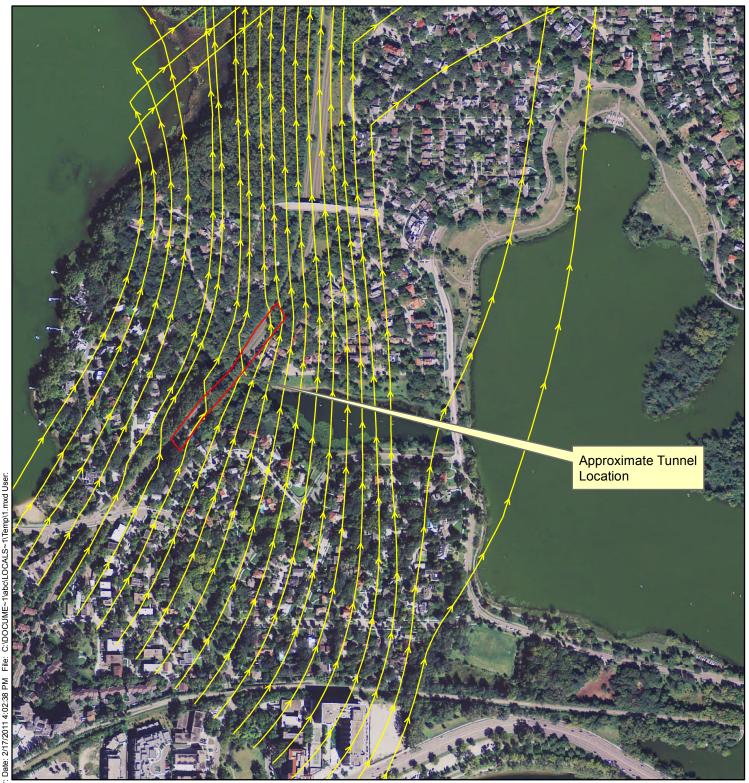


PREDICTED SHALLOW GROUNDWATER-FLOW DIRECTION: EXISTING CONDITIONS Kenilworth Channel Assessment MPRB, Minneapolis, MN



Groundwater Flow Path



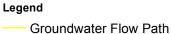


Shallow groundwater flow paths for depths to 60 feet below ground surface





PREDICTED SHALLOW GROUNDWATER-FLOW DIRECTION: WITH JACKED TUNNEL Kenilworth Channel Assessment MPRB, Minneapolis, MN



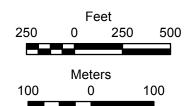


Figure 5

**APPENDIX F – Surface Water Impacts** 



resourceful. naturally. engineering and environmental consultants

## Memorandum

To:Todd Christopherson, Brierley AssociatesFrom:Nathan Campeau, Barr Engineering Co.Subject:Kenilworth Channel Alternatives Assessment: Surface Water ImpactsDate:March 5, 2015Project:23271414.00c:Michael Schroeder (MPRB), Jim Herbert (Barr)

The purpose of this memorandum is to provide a summary of the evaluation that assesses and identifies the least impactful alternative for the Southwest Light Rail Transit (SWLRT) crossing of the Kenilworth Channel, a property owned by the Minneapolis Park and Recreation Board (MPRB). Whereas the focus on Phase 1 of the project was to demonstrate the feasibility of a tunnel alternative under the Kenilworth Channel, the intent of Phase 2 of the project is to address impacts of the alternatives for crossing the channel, relative to the park and park resources. The Kenilworth Channel crossing alternatives evaluated include:

- SWLRT Project Office (SPO) Bridge Option
- Cut and Cover Tunnel (Tunnel Option 1)
- Jacked Box Tunnel (Tunnel Option 2)

This memorandum is specifically related to the evaluation of the referenced focus area.

## Identification

The proposed improvements for the SWLRT corridor will occur adjacent to and upgradient from the Kenilworth Channel, in addition to Cedar Lake and Lake of the Isles. Each of these water resources is owned by the MPRB and hydraulically connected. Each of the proposed alternatives involves the construction of impervious surfaces which will generate stormwater runoff to the adjacent receptors. Construction activities related to the proposed SWLRT improvements should consider the effects to the adjacent surface water receptors.

# Methodology

To assess the potential stormwater impacts to the Kenilworth Channel, each alternative was analyzed for proposed impervious surface area, proposed stormwater treatment facilities, pollutant generation from the proposed impervious surfaces, and the resulting pollutant loading to the Kenilworth Channel after stormwater treatment. The stormwater pollutants assessed were total suspended solids (TSS) and total phosphorus (TP), which are two important pollutants in water quality analyses and are regulated by the City of Minneapolis and the Minnehaha Creek Watershed District (MCWD), the local governmental units responsible for managing stormwater at this location.

For this analysis, a 2,650-foot segment of the SWLRT alignment that encompasses the Kenilworth Channel crossing was chosen. This segment was chosen because it includes all changes in impervious surface area between the three alternatives, so a full comparison can be made. The 2,650-foot segment aligns with five (5) sub-segments of the SWLRT Segment E3 (sub-segments E3-5, E3-6, E3-7, E3-8, and E3-9) that match the SPO-proposed stormwater treatment facility locations. These five (5) sub-segments run from Station 279+300 to Station 281+950, and are identified in SPO's September 2014 report, "Preliminary Water Resources Design, East Segment."

SPO's September 2014 report identified proposed impervious surfaces for the SPO Bridge Option, as well as proposed stormwater treatment facility sizes. Figure 1 show the location of each sub-segment.

To:Todd Christopherson, Brierley AssociatesFrom:Nathan Campeau, Barr Engineering Co.Subject:Kenilworth Channel Alternatives Assessment: Surface Water ImpactsDate:March 5, 2015Page:3Project:23271414.00

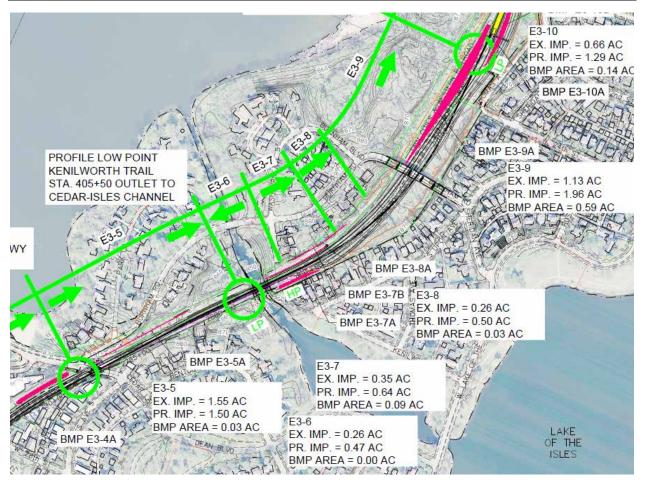


Figure 1 SPO Bridge Option Water Resources Proposed Conditions Map (Segment E3), SPO, September 2014

The total impervious area within this 2,650-foot segment was calculated using the available design plan and profile for each alternative. Impervious surfaces included in this assessment were limited to paved surfaces, rail surface course, and compacted aggregate base. The additional surfaces created for sound walls, visual buffers, and other features outside of the rail, fright, and recreation paths were not included. Table 1 displays the resulting impervious surfaces areas for each sub-segment.

The stormwater treatment facility volumes for each sub-segment in SPO Bridge Option were identified in SPO's September 2014 report, "Preliminary Water Resources Design, East Segment." No stormwater treatment of sub-segment E3-6, which includes the bridge over the Kenilworth Channel, was identified in the report; however, the other 4 sub-segments receive stormwater treatment. For the two (2) tunnel alternatives, stormwater treatment facilities were sized for each sub-segment to provide the same level of

treatment relative to the quantity of proposed impervious surface. For example, if for a particular subsegment one of the tunnel alternatives resulted in 10% more impervious surface compared with the SPO Bridge Option, then the stormwater treatment facility for the tunnel alternative would be sized 10% larger than the SPO Bridge Option.

Table 1 displays the resulting impervious and stormwater treatment facility sizes for each sub-segment. Sub-segment E3-6 includes the bridge over the Kenilworth Channel.

			SPO Bridge Option		Tunnel Option 1 Cut and Cover Tunnel		Tunnel Option 2 Jacked Box Tunnel	
Sub- Segment	Begin Station	End Station	Proposed Imperv. Area (acre)	Stormwater Treatment Facility Volume (acre-feet)	Proposed Imperv. Area (acre)	Stormwater Treatment Facility Volume (acre-feet)	Proposed Imperv. Area (acre)	Stormwater Treatment Facility Volume (acre-feet)
E3-5	279+300	280+100	1.5	0.26	1.264	0.219	1.264	0.219
E3-6	280+100	280+400	0.47	0	0.243	0.000	0.243	0.000
E3-7	280+400	280+750	0.64	0.11	0.509	0.087	0.509	0.087
E3-8	280+750	281+100	0.5	0.04	0.411	0.033	0.294	0.023
E3-9	281+100	281+950	1.96	0.71	1.943	0.704	1.960	0.710
TOTAL	2,65	0 feet	5.07	1.12	4.369	1.043	4.268	1.040

 Table 1
 Sub-Segment Impervious Surface and Stormwater Treatment

Using the impervious areas and stormwater treatment facility volumes, the total stormwater pollutant loading was calculated using the water quality tool described below.

# Assumptions

This review of surface water impacts is based on several assumptions, which may change as the project develops. The significant assumptions used to complete this evaluation are summarized below:

• Stormwater runoff produced by the chosen alternative will be treated by infiltration facilities before discharge to the groundwater or surface water, consistent with the assumptions made by the SPO in their September 2014 water resources report.

- Available plan set and documents provided by MPRB and SPO were used to calculate the impervious area created in each alternative.
- Surface water that flows towards the tunnel and groundwater seepage in each alternative will be collected by subsurface drainage systems that are capable of pumping and infiltrating stormwater and groundwater seepage up to the 100-year event. These volumes were not considered in this analysis.
- Temporary impacts due to stormwater runoff during construction activity at the ground surface were not assessed.
- In aggregate, all alternatives meet local stormwater quality requirements.
- Rate control was not considered for this analysis.

## Tools

This review of surface water impacts relied on water quality calculations performed by the Minnesota Pollution Control Agency's (MPCA) Minimal Impact Design Standards (MIDS) Calculator, Version 2, released June 2014. The MIDS Calculator was developed by the MPCA using the water quality program "Program for Predicting Polluting Particle Passage thru Pits, Puddles, & Ponds", or P8. The MIDS Calculator is an accepted statewide water quality evaluation tool that determines average annual stormwater volume and pollutant (TSS and TP) generation as well as stormwater volume and pollutant removal by specific stormwater treatment facilities.

The total proposed impervious surface for each alternative was placed in the MIDS Calculator to determine the total pollutant loading generated by each alternative. To determine the pollutant removal of each alternative, the stormwater treatment facility volumes for each sub-segment that included a stormwater management facility were then entered into the MIDS Calculator as infiltration basins.

The MIDS Calculator was used to compare each of the three (3) alternatives and evaluate impacts to the Kenilworth Channel.

## **Results and Discussion**

The results of the MIDS Calculator analysis for each alternative are included in Attachment 1. Table 2 displays a summary of the water quality analysis for each alternative.

	SPO Bridge Option	Tunnel Option 1 Cut and Cover Tunnel	Tunnel Option 2 Jacked Box Tunnel
Proposed Imperviousness (acre)	5.07	4.369	4.268
Pre-Treatment TSS Loading (lbs)	1,661	1,432	1,399
Post-Treatment TSS Discharge (lbs)	174	97	93
Pre-Treatment TP Loading (lbs)	9.15	7.88	7.69
Post-Treatment TP Discharge (lbs)	0.96	0.53	0.51
TSS and TP Removal (%)	90%	93%	93%

#### Table 2Water Quality Results by Alternative

The tunnel alternatives result in the discharge of fewer pollutants to surface waters, each discharging at least 44% fewer pollutants than the SPO Bridge Option. Most of the decrease in pollutant discharge in the tunnel alternatives is due to the elimination of the impervious surfaces of the LRT bridge, which discharge stormwater and pollutants untreated to the Kenilworth Channel.

# **Opinion of Least Impactful Alternative**

While all alternatives meet, in aggregate, local governmental water quality requirements, the tunnel alternatives result in less impact to surface waters. Tunnel Option 2 discharges the fewest pollutants to the Kenilworth Channel; therefore in our opinion Tunnel Option 2 is the least impactful alternative to the surface waters of Kenilworth Channel.

# **Mitigation Strategy**

Of the five (5) sub-segments considered, four (4) provide an adequate level of stormwater treatment. Subsegment E3-6, however, does not have an identified stormwater treatment facility and the resulting runoff and pollutants discharge to the Kenilworth Channel untreated. This sub-segment includes the bridges that are directly over the Kenilworth Channel. Regardless of the alternative chosen, we recommend directing stormwater runoff from the bridges (freight rail, SWLRT, and pedestrian) over the Kenilworth Channel to infiltration facilities, designed at least to the MCWD-standard of treating and infiltrating the first inch of runoff from the impervious surfaces, which would also meet the City's requirements for TSS removal.

# Attachments

MIDS Calculator

## **APPENDIX F – Surface Water Impacts: Attachment 1**

#### **Project Information**

Calculator Version:	Version 2: June 2014
Project Name:	Kenilworth Channel
User Name / Company Name:	Nathan Campeau, Barr
Date:	2/2/2015
Project Description:	SPO Option

#### **Site Information**

Retention Requirement (inches):	1.1
Site's Zip Code:	55416
Annual Rainfall (inches):	31
Phosphorus EMC (mg/l):	0.3
TSS EMC (mg/l):	54.5

#### **Total Site Area**

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed					0
		I	mpervious A	rea (acres)	5.07
			Total A	rea (acres)	5.07

#### Site Areas Routed to BMPs

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed					0
		Ir	mpervious A	rea (acres)	4.6
			Total A	rea (acres)	4.6

#### **Summary Information**

#### Performance Goal Requirement

Performance goal volume retention requirement: Volume removed by BMPs towards performance goal: Percent volume removed towards performance goal	20244 18113 <b>89</b>	ft3 ft3 <b>%</b>
Annual Volume and Pollutant Load Reductions		
Post development annual runoff volume	11.1984	acre-ft
Annual runoff volume removed by BMPs:	10.023	acre-ft
Percent annual runoff volume removed:	90	%
Post development annual particulate P load:	5.03	lbs
Annual particulate P removed by BMPs:	4.5	lbs
Post development annual dissolved P load:	4.11	lbs
Annual dissolved P removed by BMPs:	3.69	lbs
Percent annual total phosphorus removed:	90	%
Post development annual TSS load:	1660	lbs
Annual TSS removed by BMPs:	1487	lbs
Percent annual TSS removed:	90	%

#### BMP Summary

#### Performance Goal Summary

BMP Name	BMP Volume Capacity (ft3)	Volume Recieved (ft3)	Volume Retained (ft3)	Volume Outflow (ft3)	Percent Retained (%)
E3-5	11326	5989	5989	0	100
E3-8	1742	1996	1742	254	87
E3-7	4792	2556	2556	0	100
E3-9	30928	7826	7826	0	100

#### Annual Volume Summary

BMP Name					
E3-5	3.3131	0	3.2829	0.0301999999	99
E3-8	1.1044	0	1.009	0.0954000000	91
E3-7	1.4136	0	1.402	0.0116000000	99
E3-9	4.3292	0	4.3292	0	100

#### Particulate Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	1.49	0	1.48	0.01	99
E3-8	0.5	0	0.46	0.04	91
E3-7	0.63	0	0.62	0.01	99
E3-9	1.94	0	1.94	0	100

#### **Dissolved Phosphorus Summary**

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	1.22	0	1.21	0.01	99
E3-8	0.41	0	0.37	0.04	91
E3-7	0.52	0	0.52	0	99
E3-9	1.59	0	1.59	0	100

#### **TSS Summary**

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	491	0	487	4	99
E3-8	164	0	150	14	91
E3-7	210	0	208	2	99
E3-9	642	0	642	0	100

**BMP Schematic** 



## **Project Information**

Calculator Version:	Version 2: June 2014
Project Name:	Kenilworth Channel
User Name / Company Name:	Nathan Campeau, Barr
Date:	2/16/2015
Project Description:	MPRB Tunnel Option 1, Cut and Cover

#### Site Information

Retention Requirement (inches):	1.1
Site's Zip Code:	55416
Annual Rainfall (inches):	31
Phosphorus EMC (mg/l):	0.3
TSS EMC (mg/l):	54.5

#### **Total Site Area**

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed					0
		Iı	mpervious A	rea (acres)	4.369
			Total A	rea (acres)	4.369

#### Site Areas Routed to BMPs

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed					0
		I	mpervious A	rea (acres)	4.127
			Total A	area (acres)	4.127

#### **Summary Information**

#### Performance Goal Requirement

Performance goal volume retention requirement: Volume removed by BMPs towards performance goal: <b>Percent volume removed towards performance goal</b>	17445 16269 <b>93</b>	ft3 ft3 <b>%</b>
Annual Volume and Pollutant Load Reductions		
Post development annual runoff volume	9.65	acre-ft
Annual runoff volume removed by BMPs:	9.0022	acre-ft
Percent annual runoff volume removed:	93	%
Post development annual particulate P load:	4.33	lbs
Annual particulate P removed by BMPs:	4.04	lbs
Post development annual dissolved P load:	3.54	lbs
Annual dissolved P removed by BMPs:	3.31	lbs
Percent annual total phosphorus removed:	93	%
Post development annual TSS load:	1431	lbs
Annual TSS removed by BMPs:	1335	lbs
Percent annual TSS removed:	93	%

#### BMP Summary

#### Performance Goal Summary

BMP Name	BMP Volume Capacity (ft3)	Volume Recieved (ft3)	Volume Retained (ft3)	Volume Outflow (ft3)	Percent Retained (%)
E3-5	9541	5047	5047	0	100
E3-8	1432	1641	1432	209	87
E3-7	3807	2032	2032	0	100
E3-9	30665	7758	7758	0	100

#### **Annual Volume Summary**

BMP Name	Volume From Direct Watershed (acre-ft)	Volume From Upstream BMPs (acre-ft)	Volume Retained (acre-ft)	Volume outflow (acre-ft)	Percent Retained (%)
E3-5	2.7919	0	2.7664	0.0255000000	99
E3-8	0.9078	0	0.8294	0.0784	91
E3-7	1.1243	0	1.115	0.0093000000	99
E3-9	4.2916	0	4.2916	0	100

#### **Particulate Phosphorus Summary**

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	1.25	0	1.24	0.01	99
E3-8	0.41	0	0.37	0.04	91
E3-7	0.5	0	0.5	0	99
E3-9	1.93	0	1.93	0	100

#### **Dissolved Phosphorus Summary**

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	1.03	0	1.02	0.01	99
E3-8	0.33	0	0.3	0.03	91
E3-7	0.41	0	0.41	0	99
E3-9	1.58	0	1.58	0	100

#### **TSS Summary**

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	414	0	410	4	99
E3-8	135	0	123	12	91
E3-7	167	0	166	1	99
E3-9	636	0	636	0	100

**BMP Schematic** 



## **Project Information**

Calculator Version:	Version 2: June 2014
Project Name:	Kenilworth Channel
User Name / Company Name:	Nathan Campeau, Barr
Date:	2/16/2015
Project Description:	MPRB Tunnel Option 2, Jacked Box

#### Site Information

Retention Requirement (inches):	1.1
Site's Zip Code:	55416
Annual Rainfall (inches):	31
Phosphorus EMC (mg/l):	0.3
TSS EMC (mg/l):	54.5

#### **Total Site Area**

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed					0
		Iı	mpervious A	rea (acres)	4.268
			Total A	rea (acres)	4.268

#### Site Areas Routed to BMPs

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed					0
		I	mpervious A	rea (acres)	4.027
			Total A	area (acres)	4.027

#### **Summary Information**

#### Performance Goal Requirement

Performance goal volume retention requirement: Volume removed by BMPs towards performance goal: <b>Percent volume removed towards performance goal</b>	17042 15928 <b>93</b>	ft3 ft3 <b>%</b>
Annual Volume and Pollutant Load Reductions		
Post development annual runoff volume	9.4269	acre-ft
Annual runoff volume removed by BMPs:	8.8035	acre-ft
Percent annual runoff volume removed:	93	%
Post development annual particulate P load:	4.23	lbs
Annual particulate P removed by BMPs:	3.94	lbs
Post development annual dissolved P load:	3.46	lbs
Annual dissolved P removed by BMPs:	3.24	lbs
Percent annual total phosphorus removed:	93	%
	4007	
Post development annual TSS load:	1397	lbs
Annual TSS removed by BMPs:	1306	lbs
Percent annual TSS removed:	93	%

#### BMP Summary

#### Performance Goal Summary

BMP Name	BMP Volume Capacity (ft3)	Volume Recieved (ft3)	Volume Retained (ft3)	Volume Outflow (ft3)	Percent Retained (%)
E3-8	1023	1174	1023	151	87
E3-7	3807	2032	2032	0	100
E3-5	9541	5047	5047	0	100
E3-9	30928	7826	7826	0	100

#### **Annual Volume Summary**

BMP Name	Volume From Direct Watershed (acre-ft)	Volume From Upstream BMPs (acre-ft)	Volume Retained (acre-ft)	Volume outflow (acre-ft)	Percent Retained (%)
E3-5	2.7919	0	2.7664	0.0255000000	99
E3-8	0.6494	0	0.5931	0.0563	91
E3-7	1.1243	0	1.115	0.0093000000	99
E3-9	4.3292	0	4.3292	0	100

#### Particulate Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	1.25	0	1.24	0.01	99
E3-8	0.29	0	0.26	0.03	91
E3-7	0.5	0	0.5	0	99
E3-9	1.94	0	1.94	0	100

#### **Dissolved Phosphorus Summary**

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	1.03	0	1.02	0.01	99
E3-8	0.24	0	0.22	0.02	91
E3-7	0.41	0	0.41	0	99
E3-9	1.59	0	1.59	0	100

#### **TSS Summary**

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (Ibs)	Outflow Load (lbs)	Percent Retained (%)
E3-5	414	0	410	4	99
E3-8	96	0	88	8	91
E3-7	167	0	166	1	99
E3-9	642	0	642	0	100

**BMP Schematic** 





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### Memorandum

To:Todd Christopherson, Brierley AssociatesFrom:Ron Koth, Barr Engineering Co.Subject:Kenilworth Channel Alternatives Assessment: Wildlife Impacts/MovementDate:March 5, 2015Project:23271414.00c:Michael Schroeder (MPRB), Jim Herbert (Barr)

The purpose of this memorandum is to provide a summary of the evaluation that assesses and identifies the least impactful alternative for the Southwest Light Rail Transit (SWLRT) crossing of the Kenilworth Channel, a property owned by the Minneapolis Park and Recreation Board (MPRB). Whereas the focus on Phase 1 of the project was to demonstrate the feasibility of a tunnel alternative under the Kenilworth Channel, the intent of Phase 2 of the project is to address impacts of the alternatives for crossing the channel relative to the park and park resources. The Kenilworth Channel crossing alternatives evaluated include:

- SWLRT Project Office (SPO) Bridge Option
- Cut and Cover Tunnel (Tunnel Option 1)
- Jacked Box Tunnel (Tunnel Option 2)

This memorandum is specifically related to the evaluation of the referenced focus area.

## Identification

Objectives:

- 1) Evaluate potential aquatic and terrestrial issues associated with shade and shadows associated with any changes from the existing wooden bridge.
- 2) Use guidance and/or criteria from other jurisdictions or Minnesota as the basis for evaluation.
- 3) Attempt to quantitatively describe any differences between options.

#### Existing bridge



SPO Bridge Option (at grade LRT/trail on bridge plus freight rail bridge)



Tunnel Option 1 and 2 with robust pedestrian bridge (LRT tunnel plus robust pedestrian bridge and freight rail bridge)



Tunnel Option 1 and 2 with vaulted pedestrian bridge (LRT tunnel plus vaulted pedestrian and freight rail bridge)



#### General site description

Bridges and light rail crossing/tunnel are proposed to be constructed on the existing Kenilworth Trail over the Kenilworth Channel between Cedar Lake and Lake of the Isles. An existing approximately 2-foot deep slow moving (west to east) flow of water is present in the Kenilworth Channel. No change to the water depth in the channel is proposed following final construction. The existing wooden bridge has a total width across the deck of approximately 44 feet with the deck approximately 14-feet above the surface of the water. The estimated opening width between the wooden bents is 15 feet. The area is within an urban parkland setting sees heavy human use and has a population of mammals commonly found in urbanized parklands associated with water bodies such as red fox, gray squirrel, mink, various mice, rabbits, deer etc. The Kenilworth Channel is likely used/inhabited by fishes common to both Cedar Lake and Lake of the Isles with the channel used seasonally for spawning movements and movements to and from winter cover found in Cedar Lake. Fishes common to both lakes include a variety of panfish, walleye, northern pike, black and yellow bullhead, with low numbers of rough fish such as carp Minnesota DNR (MDNR) Lake Finder fisheries survey 2009. MDNR (2009) noted that shore fishing is very popular on both Cedar Lake and Lake of the Isles; the assumption is made that some shore fishing and channel shoreline traverse by anglers may also occur in and along the Kenilworth Channel seasonally.

## Methodology

Quantitative comparisons of proposed options for terrestrial wildlife passage were conducted using the metric known as openness ratio as used by the states of Arizona (2006) and Maine (2008) to evaluate openings of bridges and culverts as impediments to wildlife passage related to darkness and size. The openness ratio is based on data about animal behavior that indicates that an open field of view with habitat clearly visible on the other side of an opening correlates with reduced passage or movement impediments. The openness ratio is a straight-forward calculation (Height x Width)/Length. In this evaluation height is the distance of a bridge above the water surface, width is distance between in-water piers, and length is the width of the bridge deck. The threshold value for large animal passage impediment is 0.75. The higher the openness ratio the less potential impediment there will be for terrestrial wildlife passage or usage.

Quantitative comparisons of proposed options for aquatic organism passage were not conducted based on the expected future condition of no change to water depths in the Kenilworth Channel and the 2 fps maximum velocity expected during a 100-year event. At a flow less than a 100-year event it is expected that velocities will fall below 2 fps; where no passage impediment is anticipated.

## **Results and Discussion**

The openness ratio was used to compare between options and existing conditions.

#### SPO Bridge Option (at grade LRT/trail bridge plus freight rail bridge)

Two bridges with approximate dimensions:

- 1 bridge 20.3-feet wide
- 1 bridge 53.5-feet wide
- 9-foot space between bridges
- estimated height above water surface = 14.5 feet
- average distance between piers= 22 feet'

This option as shown on the above drawing visually appears to cast a larger shadow on the Kenilworth Channel than the existing wooden bridge or other options considered. The openness ratio for this is 4.21 using the values above with both bridge widths combined due to the small separation between decks.

# Tunnel Option 1 and 2 with robust pedestrian bridge (LRT tunnel plus robust pedestrian bridge and freight bridge)

Two bridges with approximate dimensions:

- 1 bridge 22.5-foot wide
- 1 bridge 20.3-foot wide
- 44.5 foot spacing between bridges
- estimated height above the water surface = 14.5 feet
- average distance between piers = 22 feet

The approximate 40-foot distance between the two bridges effectively creates separation for light penetration and visual separation. Calculation of the openness ratio metric used two separate bridge openings in consideration of this fact. The openness ratio for the 22.5–foot wide bridge is 14.2 and for the 20.3–foot wide bridge it is 15.7.

# Tunnel Option 1 and 2 with vaulted pedestrian bridge (LRT tunnel plus vaulted pedestrian bridge and freight rail bridge)

Two bridges with approximate dimensions:

- 1 bridge (#1) estimate 22.5-feet wide
- 1 bridge (#2) 20.3-feet wide
- 44.5-foot spacing between bridges
- height above water bridge #2 = approx. 14.5 feet
- height above water bridge #1 = approx. 16.0 feet
- average distance between piers bridge #2 = 22 feet
- Channel span distance = 92 feet

This option has as shown improves the openness ratio with no piers in mid-channel for the pedestrian bridge. The openness ratio(s) are based on a 40-foot separation between the bridges so each openness ration is calculated separately. Openness ratio for the vaulted pedestrian bridge with no piers is: 65.6. Openness ratio for the LRT bridge is 15.7, similar to the previous scenario.

#### Terrestrial wildlife impacts

Openness ratio comparisons between the existing bridge and three potential scenarios indicate that the tunnel option with vaulted pedestrian bridge has a ratio of nearly a factor of 3.5 times greater than SPO Bridge Option and nearly a factor of 3 greater than the existing bridge that has an openness ratio of 4.8. Neither the existing conditions nor either SPO Bridge Option or Tunnel Options 1 and 2 with robust pedestrian bridge present any likely impediments to wildlife passage through the bridge openings based on the threshold openness ratio requirement of 0.75 for large mammals. Tunnel Options 1 and 2 with a clear span vaulted pedestrian bridge slightly higher off the water surface than other options increases the openness ratio for this structure to 65.2. None of the openness ratios indicate any impediments to terrestrial wildlife passage; however, these ratios do quantify the perceived visual differences in shading between existing conditions and any of the proposed options.

All option renderings show relatively steeply sloping banks under the bridges with the rendering of the tunnel options showing rock rip rap bank lining between the bridges; steep banks and use of rip rap may create passage difficulties for mammals, herpetofauna, or persons seeking to traverse the shoreline of the channel and is not recommended without provisions for a passage bench as recommended by (MDNR 2014).

#### Aquatic organism impacts

Aquatic organism passage or use of the channel is not anticipated to be measurably different from the existing or with either proposed option. Some increased use of the channel area under the wider bridge as proposed in SPO Bridge Option could take place as aquatic organisms seek shade for thermal shelter during high sun and hot summer periods, although the shallow water depth of 2 feet may not be preferred as deeper/cooler water is likely found in either Cedar Lake or Lake of the Isles during summer periods. No velocity barriers are expected with the generally low slope of the Kenilworth Channel and associated low velocity water flow from Cedar Lake to Lake of the Isles. Velocities in the channel are anticipated to be below 2 fps projected to occur during a 100-year flow event. The rough surface of the wooden bents of the existing bridge may afford more surface area for attached periphyton than the smooth concrete walls of either proposed future condition. Shading caused by any proposed option is not anticipated to impact fish passage; passage impediments are most commonly associated with sharp contrast between light and very dark. None of the options proposed have such circumstances. In dark culverts some agencies recommend consideration of lighting when a culvert is over 150–feet long culvert (NIMFS 2001).

#### Temporary construction impacts

Construction related closures of the Kenilworth Channel range from approximately 12-18 months based on early schedule projections. Aquatic, avian and terrestrial organisms seeking to utilize the channel or riparian corridor adjacent to the channel will be adversely impacted during this period. Some fishes present in the Lake of the Isles that typically seek to move to Cedar Lake to seek preferred habitat conditions during seasonal periods of stress in the Lake of the Isles could suffer mortality if they are not able to find preferred habitat conditions by moving into Lake Calhoun as an alternate to Cedar Lake. Terrestrial wildlife travel corridors along the Kenilworth Channel will be disrupted by construction related activity; alternate routes will likely be sought by these animals during construction. Woody vegetation now present adjacent to the channel will likely be removed during construction. Avian wildlife now using these habitats will be displaced until woody vegetation is replaced and becomes established. No longterm adverse consequences to aquatic or terrestrial wildlife should, however, be anticipated due to temporary construction related impacts.

## **Opinion of Least Impactful Alternative**

Comparison of the options using the openness metric and criteria as shown in Table 1 suggest that Tunnel Options 1 and 2 with vaulted pedestrian bridge has highest openness ratio and least potential adverse impacts to wildlife passage, however, none of the options evaluated using the openness ratio approach the 0.75 threshold where passage may be impeded by shading or wildlife behavioral avoidance. Comparisons of tunnel construction methods; cut/cover or jacked box have differing channel closure periods as discussed by others and may impact the time of channel closure leading to increased or decreased temporary construction impacts on terrestrial wildlife and aquatic species. None of the options evaluated are likely to have long-term adverse impacts on wildlife or aquatic organisms.

#### Table 1

Comparison Feature	SPO Bridge Option	Tunnel Option 1 and 2 with robust pedestrian bridge	Tunnel Option 1 and 2 with vaulted pedestrian bridge
Openness Ratio	4.21	14.2 / 15.7	65.2 / 15.7
Channel closures Intermittent (months)	12	18 (Option 1) 12 (Option 2)	18 (Option 1) 12 (Option 2)

## **Mitigation Strategy**

The primary mitigation strategy for temporary wildlife and aquatic species movements is to reduce the length of time the channel and riparian corridor are completely closed due to construction. The primary long-term mitigation strategy for wildlife passage is to include a wildlife passage bench (MDNR 2014) on one or both sides of the channel.

## Literature Cited

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- Minnesota Department of Natural Resources. 2009. Lake Survey of Cedar Lake and Lake Calhoun, Hennepin County; accessed via LakeFinder at: <u>http://www.dnr.state.mn.us/lakefind/index.html</u>.

Minnesota Department of Natural Resources. 2014. Best Practices for Meeting DNR GP 2004-001; accessed at:

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## Memorandum

To:	Charlene Roise, Hess Roise and Company
From:	Christina Harrison, Archeological Research
Subject:	Kenilworth Channel Alternatives Assessment: Archeology Impacts
Date:	March 5, 2015
C:	Michael Schroeder (MPRB), Todd Christopherson (Brierley), Jim Herbert (Barr)

The purpose of this memorandum is to provide a summary of the evaluation that assesses and identifies the least impactful alternative for the Southwest Light Rail Transit (SWLRT) crossing of the Kenilworth Channel, a property owned by the Minneapolis Park and Recreation Board (MPRB). Whereas the focus on Phase 1 of the project was to demonstrate the feasibility of a tunnel alternative under the Kenilworth Channel, the intent of Phase 2 of the project is to address impacts of the alternatives for crossing the channel, relative to impacts on the park and park resources. The Kenilworth Channel crossing alternatives evaluated include:

- SWLRT Project Office (SPO) Bridge Option
- Cut and Cover Tunnel (Tunnel Option 1)
- Jacked Box Tunnel (Tunnel Option 2)

This memorandum is specifically related to the evaluation of the referenced focus area.

## Identification

The proposed improvements for the SWLRT corridor at/near the Kenilworth Channel will affect property which, as parkland owned by the MPRB, comes under the purview of Section 4(f) of the Department of Transportation Act of 1966 – legislation which requires consideration of historic sites and archaeological resources of national, state or local significance in public ownership.

## Methodology

In order to comply with Section 106 of the National Historic Preservation Act of 1966 and 36CFR800 (procedures of the Advisory Council on Historic Preservation), the methodology used to identify archaeological resources on 4(f) lands needs to meet the requirements of the Secretary of the Interiors Standards for Identification and Evaluation of historic properties.

To:Charlene Roise, Hess Roise and CompanyFrom:Christina Harrison, Archeological ResearchSubject:Kenilworth Channel Alternatives Assessment: ArcheologyDate:March 5, 2015Page:2

Archaeological reviews conducted on non-federal public land and under a license issued by the Office of the State Archaeologist also need to be conducted in a manner that complies with Minnesota Statutes 138.31 -138.42 (the "Field Archaeology Act") and 307.08 (the "Private Cemeteries Act").

In order to identify any archaeological resources present within the study area, ARS staff conducted a records and literature search focused on sources described below under "Tools". Due to the timing of this review, which had to be completed during the months of December and January, the presence of a snow cover and the depth of ground frost prevented ARS from conducting the visual reconnaissance and subsoil testing that typically is the recommended/required second part of an identification (Phase 1) level archaeological survey.

## "Tools"

As standard surface reconnaissance and subsoil testing could not be conducted for the abovereferenced reasons, ARS had to base its conclusions regarding archaeological potential on careful review of the following resources:

- archaeological inventory and survey report files maintained by the Minnesota Historical Society (MHS) and the Office of the State Archaeologist (OSA) as well as historic insurance maps, plat maps, aerial photographs and field observations compiled by ARS for the Phase 1 Archaeological Survey of the SWLRT project;1
- soil boring profiles provided by Brierley Associates (Attachment 1).

## **Results and Discussion**

The Phase I cultural resources review of the SWLRT corridor was conducted on the assumption that the proposed undertaking would utilize the existing railroad corridor and at that time, there had not yet been any consideration given to the possibility of a shallow tunnel option.

Periods of lower lake levels that have been documented for parts of the postglacial period would have created shorelines that more than likely attracted prehistoric Native American use but now are buried under more recent marsh deposits. Assuming (a) that this would be true also of the areas adjacent to the Kenilworth channel and (b) that soils within the existing railroad corridor would have been too deeply disturbed by railroad construction to retain meaningful historic Native American and Euro-American evidence that predates the railroad, the Phase I review concluded that the area of potential effect for what is now considered the SPO Bridge Option was completely lacking in archaeological potential.

<sup>&</sup>lt;sup>1</sup> SWCA Environmental Consultants, 2012: Phase I Archaeological Survey for Southwest Light Rail Transit Project in Minneapolis, St. Louis Park, Hopkins, Minnetonka and Eden Prairie, Minnesota.

Soil boring profiles indicate that most of the construction and excavation activities associated with Options 1 and 2 only would impact soils that consist of fill placed on former marsh during the creation of the Kenilworth channel and lagoon in the early 1900s. Consequently, the areas that would be impacted by either the jacked box or the cut & cover tunnel options also appear to lack Native American and historic Euro-American archaeological potential, a possible exception being their portal segments where soils below the disturbed railroad embankment could contain archaeological evidence in a context that retains enough physical integrity to yield meaningful information. Should either of these options be considered for construction, Phase 1 level subsoil testing – under improved soil conditions -- would be warranted as well as, in case of positive results, further Phase 2 level intensive testing and evaluation of significance.

## **Opinion of Least Impactful Alternative**

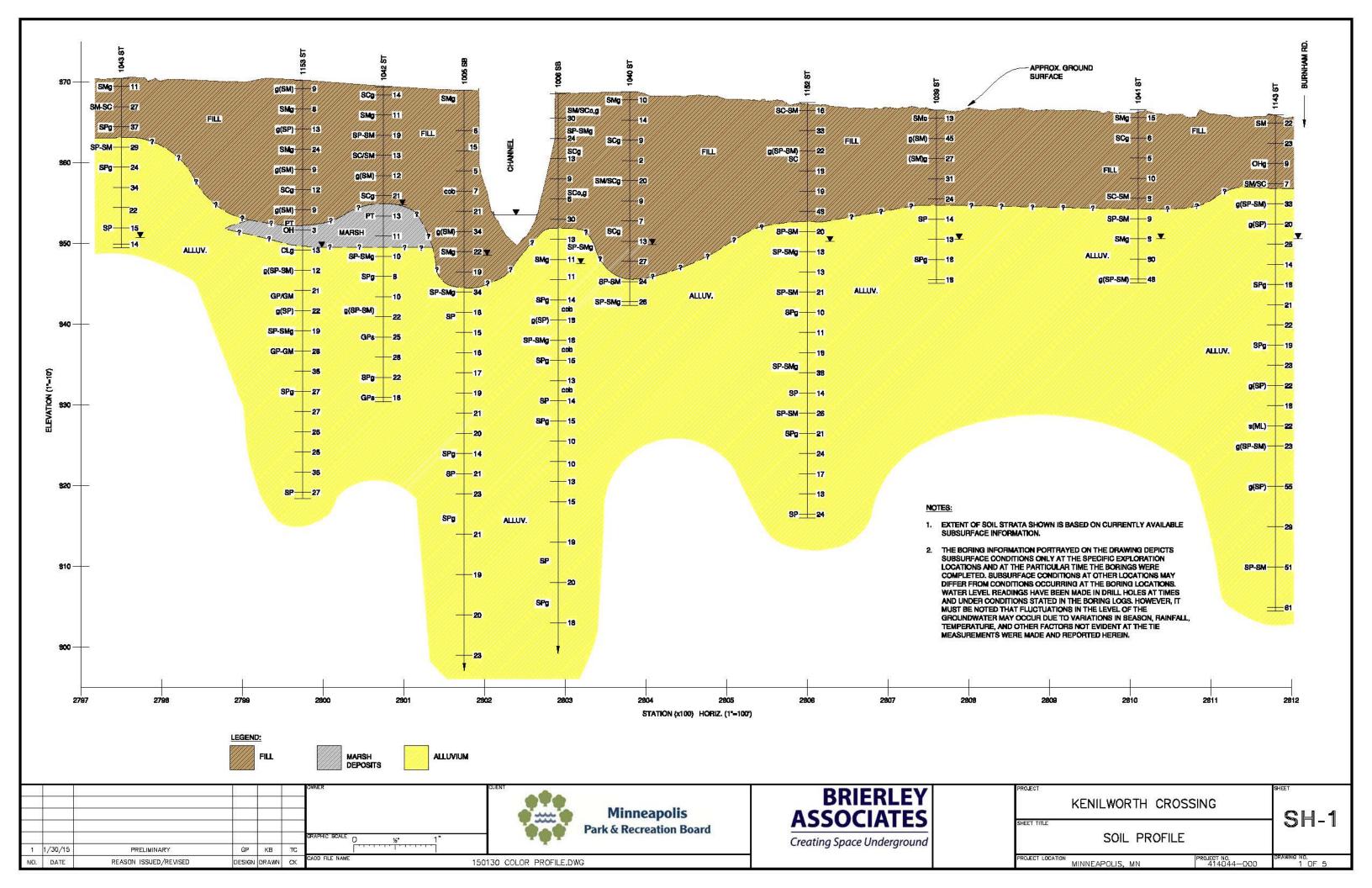
Results of completed records and literature searches indicate that the SPO Bridge Option could be completed without any impact to archaeological resources whereas in the case of Cut and Cover Tunnel Option 1 and Jacked Box Tunnel Option 2 there is equal though rather minimal risk that archeological evidence could be encountered during excavation for the portal segments.

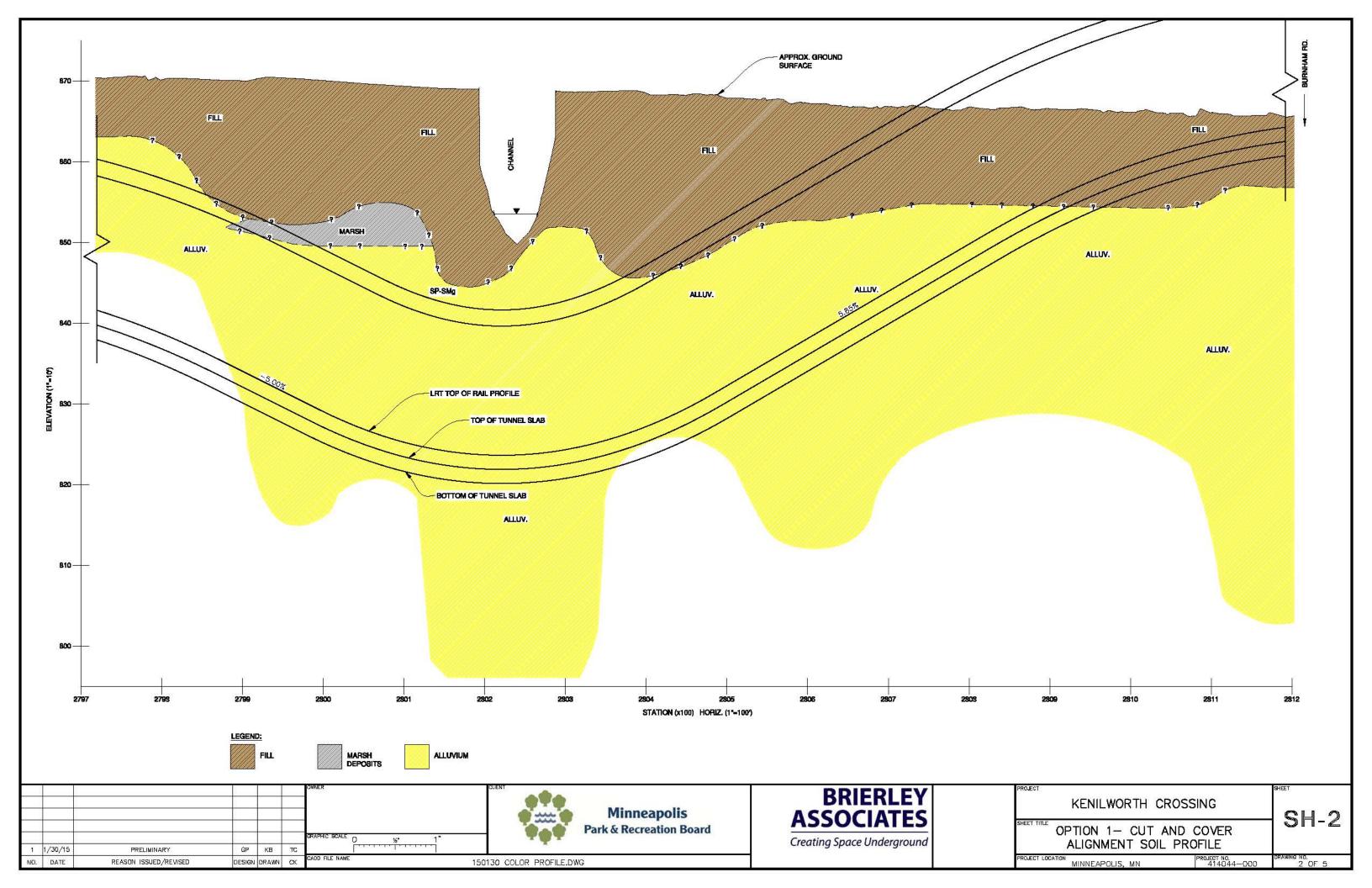
## **Mitigation Strategy**

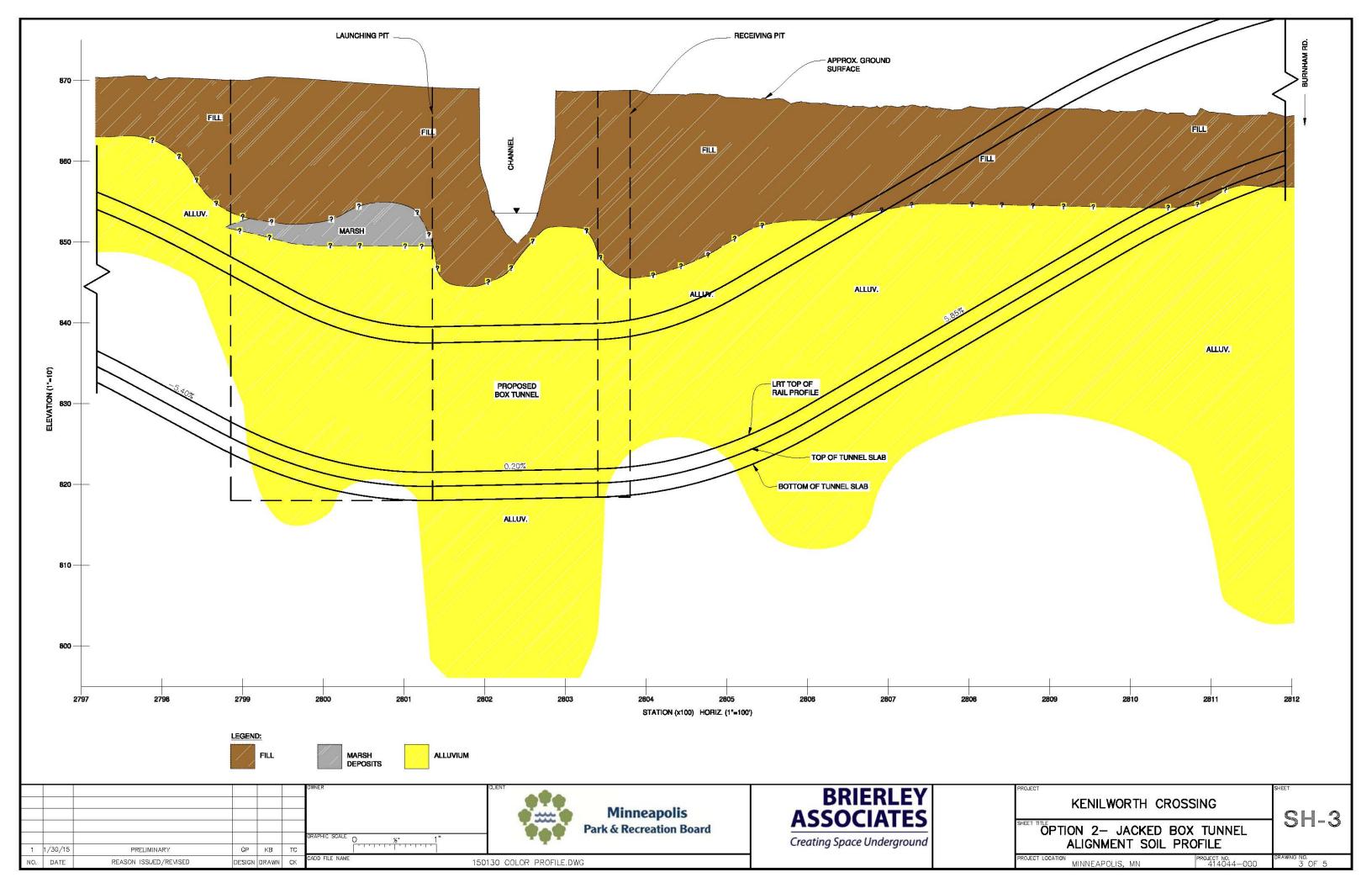
Records search has already indicated that no Native American earthworks or traditional cultural properties have been recorded in the study area. Should any other archaeological evidence be encountered at either of the portal segments, it could most likely be fairly easily mitigated through Phase 3 data recovery.

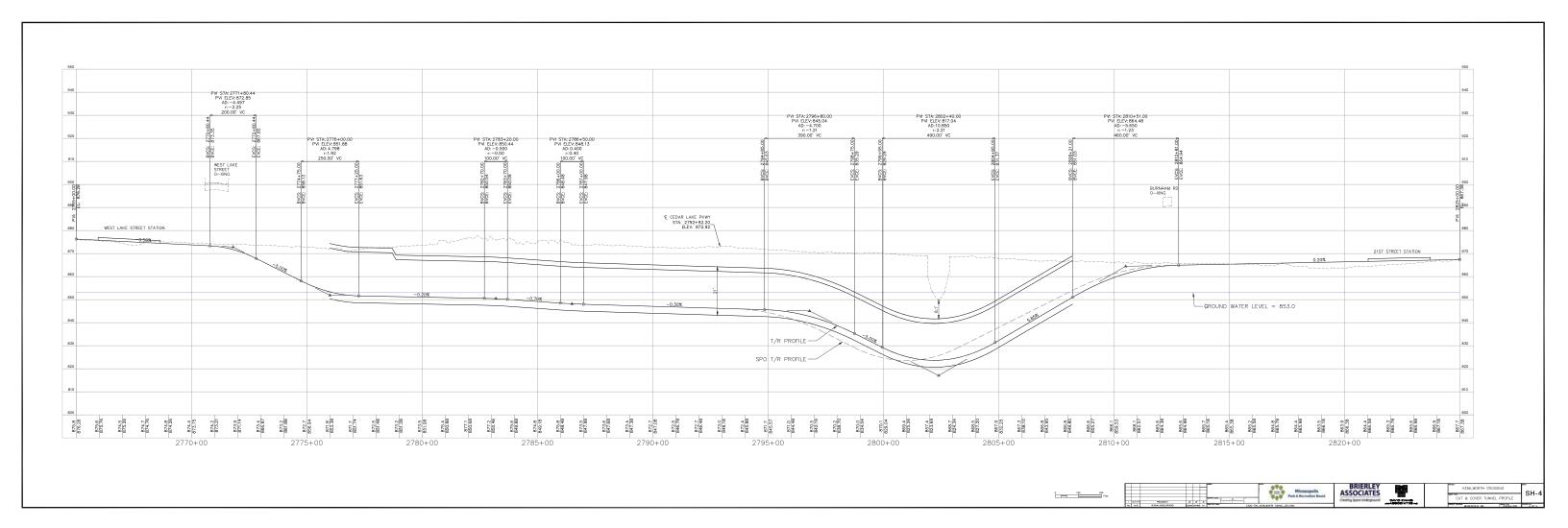
## Attachments

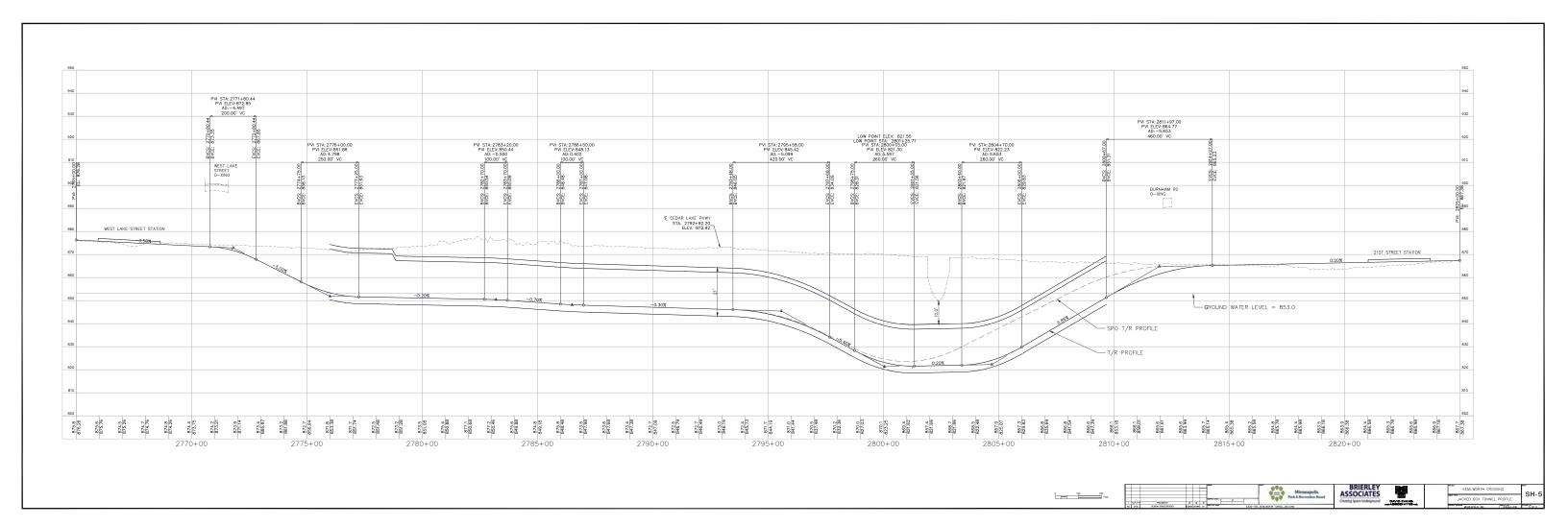
Drawings SH-1, SH-2, SH-3, SH-4, SH-5











#### APPENDIX I-HISTORICAL IMPACTS

#### Memorandum

To:	Jim Herbert, Barr Engineering
From:	Charlene Roise, Hess, Roise and Company, Historical Consultants 100 North First Street, Minneapolis, Minnesota 55401
Subject:	Kenilworth Channel Alternatives Assessment: Historical Impacts

Date: February 23, 2015

This memorandum reviews three alternatives for the Southwest Light Rail Transit (SWLRT) crossing of the Kenilworth Channel in southwest Minneapolis and provides an assessment of the impacts of these alternatives on above-ground properties listed, or eligible for listing, in the National Register of Historic Places. The three alternatives are:

- 1. SWLRT Project Office (SPO) Bridge Option
- 2. Cut and Cover Tunnel (Tunnel Option 1)
- 3. Jacked Box Tunnel (Tunnel Option 2)

Consultants undertook extensive cultural resources investigations during preparation of the Draft Environmental Impact Statement for the SWLRT Project. At the outset, a research design was prepared that established a methodology, including a delineation of the project's Area of Potential Effects (APE).

The investigations produced four survey report volumes. A fifth volume was subsequently prepared to further analyze some properties in the survey areas. The methodology for the survey work and the findings were reviewed by the Federal Transit Administration (FTA) and the Hennepin County Railroad Authority per the FTA's responsibilities for compliance with Section 106 of the National Historic Preservation Act, as amended (36 CFR 800).

In addition, at the behest of the Metropolitan Council, Greg Mathis and Saleh Miller of the 106 Group prepared a detailed analysis titled "Kenilworth Lagoon/Channel Context, History, and Physical Description." Completed in November 2014, the study was specifically intended to "serve as a reference when considering the design of a new crossing structure for the Southwest Light Rail Transit project."<sup>1</sup>

As required under 36 CFR 800, the FTA has been consulting with the Advisory Council on Historic Preservation, the Minnesota State Historic Preservation Office (SHPO), and other interested parties to identify properties that are listed in the National Register of Historic Places or are eligible for that designation; to evaluate the effects of the proposed project on these

<sup>&</sup>lt;sup>1</sup> Greg Mathis and Saleh Miller, "Kenilworth Lagoon/Channel Context, History, and Physical Description," November 2014, 1, prepared by the 106 Group as a subcontractor to CH2M Hill for the Metropolitan Council.

properties; to consider ways to avoid adverse effects; and to develop appropriate mitigation when adverse effects cannot be avoided.

## Identification

For federal undertakings that have the potential to affect historic properties and are hence subject to review under Section 106, the National Register criteria for eligibility determine what is considered "historic." As mentioned above, the APE has been evaluated to identify properties that are listed or eligible for listing in the National Register. The FTA and the SHPO have agreed that the following properties in the vicinity of the Kenilworth Channel qualify for the National Register:

- Historic Districts (all are determined eligible)
  - Grand Rounds Historic District, including contributing elements (Cedar Lake, Cedar Lake Parkway, Kenilworth Lagoon, Dean Parkway, Park Board Bridge No. 4, Lake of the Isles Parkway, Lake of the Isles) and noncontributing elements (Park Board Bridge No. 6, Minneapolis and Saint Louis Railway Bridges over Kenilworth Lagoon/Channel)
  - Lake of the Isles Residential Historic District
  - Kenwood Parkway Residential Historic District
- Individually listed in the National Register:
  - o Frieda and J. Neils House, 2801 Burnham Boulevard
- Determined eligible for individual listing in the National Register:
  - Mahalia and Zachariah Saveland House (also known as the Franklin-Kelly House), 2405 West 22<sup>nd</sup> Street
  - Frank and Julia Shaw House, 2036 Queen Avenue South
  - Park Board Bridge No. 4

Given the extensive work that has been done to identify and evaluate potentially historic properties in the APE, this group is accepted as representing all historic properties in the vicinity of the Kenilworth Channel. No additional survey or assessment has been undertaken for the preparation of this memorandum.

## Methodology

To evaluate the impact of the three alternatives on historic properties, it was first necessary to consider if and how the properties identified above would likely be affected. The impact of the alternatives seemed minimal—and not discernably different between the alternatives—for the Neils House, Saveland/Franklin-Kelly House, and Shaw House, all of which are located at some distance from the proposed light-rail corridor, so these properties were removed from further analysis. While some properties in the Kenwood Parkway Residential Historic District overlook the corridor, they are northeast of the location of the tunnels and bridges and visually blocked by a curve in the corridor's alignment.

The extent of the impacts, and the difference between the alternatives, was considered for the remaining properties.

Information on character-defining features of the affected properties was obtained by reviewing existing studies of the properties and the area, as well as copies of historic sources available from in-house files. Further insights were derived from reconnaissance fieldwork.

Preliminary plans provided information on direct impacts; environmental studies prepared by Barr, particularly those related to noise and visual qualities, were consulted to establish the extent of indirect impacts.

### Assumptions

Assumptions in the preparation of this memorandum include:

- Acceptance of the APE previously established for the SWLRT Project.
- Acceptance of conclusions from previous cultural resources evaluations and reviews by the FTA, SHPO, ACHP, and other interested parties regarding properties qualifying for the National Register.
- An understanding that impacts can be short-term (during the construction phase) and long-term.
- An understanding that impacts can be direct (physically affected by construction of the project) and indirect (e.g., noise, economic).
- The conclusion that the most damaging short-term impacts to above-ground properties that are listed in or eligible for the National Register are direct—namely, physical alterations resulting from construction activities.
- The conclusion that the most damaging long-term impacts to above-ground properties that are listed in or eligible for the National Register are direct and indirect. Direct impacts include new construction that permanently alters a historic element. Indirect impacts include environmental changes, particularly noise and visual.

# Tools

The National Register delineates seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. These factors provide a guideline for assessing an action's impacts, and the intensity of those impacts, on historic properties.

## **Results and Discussion**

Based on an evaluation of potential impacts, it appears that only three properties will be affected by any of the alternatives:

- Grand Rounds Historic District, including these contributing elements: Kenilworth Lagoon and Channel, Dean Parkway, Park Board Bridge No. 4, Lake of the Isles Parkway, Lake of the Isles
- Lake of the Isles Residential Historic District, particularly the Kenilworth Lagoon section
- Park Board Bridge No. 4

The following analysis focuses on the tunnel and bridge structures. The impact of additional elements associated with any of the alternatives, such as retaining walls and tunnel system houses, is not considered because sufficient information on the appearance, location, and extent of these elements is not available.

#### Historical Context

Frustrated by the city council's disinterest in park development in the late nineteenth century, citizens successfully petitioned the state legislature for a referendum to establish an independent board of park commissioners. Soon after the referendum passed in 1883, the board retained prominent landscape designer Horace Cleveland to prepare a park system master plan. A decade earlier, Cleveland had articulated a comprehensive vision for a network of parks for the fledgling Twin Cities. The plan for the Minneapolis system expanded along with the boundaries of the growing city. By the late nineteenth century, the loop of parks and parkways encircling the city had been christened the "Grand Rounds."

It took many decades for the system to be built out. An early priority was the Chain of Lakes. In a series of construction campaigns, the lakes were dredged, the shores planted, and parkways established in the late nineteenth and early twentieth centuries. Some of the lakes were linked with manmade canals, equalizing differences in elevation. Creation of the canals made it necessary to erect bridges for pedestrians, vehicles, and trains. The park commissioners hoped that these bridges would be "of a permanent, modern and durable construction, preferably reinforced concrete with attractive facing. They should be ornamental in design and in keeping and harmony with the landscape."<sup>2</sup> Railroad companies, however, were reluctant to invest in aesthetics, which sometimes delayed commitments for long-term solutions to their crossings.

Such was the case with the Minneapolis and Saint Louis Railroad. Company representatives came before the board of park commissioners on June 25, 1913, to explain that the company was "not ready at this time to erect a permanent bridge carrying its tracks over the canal connecting Cedar Lake and Lake of the Isles." As a result, they "asked that permission be given to erect a temporary bridge at the present time." The board grudgingly agreed. By November of that year, excavation of the canal was completed. At around the same time, the board, perhaps empathizing with the budget concerns of the railroad, voted to build a temporary vehicular bridge over the canal at Burnham Road (Park Board Bridge No. 6). The railroad's bridge managed to survive until the early 1950s, when it was replaced by a pair of utilitarian bridges that would have again disappointed the early twentieth-century commissioners. The "temporary" Bridge No. 6 lasted until 1961 when it was replaced by a bridge with a modern design.<sup>3</sup>

The Grand Rounds served as a catalyst to neighborhood development. This is exemplified by Lake of the Isles. While improvements began with the installation of a parkway and landscaping in 1888, it took many years of dredging to transform the mosquito-infested marsh into an attractive water feature. Between 1905 and 1930, these efforts succeeded in attracting affluent

<sup>&</sup>lt;sup>2</sup> From the 1907 Proceedings of the Minneapolis Board of Park Commissioners, quoted in Mathis and Miller, 13.

<sup>&</sup>lt;sup>3</sup> Proceedings of the Board of Park Commissioners, June 25, November 5, and December 17, 1913.

residents who built elegant homes around the lake, establishing a distinctive architectural framework.<sup>4</sup>

#### Summary of Historic Properties

The **Grand Rounds** has been determined eligible for the National Register as a historic district, and a nomination for the district is currently being drafted. Elements in the vicinity of the Kenilworth Channel that are included in the Chain of Lakes Segment that district include the Kenilworth Lagoon and Channel, Cedar Lake Parkway, Cedar Lake, Dean Parkway, Park Board Bridge No. 4, Lake of the Isles Parkway, Lake of the Isles, and Kenwood Parkway (see Figure 1).

The design intent for the lagoon was Picturesque, with manicured lawns sloping down to the shore. **Park Board Bridge No. 4**, which carries Lake of the Isles Parkway over the Kenilworth Channel, provides an elegant terminus to the east end of the lagoon and a formal transition between the lagoon and the lake.

During the 1930s, federal relief crews installed sheet-piling and riprap to stabilize the shoreline around bridges and along the canal. Another campaign of improvements was launched in the 1970s by the California landscape architectural firm Eckbo, Dean, Austin and Williams, which introduced a modern overlay without compromising the original design of the Grand Rounds.

Overlapping one section of the Grand Rounds is the **Lake of the Isles Residential Historic District**, which includes the houses fronting on the lake. Several attempts to officially designate the district locally or list it in the National Register have not succeeded because of the objections of property owners. As part of a cultural resources survey in 2006, a definitive map the historic district was prepared (see Figure 2). The district's eligibility was confirmed by the FTA and SHPO as part of the evaluation for the SWLRT Project. The district includes the Kenilworth Lagoon and adjacent land that is part of the park system. The lagoon section is bounded on the north by West Twenty-sixth Street and on the south by Dean Parkway and private property. The west end terminates at the bridge across the channel that carries pedestrian and bicycle paths. The overall setting—the lake, gently sloped grassy shores, informal plantings of trees and other vegetation, paths, a meandering drive, and a fine collection of the era's eclectic residential styles—creates a unique cultural landscape.

#### Impacts of Construction

Using the National Register's seven aspects of integrity to consider impacts associated with the Kenilworth crossing, the most pertinent appear to be:

- Design—"The composition of elements that constitute the form, plan, space, structure, and style of a property."
- Setting—"The physical environment of a historic property that illustrates the character of the place."

<sup>&</sup>lt;sup>4</sup> Abigail Christman, Cynthia de Miranda, Denis Gardner, and Charlene Roise, "Lake of the Isles and Kenwood Park: An Assessment of Significance," December 1999, prepared by Hess, Roise and Company for the Minneapolis Park and Recreation Board.

- Materials—"The physical elements combined in a particular pattern or configuration to form the aid during a period in the past."
- Feeling—"The quality that a historic property has in evoking the aesthetic or historic sense of a past period of time."

The location of the resources will not change; workmanship is not as relevant for cultural landscapes; and association is more often tied to a person or event.

Construction of both the cut-and-cover tunnel and jacked-box tunnel could temporarily affect the Grand Rounds and Lake of the Isles Residential Historic Districts. Once in place, though, these alternatives should not impact any aspects of integrity of the historic districts or Park Board Bridge No. 4.

Developing an appropriate design for the proposed bridges over the Kenilworth Channel presents a challenge. When the park commissioner created the channel in the early twentieth century, they hoped that ornamental bridges would span the waterway. That is not, however, what happened. If the original railroad bridge and Bridge No. 6 had survived, they would be considered contributing parts of the Grand Rounds Historic District, despite the fact that their appearance disappointed contemporaries. Because these bridges have been replaced with newer structures, they have been determined to be non-contributing to the district. The design and materials that would be most sympathetic to the historical pattern would be a timber-trestle structure. This, however, would be the most damaging to the setting and feeling of the Grand Rounds and Lake of the Isles Residential Historic Districts and Bridge No. 4.

Noise from train operations on the Kenilworth Channel bridges will negatively affect the setting and feeling of the historic districts, which are within areas of moderate and severe noise impact (see in Addendum C, Figure 1). The visual impact will also be adverse (see Addendum B). There will be another visual impact to the Grand Rounds where the tunnel rises to grade directly north of Cedar Lake Road.

# **Option of Least Impactful Alternative**

The cut-and-cover and jacked-box tunnels are the least impactful alternatives. Both would have short-term adverse impacts during construction, but not subsequent long-term impacts.

# **Mitigation Strategy**

Tunnel construction activities should be planned to minimize construction-period impacts on historic properties.

If the channel is bridged, the design of the structures should be a balance between minimizing the structure's size and minimizing its visibility. Hence, a long span—as opposed to a trestle—will be the least intrusive for those using the channel, helping to counter the expanded covered length of the channel by opening up its width. At the same time, for those viewing the bridge's elevations, the design should blend with its naturalistic setting rather than take inspiration from the ornamental bridges that were historically installed in other locations.

Other appropriate mitigation includes preparing a documentation study for the Minnesota Historic Property Record of existing conditions before construction; interpretation on site and/or via print or digital media; and the preparation of National Register nominations for other eligible properties along the SWLRT corridor.

Mitigation strategies proposed to offset other impacts, such as walls to deflect sound, could create additional adverse impacts on the Grand Rounds and Lake of the Isles Residential Historic Districts. The design and placement of such interventions should avoid these adverse impacts to the greatest extent possible.

# Attachments



Figure 1—Proposed boundaries for Chain of Lakes Segment of the Grand Rounds Historic District

(Prepared by Hess, Roise and Company for the Minnesota State Historic Preservation Office)

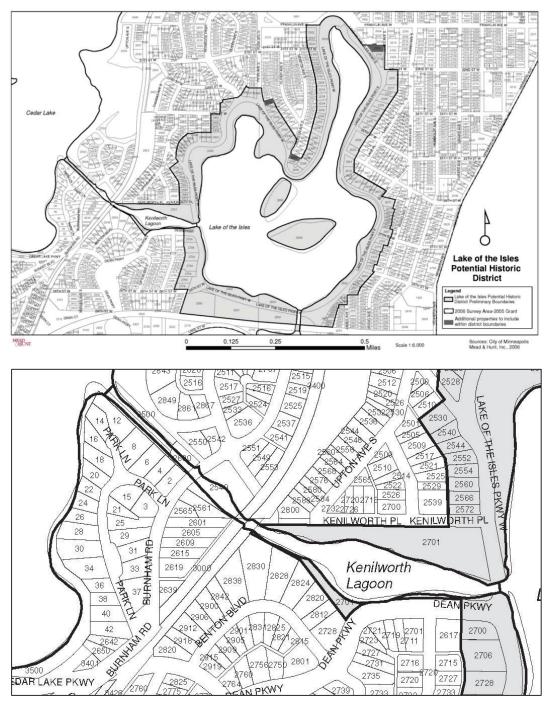


Figure 2—Lake of the Isles Potential Historic District and detail of Kenilworth Channel; the shaded area is included in the district.

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6. Minneapolis Park and Recreation Board Superintendent letter to Mark Fuhrmann, Metro Transit Program Director – New Starts, March 2015 This page intentionally left blank.



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Superintendent Jayne Miller

Secretary to the Board Jennifer B. Ringold



#### March 5, 2015

Mark Fuhrmann Program Director – New Starts Metro Transit Southwest Project Office 6465 Wayzata Boulevard, Suite 500 St. Louis Park, MN 55426

Dear Mr. Fuhrmann;

As you know from our numerous meetings and communications over the past few weeks, the Minneapolis Park and Recreation Board (MPRB) staff is committed to working with the Metropolitan Council and the SWLRT Project Office (SPO) to complete the processes required to obtain and provide the many approvals required for the funding and construction of the Southwest Light Rail Transit (SWLRT) Project. This effort resulted in the approval by our Board last night of the Memorandum of Understanding we have forged together to memorialize the commitment of our two agencies to cooperate and coordinate our efforts to make the SWLRT Project a reality.

Consultation and coordination on Section 4(f) issues relating to the proposed bridges over the channel connecting Lake of the Isles and Cedar Lake ("Kenilworth Channel") and design and environmental processes for the bridges crossing the Kenilworth Channel are the important areas where we will be working together. Attachment C of our MOU specifically addresses how we will approach the design of these bridges. The MPRB staff and Board recognize that the bridges are an integral and necessary design and alignment component of the proposed SWLRT Project. Last night our Board approved our staff and legal counsel recommendation to focus the MPRB's efforts on developing, with the SPO, a design and mitigation approach for the bridges that will mitigate any adverse impacts. Assuming that design and mitigation processes work, the FTA would make a preliminary Section 4(f) de minimis impact determination. The Park Board could then concur with a preliminary Section 4(f) de minimis impact determination by the FTA, should the FTA make such a finding. As part of its action last night approving the MOU, our Board also accepted the recommendation of staff and legal counsel, based on independent engineering studies, that the cost of the tunnel alternatives to the LRT bridge and the Project schedule impacts of modifying the design to replace the LRT bridge with a tunnel alternative would threaten the Project and not be prudent.

MPRB staff and SPO staff have also been reviewing the noise that may be generated by LRT trains on the bridges. Technical experts from both staffs have agreed the grassy area, including the bench, on the north bank of the Kenilworth Lagoon is for passive, more meditative purposes and should be classified as a Category 1 noise receptor. The experts also agree that activities on the Kenilworth Channel, e.g., canoeing, kayaking and Nordic skiing, are active uses of the channel and should be classified as a Category 3 noise receptor.

The Park Board is greatly anticipating the release of the Supplemental Draft Environmental Impact Statement (SDEIS) and the opportunity to review and comment on proposed changes to the SWLRT Project since publication of the Draft EIS (DEIS). The Park Board does not desire the ongoing coordination on Section 4(f) to delay publication of the SDEIS, rather the Park Board desires the SDEIS to update the evaluation included in the DEIS to allow for continued coordination and publication of the SDEIS as soon as possible. Further, the Park Board is committed to coordinating with SPO on the design of the proposed new bridges crossing the Kenilworth Channel, as well as identifying avoidance, minimization and mitigation measures for adverse impacts potentially caused by the Project. We understand that these coordination efforts are integral to the timely completion of both the NEPA and Section 4(f) processes and should continue through the Final EIS and completion of the Section 4(f) process.

MPRB staff and I look forward to working with SPO staff on the design and mitigation for the bridges as part of the ongoing environmental processes, including the National Environmental Policy Act, Minnesota Environmental Policy Act, Section 106 of the National Historic Preservation Act, and Section 4(f) of the Department of Transportation Act. I look forward to working together to successfully develop a design for the bridges that does not adversely affect the activities, features or attributes of the channel and that the Park Board will be able to, after review of more detailed design mitigation and public comment, concur with a *de minimis* impact determination by the FTA.

Sincerely,

Jayne Miller Superintendent

7. Kenilworth Channel/Lagoon Park Property and Kenilworth Lagoon Historic Property Section 4(f) Classification Technical Memorandum, 2015 This page intentionally left blank.

HWES

# MEMORANDUM

DATE: April 10, 2015

TO: Nani Jacobson

FROM: Leon Skiles, Leon Skiles & Associates, Inc.

SUBJECT:Kenilworth Channel/Lagoon Park Property and Kenilworth Lagoon Historic Property Section4(f) Classification

This memorandum provides a brief description of the Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) and the Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) and the rationale for treating them as two distinct properties within the Southwest LRT Project's Draft Section 4(f) Evaluation Update (to be published within the project Supplemental Draft Environmental Impact Statement (EIS).

- The Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) includes the manmade waterway located between Cedar Lake and Lake of the Isles in Minneapolis, Minnesota. Recreational features within the channel/lagoon include the large curved lagoon to the east of the Kenilworth Corridor and the narrow and relatively straight channel to the west of the Kenilworth Corridor. Most of the area around the lagoon has relatively long and gently-sloping grass banks, where the banks of the channel are generally steeper, narrower, and have some remaining wood and stone retaining walls. The channel/lagoon is owned and operated by the Minneapolis Park and Recreation Board (MPRB), which designates it in its planning documents as parkland. As the park is a publicly owned, publicly accessible park of local significance, the Kenilworth Channel/Lagoon is considered by FTA to be a Section 4(f) protected property. The Section 4(f) boundary of the Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) is illustrated on Exhibit 1.
- The Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) is a constructed body of water that connects Cedar Lake and Lake of the Isles in Minneapolis, Minnesota. Through the Southwest LRT Project's Section 106 process, FTA and the MnSHPO, in consultation with the Section 106 consulting parties, have determined that the Kenilworth Lagoon is a contributing element of the Grand Rounds Historic District, which is eligible for listing in the National Register of Historic Places based on Criteria A and C (areas of significance: Community Planning & Development, Entertainment/ Recreation, and Landscape Architecture). Contributing elements of the Kenilworth Lagoon include topographical features, vegetation, and WPA-era retaining walls. As a contributing element to an eligible historic district, the Kenilworth Lagoon is considered by FTA to be a Section 4(f) protected property.<sup>1</sup> The Section 4(f) boundary of the Kenilworth Lagoon (as an element of the Grand Rounds Historic District) is illustrated on Exhibit 2.

Following is a summary of the rationale for treating the Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) and the Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) and as two distinct properties within the Southwest LRT Project's Draft Section 4(f) Evaluation Update:

1. **Different Property Boundaries.** While similar, the boundaries of the Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) and the Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) differ, as illustrated in Exhibits 1 and 2, respectively. The boundary of the Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park), is determined by the property currently owned and administered by the MPRB. While most of the

<sup>&</sup>lt;sup>1</sup> Additional documentation on the Kenilworth Lagoon can be found in the *Kenilworth Lagoon/Channel Context, History, and Physical Description for the Proposed Southwest LRT Project* (Mathis, 2014).

land making up the Kenilworth Channel/Lagoon is owned fee simple by the MPRB, two areas approximately mid-point in the channel/lagoon (within the Kenilworth Corridor and where the corridor crosses the channel/lagoon) are owned fee simple by BNSF and the Hennepin County Regional Railroad Authority (HCRRA). Within those two areas (i.e., the portions of the channel/lagoon owned fee simple by BNSF and HCRRA), the MPRB owns, for park purposes, a permanent easement for a right-of-way for a canal connecting Lake of the Isles and Cedar Lake. The Section 4(f) boundary of the Kenilworth Lagoon (as an element of the Grand Rounds Historic District) is determined by FTA and the MnSHPO within the Section 106 determination of eligibility process, based on the historical boundaries of the lagoon and the Grand Rounds Historic resource's period of historic significance<sup>2</sup>.

- 2. **Different Qualifying Characteristics and Impacts.** The characteristics that qualify the Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) and the Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) as Section 4(f) protected properties differ. The Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) qualifies as a Section 4(f) property based on the recreational activities, features, and attributes of the channel/lagoon (e.g., cross country skiing, paddle boarding, the waterway and banks, etc.). In contrast, the Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) qualifies as a Section 4(f) property based on it being a contributing element of a historic district that meets NRHP Criteria A and C (areas of significance: Community Planning & Development, Entertainment/Recreation, and Landscape Architecture)<sup>3</sup>. Because the two properties qualify for Section 4(f) protection differently, impacts to the activities, features, and attributes of the recreational property can differ from the impacts to the qualifying characteristics of the historic resource. For example, one design could better accommodate existing recreational activities and have a greater adverse effect to the setting of the historic property.
- 3. **Different Officials with Jurisdiction.** The Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) and the Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) each have different officials with jurisdiction. As per 23 CFR 774.17, the official with jurisdiction for the Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) is the MPRB, as the MPRB owns and administers the property; while the official with jurisdiction for the Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) is the MNSHPO, as state SHPOs for historic properties<sup>4</sup> are the officials with jurisdiction for listed and eligible historic properties, independent of ownership.

<sup>&</sup>lt;sup>2</sup> In the project vicinity, the boundaries of the Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) and the Grand Rounds Historic District are identical.

<sup>&</sup>lt;sup>3</sup> The Kenilworth Lagoon (as a contributing element of the Grand Rounds Historic District) is not eligible for NRHP listing as an individual resource.

<sup>&</sup>lt;sup>4</sup> Unless the historic property is located on tribal land and then it would be the THPO.

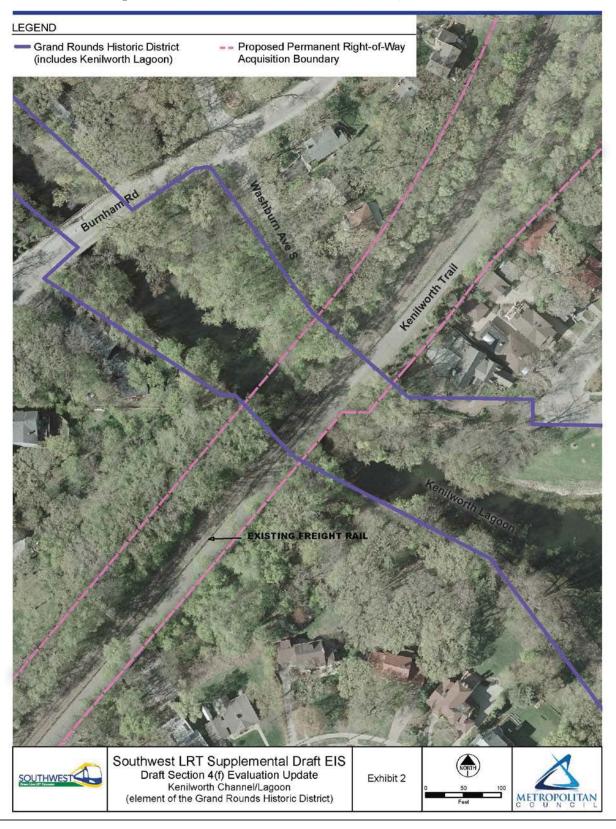
#### EXHIBIT 1

Kenilworth Channel/Lagoon Recreational Resource (Element of the Minneapolis Chain of Lakes Regional Park)



#### EXHIBIT 2

Kenilworth Channel/Lagoon (Element of the Grand Rounds Historic District)



8. City of Eden Prairie Comment Letter on the SDEIS/Draft Section 4(f) Evaluation Update, 2015

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July 21, 2015

\$ 1



Nani Jacobson Assistant Director, Environmental and Agreements Metro Transit – Southwest LRT Project Office 6465 Wayzata Blvd., Suite 500 St. Louis Park, MN 55426

SUBJECT: Southwest LRT SDEIS Comments

Ms. Jacobson:

The City of Eden Prairie has reviewed the Southwest LRT Supplemental Draft Environmental Impact Statement (SDEIS). We appreciate the opportunity to review the SDEIS and respectfully submit the following comments for consideration:

#### **General Comments**

- The City of Eden Prairie continues to support an alignment that matches the alignment evaluated in the SDEIS. This includes an end-of-line Mitchell Station located on City Center property and a Town Center Station that is centrally located midpoint between Flying Cloud Drive and Prairie Center Drive as well as Technology Drive and Singletree Lane. The City Council provided Municipal Consent to this plan on July 14, 2014.
- 2) The design of the Southwest LRT must complement and be coordinated with the services offered by Southwest Transit. Future Southwest Transit operations are critical to the design and operation of the Southwest LRT line. Southwest Transit needs to be an active partner in the development of Southwest Station plans. Impacts to Southwest Transit's operations during construction of LRT should be minimized.
- 3) The Southwest LRT bridge structure adjacent to Purgatory Creek Park and the Veteran's Memorial will be a primary visual component of the park once constructed. The bridge must be designed with appropriate context and to compliment the park setting and experience. Due to its location and its visual impacts enhanced aesthetic treatment for the bridge should be included in the base project costs. In addition the bridge will permanently impact the park's entry area and signage board located near the Prairie Center Drive / Technology Drive intersection. The Southwest LRT design must restore these park amenities to a similar or better condition.

Southwest LRT SDEIS Comments July 21, 2015 Page 2 of 7

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- 4) The Southwest LRT construction will have temporary impacts to the Purgatory Creek Park and trail system which must be eliminated or minimized and appropriately coordinated with the City of Eden Prairie. The Purgatory Creek Park has a number of programs and events throughout the year that can be scheduled up to a year in advance and have the potential to be impacted by the SWLRT construction. It is imperative that avoiding and minimizing the impacts on these activities be accounted for in the construction schedule. In addition, the loop trail around the Purgatory Creek pond and wetland area is a primary and heavily used recreation amenity within Eden Prairie and its functionality must be maintained throughout construction.
- 5) The grade separated LRT crossing of Valley View Road at Flying Cloud Drive should be refined to eliminate curves. A straightened alignment significantly reduces the SWLRT travel time and has the additional benefit of reducing private property impacts, better coordinating with future improvements in the TH 212 / Valley View Road interchange area, and preserving excess right-of-way for future potential development.
- 6) Should the alignment, number of stations, and parking distribution be modified from the SDEIS, additional analysis should be completed to ensure adequate roadway, parking, sidewalk and trail infrastructure exists to serve the changed traffic patterns and parking demand.
- 7) The location, placement, and screening of the Traction Power Sub-Stations (TPSS), signal bungalows, and other LRT accessory cabinets and equipment must be closely coordinated with the City of Eden Prairie. This equipment must be located, screened, and designed as appropriate to avoid impacts to existing and future developments.
- 8) The project must evaluate alternatives and determine solutions for mitigating design and construction impacts of the project on all businesses, residents, and properties along the corridor. These should include ongoing communication methods such as social media, newsletters, and wayfinding signage. The City should be included as a partner in determining the appropriate solution for the identified impacts.

#### **Detail Comments**

- 1) Section 3.2.1.1 (Land Use)
  - a. Planned land uses in the east portion of the segment tend to be office, industrial, and mixed use.
  - b. The location of the proposed Mitchell Station is adjacent to Eden Prairie City Center. The Town Center refers to another area along the alignment farther to the east.
  - c. Eden Prairie has prepared a TOD ordinance that will be proceeding through the

Southwest LRT SDEIS Comments July 21, 2015 Page 3 of 7

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public review process. Adoption of the ordinance is anticipated for August/September 2015.

- 2) 3.2.1.3 (Cultural Resources) Three areas of archeological potential were identified within the revised Eden Prairie Segment. Evaluation of one site (site C) was completed. There are two remaining sites that have not been evaluated according to the SDEIS. The City of Eden Prairie recommends that the two remaining sites (sites A and B) are fully evaluated and if any of those sites are found to meet NRHP criteria, potential effects to those sites and mitigation measures should be considered.
- 3) 3.2.1.5 (Visual Quality and Aesthetics) The analysis completed with the SDEIS indicates a decrease in visual quality and aesthetics in nine out of the ten vantage points. The other vantage point maintains the same visual quality and aesthetics as in the original condition. Considering the significant impacts of the project to the built environment of the Eden Prairie community, particularly Purgatory Creek Park, aesthetic improvements such as lighting, structure design elements, and other visual treatments will be essential to maintain the quality of the character of areas adjoining the LRT line. The Southwest Project Office should closely coordinate the design of all architectural and aesthetic elements with the City of Eden Prairie. In addition, the City of Eden Prairie supports and encourages the Southwest Project Office to actively engage in outreach to residents, property owners and other stakeholders regarding the aesthetic design elements of the project.
- 4) 3.2.1.5 (Visual Quality and Aesthetics) The City does not concur with the conclusion that eight of the ten vantage points evaluated will not have a substantial level of visual and aesthetic impact. As stated above the project is expected to significantly change the built environment within the corridors it is constructed. Aesthetic and visual quality treatments must be primary elements of the SWLRT design in order to best integrate the SWLRT into the existing environment. In particular, the viewpoints adjacent to and within Purgatory Creek Park will have a substantial level of visual and aesthetic impact as SWLRT and the bridge structure along Prairie Center Drive will be a primary visual component of the park once constructed. The bridge must be designed with appropriate context and to compliment the park setting and experience. Due to its location and its visual impacts enhanced aesthetic treatment for the bridge should be included in the base project costs.
- 5) Section 3.2.2.1 Subp. B. (Groundwater) The SDEIS references our 2004 Wellhead Protection Plan (WHPP), the modeling has since been updated and the draft WHPP (Parts 1 & 2) sent to the MDH for approval. The Draft WHPP has been through all the relevant reviews (local government units and public comment hearings) and has been submitted to the MDH for review and approval. Approval from the MDH is expected soon. The FEIS

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should be updated based on the new WHPP as the DWSMA and Wellhead Protection Area have both changed significantly.

- 6) Section 3.2.2.2 Subp. A. (Floodplains) The SDEIS only references FEMA, but both Nine Mile and Riley-Purgatory-Bluff Creek Watershed Districts have done flood profile modeling and they are both close to finishing Atlas 14 models which could impact the amount of potential floodplain fill. The findings should be incorporated into the FEIS.
- 7) Section 3.2.2.2 Subp. B. (Long-Term Direct and Indirect Water Resources Impacts) The SDEIS includes the statement that "No additional public watercourses were identified by analysis of MnDNR GIS data for the Eden Prairie Segment." There are a number of DNR Protected Wetlands on this corridor (including EP-EP-07, EP-EP-15, EP-EP-16 and EP-EP-23 that are listed as being impacted by the project as well as the creeks. These would typically be identified as public waters. The FEIS should include some clarification should be added on what is included in the definition of public watercourses (is it just lakes?). Purgatory and Nine Mile Creeks are listed as public waters later on in some of the discussions under the subtitle of Public Waters, so these should be indicated here to avoid confusion. It would also help if in the Wetlands Section a statement for those that are MnDNR public wetlands or waters was added into the individual paragraphs for each wetland.
- Section 3.2.2.2 Subp. B. (Long-Term Direct and Indirect Water Resources Impacts Wetlands)
  - a. In the third sentence of the introductory paragraph it is stated that "The total wetlands filled in this segment..." This statement seems to indicate that 16 wetlands would be completely filled, whereas some of them will only be partly filled. The FEIS should state how many would be completely filled and how may would be partially filled to provide better clarity.
  - b. In the list they state that EP-EP-15 is part of a larger wetland complex. However, this is actually 2 distinct areas. The northern piece (City ID 15-13-E) is a constructed wetland mitigation site. The larger, southern piece (15-14-A) is a natural wetland complex (and Purgatory Creek). The discussion for this wetland should indicate that the impacts will occur within that part that is a wetland mitigation area as this will have greater protections that must be dealt with than the remaining wetlands will.
- 9) Exhibit 3.2-5 There is a map error; DIG-EP-EP-04 and associated impacts are actually north of Technology Drive.
- 10) Section 3.2.2.2 Subp. B. (Long-Term Direct and Indirect Water Resources Impacts Floodplains) Calculations for floodplain impacts are based on the FEMA maps only.

.....

The FEIS should re-evaluate based on the Watershed District models once they are completed (for the Final EIS).

- 11) Section 3.2.2.2 Subp. B. (Long-Term Direct and Indirect Water Resources Impacts Public Waters and Stormwater Management)
  - a. The first paragraph states that Purgatory Creek, a public waterway, would be spanned by the proposed light rail alignment immediately south of where Technology Drive currently spans the creek. However, the next sentence states that the LPA construction limits would be close to Lake Idlewild. This is an error; the Purgatory Creek crossing is not located by Lake Idlewild, but flows between EP-EP-17 and EP-EP-15.
  - b. The fifth paragraph includes the statement "Eden Prairie and the Riley-Purgatory-Bluff Creek Watershed District have stormwater management regulations and program." This should be corrected in the FEIS to read "Eden Prairie and the Nine Mile Creek and Riley-Purgatory-Bluff Creek Watershed Districts have stormwater management regulations and programs."
- 12) Section 3.2.2.2 Subp. B. (Short-Term Water Resources Impacts Public Waters and Stormwater Management) - The SDEIS states that "An MnDNR-certified erosion and sediment control specialist would be employed..." This should be a University of Minnesota certified and/or MPCA approved erosion and sediment specialist.
- 13) Section 3.2.2.2 Subp. C. (Mitigation Measures) This section indicates that the Section 404 permit application will identify compensatory mitigation and that this plan would be reviewed by the USACE prior to submittal of the Section 404 permit application. However, a compensatory mitigation plan will also need to be submitted to the appropriate Local Government Units for review and approval. The process for this local review and approval of the mitigation measures should be added to this section.
- 14) Section 3.2.2.3 (Noise) The methodology section indicates that grade crossing bells have the highest level of cumulative noise impact and their potential use in areas of residential land uses must be evaluated and reviewed with the City. Any modification to the proposed LRT operational assumptions and how they impact grade crossings must be accounted for in the updated FEIS analysis and if necessary appropriately mitigated.
- 15) Section 3.2.4.1 Subp. B. (Transit Long Term Impacts) The City supports and see benefits in operating Express Bus Service along with LRT from Southwest Station
- 16) Section 3.2.4.2 Subp. B. (Roadway and Traffic) This section identifies several intersections that are expected to operate at unacceptable level-of-services (LOS E or F) in the build condition without mitigation. Acceptable mitigation strategies must be identified and implemented for each intersection identified. Any modification to the

Southwest LRT SDEIS Comments July 21, 2015 Page 6 of 7

proposed LRT operational assumptions and how they impact traffic operations must be accounted for in the updated FEIS analysis.

- 17) Section 3.2.4.2 Subp. B. (Roadway and Traffic Long Term Impacts) Bulleted list of key changes should indicate that Technology Drive will be converted from a four-lane roadway section to a three-lane section.
- 18) Section 3.2.4.2 (Roadways) The City has identified through various planning studies and processes the following locations where future roadways and trail/sidewalk crossings of SWLRT may be desired. The potential for these future crossings should be acknowledged:
  - Additional or relocated access for the UHG / Optum campus on Technology Drive
  - A second north-south roadway to the west of the proposed north-south main street and the Town Center Station
  - An east-west roadway south of West 70th Street and the Golden Triangle Station
  - An east-west roadway north of West 70th Street and the Golden Triangle Station
- 19) Section 3.2.4.2 Subp. B. (Roadway and Traffic Short Term Impacts) First bullet indicates potential roadway closures for construction of the Flying Cloud Drive / Valley View Road LRT bridge may be necessary. No long term closures of these roadways or any other roadway impacted by LRT construction should be considered. It is understood that weekend or evening closures may be necessary for certain construction activities. These closures must be coordinated with the City and all impacted businesses, residents, and properties.
- 20) Section 3.2.4.2 Subp. B. (Roadway and Traffic Short Term Impacts) Temporary construction impacts must be evaluated and to the extent possible minimized and mitigated. This includes providing viable access to all properties at all times.
- 21) Section 3.2.4.2 and 3.2.4.3 (Roadway and Traffic / Parking) The parking demand and roadway impacts for end-of-line parking should be planned for in the design of the build project. This is in reference to the statement in Note 20 on page 3-82 that indicates that the structured park-and-ride lot at Southwest Station would increase by approximately 600 spaces if Mitchell Station were eliminated and Southwest Station was the western terminus of the line.
- 22) Section 3.2.4.3 Subp. B. (Parking) The SDEIS does not identify the parking impacts to the Eden Prairie City Center building (8080 Mitchell Road). There are both short and long term impacts for the property that would need to be mitigated.
- 23) Section 3.2.4.4 Subp. B. (Bicycle and Pedestrian) The loop trail around the Purgatory Creek pond and wetland area is a primary and heavily used recreation amenity within

(**4**)

Eden Prairie and any closure of this trail would have significant impacts. The functionality of this trail must be maintained throughout construction.

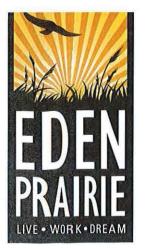
- 24) Section 3.2.4.4 Subp. B. (Bicycle and Pedestrian) The design of Southwest LRT should not preclude or increase the cost of providing a direct trail connection between the Prairie Center Drive / Technology Drive intersection and the Southwest Station platform.
- 25) Section 3.2.4 (Utilities) The City of Eden Prairie has a number of large diameter collector and distribution water lines within the proposed SWLRT project limits. Shut down of these lines would have a significant impact on the City's water operation and cannot be permitted during the peak demand months. Shut downs to other lines may also need to restricted. All watermain shut downs must be coordinated with the City and impacted businesses, residents, and property owners. In addition any impacts to sanitary sewer lines and services must also be coordinated with the City and impacted businesses, residents, and property owners.

26) Exhibit F-32 (LRCIs) – LRCIs 5 and 7 should also be shown along Eden Road.

Sincerely,

Rick Getschow City Manager

CC: Mayor and City Council



CITY OF EDEN PRAIRIE, MINNESOTA 8080 Mitchell Rd | Eden Prairie, MN | 55344-4485 Fugineering

ZIP 55305 🕵

Nani Jacobson Assistant Director, Environmental & Agreements Metro Transit-Suthwest LIRT Project Office 6465 Wayzata Blud, Site 500 St. Louis Park, MN 55426 JUL 2 3 2015

9. Minneapolis Park and Recreation Board Comment Letter on the SDEIS/Draft Section 4(f) Evaluation Update, 2015 This page intentionally left blank.



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Vice President Scott Vreeland

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Superintendent Jayne Miller

Secretary to the Board Jennifer B. Ringold



July 21, 2015

Nani Jacobson Assistant Director, Environmental and Agreements Metro Transit – Southwest LRT Project Office 6465 Wayzata Blvd., Suite 500 St. Louis Park, MN 55426

Dear Ms. Jacobson:

The Minneapolis Park & Recreation Board (MPRB) welcomes this opportunity to comment on the Supplemental Draft Environmental Impact Statement (SDEIS) for the Southwest Light Rail Transit (SWLRT) project. The MPRB's comment letter builds upon statements and outcomes noted in comments on the Draft Environmental Impact Statement (DEIS) while focusing on the changes to the project noted in the SDEIS. To best recognize the MPRB's earlier comments, members of a Community Advisory Committee formed to guide comments on the DEIS were assembled to offer insights related to the SDEIS.

In 1883, the Minneapolis Park & Recreation Board was created by an act of the Minnesota State Legislature and a vote of Minneapolis residents. It serves as an independently elected, semi-autonomous body responsible for governing, maintaining, and developing the Minneapolis park system. The MPRB's mission is as follows:

The MPRB shall permanently preserve, protect, maintain, improve, and enhance its natural resources, park land, and recreational opportunities for current and future generations.

The MPRB exists to provide places and recreation opportunities for all people to gather, celebrate, contemplate, and engage in activities that promote health, well-being, community, and the environment.

The MPRB is one of ten regional park implementing agencies. It works with the Metropolitan Council to acquire and develop regional parks and trails to protect natural resources and provide outdoor recreation for public enjoyment in the Metropolitan Area. In 2011, based on Metropolitan Council annual use estimates, the regional parks and trails that are impacted by the proposed SWLRT alignment received more than 6 million visits.

The MPRB is obligated to ensure that parks and trails and the interests of current and future park and trail users are not substantially impaired by the project. It is within this context that the MPRB makes the comments contained in this letter. As stated in the MPRB's comments on the DEIS, there are several overarching messages the MPRB wishes to express

Letter to Nani Jacobson re: SDEIS Comments from MPRB July 21, 2015 Page 2 of 2

regarding the SWLRT project:

- MPRB remains supportive of light-rail transit.
- Current development and public use of the corridor within Minneapolis has an open and natural character that includes portions of the Minneapolis Chain of Lakes Regional Park, Grand Rounds National Scenic Byway, Kenilworth Regional Trail, Cedar Lake Regional Trail, and Cedar Lake Park. Park design in this area focuses on serenity, habitat restoration, minimal development, and passive recreation. To retain the area's character the water table levels and quality, cultural landscapes, habitat, and open space must be protected and preserved.
- Other parks in or near the corridor include Alcott Triangle, Park Siding Park, and Bryn Mawr Meadows. These parks serve more neighborhood use and maintaining existing park settings, access, and use are clear priorities of the MPRB.
- Visual quality and noise are key areas of concern for the MPRB. The introduction of light rail transit in combination with freight rail poses the potential for significant disturbance to a corridor that, once disturbed, may never regain the "dense regular massing of trees bordering the corridor [that] creates a highly memorable element," as noted in the SDEIS.
- The seamless connections between and among parks and trails is a key attribute of the Kenilworth Corridor, one which the MPRB believes should be present in the corridor to at least to the extent it is today after introduction of the combination of LRT and freight rail.
- The perpetuation of freight rail in the Kenilworth Corridor, which the MPRB believes makes that infrastructure a permanent element, is a substantive change from the DEIS, one that varies dramatically from a long-held understanding of the use of the corridor and one that poses significant safety concerns for trail users and the natural setting and environment of the corridor.

The MPRB believes many of its comments offered as part of its response to the DEIS remain valid and should be perpetuated. To that end, we have attached our comments on the DEIS to this response to the SDEIS.

Thank you for this opportunity to comment on the SDEIS for the SWLRT project. If you have any questions, please do not hesitate to contact Michael Schroeder, Assistant Superintendent for Planning, at <a href="mailto:mschroeder@minneapolisparks.org">mschroeder@minneapolisparks.org</a>.

Sincerely,

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Liz Wielinski President, Minneapolis Park & Recreation Board

Attachments: SDEIS Comments (July 21, 2015) SDEIS Comments (December 5, 2012) **Comments Submitted by the Minneapolis Park & Recreation Board in Response to the Supplemental Draft Environmental Impact Statement for the Southwest Light Rail Transit Project** July 21, 2015

#### CONTINUATION OF FREIGHT RAIL OPERATIONS IN THE KENILWORTH CORRIDOR

#### <u>REVIEW</u>

As described in the SDEIS, changes to the St. Louis Park/Minneapolis Segment of the SWLRT project would continue freight rail operations in the corridor by co-locating those facilities with the proposed LRT infrastructure. This change presents concerns related to the baseline comparison of impacts evaluated in the SDEIS.

In a *relocation* solution, issues related to freight rail operations in the Kenilworth Corridor are eliminated. The impacts of LRT on the setting and experience of the corridor can be based solely on the introduction of LRT. The baseline for noise is greatly reduced with the elimination of freight rail operations in the corridor, the need for expanding the corridor is limited, the existing significant and character-defining visual features are largely retained, and concerns for safety can be limited to the interactions of corridor users with light rail operations only.

With *co-location*, the noise of LRT is additive to freight rail, the corridor must be significantly expanded by impacting features noted in the SDEIS as definitive of the character of the Kenilworth Corridor, safety concerns related to trail access and blockage of trail connections are increased, and concerns related to park and trail user safety relative to the potential for spills and combustion of conveyed freight becomes significant. In addition, significant disturbance and additional construction is required near sensitive environmental and recreational features.

The MPRB is interested in a more direct comparison of impacts related to visual quality, noise, safety, and construction using re-location as a baseline. While we understand the solution proposed in SDEIS is co-location, we believe the impacts and, importantly, the strategies for mitigation, are best documented using parallel comparisons of co-location and relocation.

#### OUTCOMES

A. A comparison of the effects of co-location based on a solution where freight rail is not present in the Kenilworth Corridor.

#### SDEIS SECTION 3.4.1.3 (CULTURAL RESOURCES)

#### <u>REVIEW</u>

The Kenilworth Corridor is a resource enjoyed by tens of thousands of visitors each year. While it serves as a bicycle commuting route between Minneapolis and southwest suburbs, users are attracted to the corridor as a recreation resource based on its location relative to features of the Minneapolis' Grand Rounds and the Minneapolis Chain of Lakes Regional Park and the unique settings of each. Cultural resources are prominent as an attraction and the SDEIS identifies features important to the MPRB and, notes adverse effects of the SWLRT project on those features and resources.

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The MPRB offers the following comments relative to Section 3.3.1.3 (Cultural Resources) provided in the SDEIS:

- 1. Table 3.4-4 (Cultural Resources in St. Louis Park/Minneapolis Segment that would be adversely affected under the LPA), Historic Districts, XX-PRK-001, notes impacts to the Grand Rounds from the introduction of LRT. The MPRB is keenly interested in preserving the qualities and integrity of the Grand Rounds, a resource under its jurisdiction. The MPRB agrees that the project poses the potential for adverse impacts, but also notes those impacts cannot be fully understood from information presented in the SDEIS. The MPRB anticipates the Metropolitan Council will provide information sufficient and comprehensive in nature to understand and evaluate impacts on the Grand Rounds, particularly as it relates the visual quality and encroachments of LRT and LRT-supporting infrastructure, as well as any new freight rail infrastructure, on the setting and viewsheds of the Grand Rounds.
- 2. Table 3.4-4 (Cultural Resources in St. Louis Park/Minneapolis Segment that would be adversely affected under the LPA), Individual Resources, HE-MPC-1822 cites the impacts on the Kenilworth Lagoon. The MPRB agrees that passage under the proposed bridges is a significant issue and that the introduction of additional bridge deck area poses an impact on the experience of users of the Kenilworth Channel (referred to as the Kenilworth Lagoon in the SDEIS). The MPRB, through a Memorandum of Understanding (MOU) created between the MPRB and the Metropolitan Council, have agreed to cooperate on the design of the bridge crossings of the channel. That process has not concluded so comment on the impacts cannot be offered. In the MOU, a process for designing the bridges and concepts for their design were framed. The MPRB anticipates the design will be aligned with the terms of the MOU. Significantly, the MPRB seeks a solution that encourages passage for channel users by reducing or eliminating encroachment of bridge components into the channel as the primary method of respecting the historic qualities of the channel.
- 3. Table 3.4-4 (Cultural Resources in St. Louis Park/Minneapolis Segment that would not be adversely affected under the LPA), Individual Resources, HE-MPC-1833 cites Cedar Lake Parkway as unaffected by the project. It notes effects considered include "LRT tunnel portal outside of the parkway" but views from the parkway to this portal are part of the experience of the parkway. In fact, views demonstrated for the tunnel portal and the necessary fencing (Appendix J, Exhibit J-13) suggest that infrastructure is significant to the viewshed from the parkway. In addition, Section 3.4.1.5 (Visual Quality and Aesthetics) notes the positive effects of the "dense regular massing of trees bordering the corridor creates a highly memorable moment." That visual feature is, in the view of the MPRB, part of the experience of the parkway. As a result, the MPRB disagrees that Cedar Lake Parkway is unaffected by the project and recommends it be included with other adversely impacted resources.

#### **OUTCOMES**

A. Encroachments of LRT and LRT-supporting infrastructure as well as freight rail and its infrastructure are demonstrated for their visual impacts on cultural resources present on MPRB parklands and recreation areas and that methods of reducing those visual impacts on the experience of parks and trails users is minimized.

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# SDEIS SECTION 3.4.1.4 (SOURCE: MNDOT CRU, 2014.IMPACTS ON PARKLANDS, RECREATION AREAS, AND OPEN SPACES)

#### <u>REVIEW</u>

The Kenilworth Corridor and the North Cedar Lake Trail are maintained or owned and maintained by the MPRB as significant regional recreation resources. The introduction of LRT in a co-location scenario is a concern for the MRPB particularly from the perspective of impacts on these resources and safety concerns resulting from co-location. For the MPRB, the Kenilworth Corridor serves 550,000 users annually and the North Cedar Lake Trail serves 414,000 users annually (estimates provided by the Metropolitan Council), making these parklands, recreation areas, and open spaces areas of primary concern for the MPRB. Because this section deals, in part, with access to those facilities, the MPRB believes safety at crossings of LRT and freight rail infrastructure should be addressed.

The MPRB offers the following comments relative to Section 3.4.1.4 (Source: MnDOT CRU, 2014, Impacts on Parklands, Recreation Areas, and Open Spaces) provided in the SDEIS:

- Section 3.4.1.4 (Source: MnDOT CRU 2014.Parklands, Recreation Areas, and Open Spaces) notes "there would be no long-term direct impacts from the LPA on parklands, recreation areas, and open spaces in the segment." Co-location poses the potential for safety impacts, which the MPRB considers to be a long-term and direct impact on resource users. The presence of freight rail and its impacts on safety for users of the Kenilworth Corridor has not been fully addressed in the SDEIS from the perspective of any failure of LRT or freight rail infrastructure and the ability to respond to an emergency condition.
- 2. Table 3.4-6 (Parks, Recreation Areas, and Open Spaces in the St. Louis Park/Minneapolis Segment) notes resources and impacts in this segment of the project. The MPRB agrees this list is complete and accurate based on its understanding of the project as demonstrated through the SDEIS, but notes that safety concerns noted in the introduction to this section are not included in the "Types of Impacts." From the perspective of the MPRB, any crossing of LRT or LRT and freight rail that is not grade-separated poses an impact on users of the parkland, recreation area, or open space resource. In particular, the MPRB is concerned that the combination of LRT and freight rail compromises safety for pedestrian and bicycle crossings when those crossings occur at-grade and recommends the Metropolitan Council address those crossings in greater detail and for any changes where grade crossing can be made equally safe as the grade-separated crossing. While the SDEIS references Appendix G for information related to crossings, the diagrams are too general to understand the specific measures to be implemented to maintain a safe crossing for pedestrians and bicyclists of LRT or LRT and freight rail.
- 3. Under Long-Term Direct and Indirect Parklands, Recreation Areas, and Open Spaces Impacts, it is noted the "The indirect impacts of the LPA would be in the form of visual, noise, and/or access impacts, addressed in greater detail in Sections 3.4.1.5, 3.4.2.3, and 3.4.4.4 of this Supplemental Draft EIS." This section of the SDEIS references the North Cedar Lake Regional Trail and correctly notes it is owned and operated by the MPRB. However, Section 3.4.1.5 (Visual Quality and Aesthetics) does not fairly or fully address the visual impacts of a bridge crossing of LRT and freight rail. The MPRB believes this structure poses the potential for a significant visual impact on the

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setting of Cedar Lake Park due to its length and height. While the MPRB supports inclusion of the bridge to provide safe crossing of LRT and freight rail, its design poses the potential for a significant impact on the parkland resource of Cedar Lake Park and on users of the North Cedar Lake Regional Trail.

#### **OUTCOMES**

- A. The corridor design fully addresses potential safety impacts posed by LRT and freight rail in the corridor, including accommodation of emergency response in the event of a spill, leak, or combustion of any conveyed freight.
- B. Fire, police, and emergency medical personnel and equipment are able to access parklands adjacent to the corridor and provide response times that meet relevant laws and standards.
- C. At-grade trail crossings at LRT and freight rail, especially where the trail must cross both facilities in the same location, are made equally as safe as a grade-separated crossing.
- D. The visual quality of all structures within or visible from parklands are addressed in ways that minimize their intrusion upon the natural settings or activity areas
- E. The North Cedar Lake Trail bridge crossing LRT and rail infrastructure is designed to minimize its visual impact and any adverse impacts to its setting in Cedar Lake Park.

#### SDEIS SECTION 3.4.1.5 (VISUAL QUALITY AND AESTHETICS)

#### REVIEW

The Kenilworth Corridor presents a visual quality that is recognized in the SDEIS as "dominated by the existing trails themselves and adjacent active freight rail track. The trails and freight rail alignment are generally surrounded by overstory and understory deciduous vegetation." The SDEIS further describes the visual quality of the corridor by stating "Dense regular massing of trees bordering the corridor creates a highly memorable element." The MRPB confirms these points as the key visual elements of the corridor, both of which are central to the experience of the corridor. It also notes that the SDEIS, in general, considers visual quality impacts during a limited portion of the year, but because of the year-round use of parks and recreation areas addressed in the SDEIS, impacts on visual quality should consider "leaf-off" conditions.

The MPRB offers the following comments relative to Section 3.4.1.5 (Visual Quality and Aesthetics) provided in the SDEIS:

1. While the process of documenting existing visual character is clear and follows processes to which the MPRB agrees, the nature of views as static are contrary to the experience of corridor users. The nature of an assessed view should be translated to the experience of a traveler in the corridor; that is, instead of a limited number of viewpoints attempting to characterize the visual experience, the constantly changing viewpoints of a bicyclist or a pedestrian should be considered. It is from that perspective that the "dense regular massing of trees bordering the corridor" becomes important.

- 2. Section 3.4.1.5 (Visual Quality and Aesthetics) indicates that Traction Power Substations (TPSS) will be sited in "fully developed areas, including surface parking lots, existing roadway right-of-way, and vacant parcels where feasible." The Kenilworth Corridor, a primary concern of the MPRB, has none of these siting opportunities. Because these features should be considered a visual intrusion similar to the "addition of the station infrastructure and the overhead equipment required by the LRT," Table 3.4-8 (Anticipated Direct Change and Impact in Visual Quality and Aesthetics from St. Louis Park/Minneapolis Segment Viewpoints, Viewpoint 6, Intactness), they should be considered a significant factor for the change in visual quality in the corridor.
- 3. Table 3.4-7 (Existing Visual Quality and Aesthetics by Viewpoint in the St. Louis Park/Minneapolis Segment) reinforces the roles of the dense massing of trees in forming the vividness and unity of the corridor from the perspective of visual quality. It further suggests the viewpoints are generally free of visual encroachments. To these points, the MPRB offers its concurrence.
- 4. Table 3.4-8 (Anticipated Direct Change and Impact in Visual Quality and Aesthetics from St. Louis Park/Minneapolis Segment Viewpoints) indicates the primary thresholds for visual character are decreased or diminished by the removal of trees to accommodate the transit and freight rail improvements and by the introduction of LRT-supporting infrastructure. In essence, the MPRB would interpret this to mean the existing visual character—and therefore, the visual experience—is denigrated by the proposed changes. From that perspective, and regardless of the formula applied to achieve the visual impact ratings, each viewpoint should be considered substantially impacted. In addition, this table seems to underestimate the impacts of LRT-supporting infrastructure. In demonstrations included in Appendix J, every preliminary rendering with LRT running at grade includes LRT-supporting infrastructure that becomes an intrusion upon the visual experience for users of the Kenilworth Corridor.
- 5. Table 3.4-8 (Anticipated Direct Change and Impact in Visual Quality and Aesthetics from St. Louis Park/Minneapolis Segment Viewpoints) for Viewpoint 3 describes the view from Cedar Lake Parkway toward the tunnel and the channel crossing. The description notes the tunnel portal as a part of the view, but the lack of notation regarding the portal suggests that it has no visual impact. In fact, the preliminary rendering shown in Exhibit J-13 would suggest the portal has a substantial visual impact. Replacing the existing split rail fence with a taller and more expansive fence at the portal does not respect the intactness described for this viewpoint in Table 3.407. While the SDEIS notes this as a substantial visual impact, the MPRB remains very concerned that mitigation will not restore the visual experience currently enjoyed by trail users.
- 6. Table 3.4-8 (Anticipated Direct Change and Impact in Visual Quality and Aesthetics from St. Louis Park/Minneapolis Segment Viewpoints) for Viewpoint 5 indicates the "increased clearance and openness under the bridge would create a visual connection between the segments of the lagoon north/south of the new bridges." The MPRB agrees this is a positive change. However, the narrative description for Viewpoint 5 suggests "the bridge, as currently conceived, will have an attractive design that will become a positive focal point in the view." From the perspective of the MPRB, this set of bridges has the potential of substantially improving the visual experience of the lagoon by removing as many piers as possible from the water, thereby reinforcing the lagoon itself as the focal point—not the bridge. As the design of the bridges proceeds, the MPRB encourages enhancement of the openness of the view, removal of bridge encroachments into the lagoon, and minimizing the

visual focus of the new bridges. The narrative description of this viewpoint indicates the impact as "Not Substantial," but this determination is largely dependent on the design of the introduced bridges.

- 7. Table 3.4-8 (Anticipated Direct Change and Impact in Visual Quality and Aesthetics from St. Louis Park/Minneapolis Segment Viewpoints) for Viewpoint 6 indicates the same response for Intactness and Unity. But more important, the description of the change suggests "the addition of the station structures will make a positive contribution to the level of vividness that counterbalances the loss of vividness due to vegetation removal." While a formulaic application of a visual quality assessment might allow for the substitution of one factor of visual quality for another, the MPRB suggests the introduction of a station cannot be considered a reasonable replacement for the loss of trees, especially when the assessment of views for the corridor suggests the dense massing of trees is a central feature of the corridor and that two of the three factors evaluating the view indicate the loss of trees decreases or reduces the factor (and the third factor cannot be determined from the SDEIS because of an apparent typographical error).
- 8. Section C (Mitigation Measures) indicates mitigation measures will "include landscaping, visual treatment and continuity with the elevated light rail structure design, lighting, and signage." A footnote references Section 3.4.1.3, but is suggesting measures of mitigation will be achieved through "sensitive design and the incorporation of protective measures" (Table 3.4 (Cultural Resources in St. Louis Park/Minneapolis Segment that would be adversely effected under the LPA), Individual Resources, HE-MPC-1822). The MPRB suggests that further definition is required to understand how sensitive design and protective measures will replace the "dense regular massing of trees bordering the corridor" that is indicated in the SDEIS as creating a "highly memorable element."
- 9. While this section of the SDEIS addresses key viewpoints of concern to the MPRB, it fails to address other significant points of visual quality related to MPRB resources. In particular, this section does not address the impacts on visual quality of the proposed grade-separated crossing of LRT and freight rail of the North Cedar Lake Regional Trail (an MPRB-owned and operated facility) and Cedar Lake Park. In addition, there is no mention of the landing for a bridge extending from Van White Memorial Boulevard and its impacts on Bryn Mawr Meadows, parkland under the jurisdiction of the MPRB. Finally, Table 3.4-6 (Parks, Recreation Areas, and Open Spaces in the St. Louis Park/Minneapolis Segment) notes visual changes as an impact at Park Siding Park, but no mention of the visual quality impacts are noted in Section 3.4.1.5.

## OUTCOMES

- A. The "dense regular massing of trees bordering the corridor" remains a defining element of the corridor.
- B. Assessments of visual quality address "leaf-off" conditions in recognition of the year-round use of the Kenilworth Corridor and MPRB parks and recreation areas.
- C. LRT-supporting infrastructure, including features not addressed or not fully addressed in the Visual Quality and Aesthetics section such as traction power substations and the LRT tunnel portal, is designed in ways that minimize visual impacts upon trail users.

- D. The experience of Kenilworth Channel users is orchestrated to maintain focus on the channel as the primary feature, with bridges that remain background elements for channel users.
- E. Stations, while significant structures in the setting of the Kenilworth Corridor, are not substitutes for the visual quality of the existing natural setting.
- F. Visual impacts to all parklands are addressed through a process that emphasizes the quality of the visual experience with the natural setting as the dominant feature.

## SDEIS SECTION 3.4.2 (ENVIRONMENTAL EFFECTS)

## <u>REVIEW</u>

The physical location of the Kenilworth Corridor is important to the MPRB not only as a recreation resource, but because of its geographic context among several lakes of the Chain of Lakes Regional Park. Instances of environmental degradation related to the introduction of LRT are of primary concern because of the proximity of the natural features along the corridor. Still, the corridor is an important recreation feature, offering a route for pedestrians and bicyclists totaling more than 550,000 visits per year. The introduction of LRT alongside freight rail poses changes related to safety and connectivity that are a paramount concern for the MPRB.

The MPRB offers the following comments relative to Section 3.4.2 (Environmental Effects) provided in the SDEIS:

1. Section 3.4.2.1 (Geology and Groundwater) notes "there is the potential for long-term pumping of surface water from the tunnel portals (predominantly stormwater) that collects inside and at the lowest point of the tunnel portals and is routed to underground infiltration chambers." This section notes further "As described in the Draft EIS, in areas of high groundwater elevations and granular soils, there is an increased potential for groundwater contamination as a result of previous hazardous and contaminated materials spills." In a description of the effects of the tunnel on lake levels, the SDEIS indicates "Groundwater and lake levels in the area surrounding Cedar Lake, Lake of the Isles, and Lake Calhoun are very similar, with little change in elevation across the system" and "there is little or no groundwater gradient among the lakes; groundwater does not 'flow' from one water body to another." During the MPRB's study of alternative crossing of the Kenilworth Channel, consultant reports suggest there is a directional movement of groundwater in this area, with a general direction along the alignment of the LRT corridor. The MPRB notes these statements as inconclusive relative to the potential for contamination and adverse impacts on the lakes. That construction activities could increase the potential for groundwater contamination, that groundwater (now potentially contaminated) would be collected upon entering portion of the tunnel and then infiltrated using underground chambers, and that there is evidence the groundwater system in this area is connected (regardless of flow), suggests a risk for groundwater contamination from the presence of the tunnel that needs to be addressed.

The SDEIS focuses on the potential impacts of groundwater contamination resulting from LRT operations and suggests "The potential to contaminate groundwater from operation of the light rail system would be low, because the trains would be electric and, generally, no activities that generate

pollutants would occur in this area." Notwithstanding the MPRB's comments above related to groundwater, the SDEIS does not address the potential for contamination of groundwater from the operations of freight rail in the Kenilworth Corridor. Because co-location is the basis of the SDEIS and because the LPA makes freight rail a permanent component of the corridor, the potential for groundwater contamination from freight rail operations should be addressed.

- 2. Section 3.4.2.1 (Geology and Groundwater), part C (Mitigation) addresses a groundwater management plan to be prepared as part of the project and that it would address "collection, storage, and disposal of surface water runoff from the light rail track systems, stations, and other infrastructure developed as part of the project." Because the LPA is based on co-location with freight rail becoming a permanent component of the corridor, freight rail is part of the "other infrastructure developed as part of the project" and should be addressed in the groundwater management plan.
- 3. Section 3.4.2.2 (Water Resources: Wetlands, Floodplains, Public Waters, and Stormwater Management, Part B. Potential Water Resource Impact, Public Waters and Stormwater Management) indicates that "runoff from newly poured concrete surfaces can have high alkalinity, often above pH 9, which can result in degraded water quality and can affect fish." This section further states "The concrete used for this project would take several months to cure enough so that the pH of exposed surfaces decreased to acceptable levels. Stormwater runoff would be tested, and if excessive levels of pH or turbidity are found, the runoff would be treated before it is released to storm sewers or a receiving water body." From the perspective of the MPRB, "acceptable levels" would be at least the same as those levels found prior to the construction of the improvements. In addition, when the receiving water bodies include those under the jurisdiction of the MPRB or are related to its park resources, the MPRB would urge the Metropolitan Council to treat any runoff from those surfaces that might degrade water quality or affect fish, and to not rely upon finding excessive levels of pH or turbidity (at which point, the MPRB assumes, some stormwater runoff would have already entered receiving water bodies).

In addition, the SDEIS fails to address the potential impacts to water resources from a spill or leak of conveyed freight in the Kenilworth Corridor. Because the LPA makes freight rail a permanent component of the corridor, the potential impacts should be recognized and addressed as a part of the SDEIS.

- 4. Section 3.4.2.3 (Noise), A. Existing Conditions indicates that east of West Lake Station and the Kenilworth Lagoon "Currently, the dominant noise source in the segment is existing freight rail traffic." The nature of the park setting suggests that this noise level not be exceeded by the combination of LRT and freight rail in the corridor. In fact, and as noted at the beginning of these comments, the MPRB believes a more fair demonstration of impacts would be achieved by indicating a comparison to a re-location solution where the impacts of noise from freight rail would be eliminated from the corridor.
- 5. Section 3.4.2.3 (Noise), B. Potential Noise Impacts, Long-Term Direct and Indirect Noise Impacts indicates that "The presence of the proposed tunnel in the Kenilworth Corridor eliminates almost all noise impacts relative to an at-grade LRT system within the same segment of the corridor," yet it fails to identify what noise impacts remain. The MPRB desires clarity on those impacts that remain after "almost all" have been eliminated so that it can better understand the mitigation that might be

proposed. Table 3.4-12 (Summary of Noise Impacts for Category 1 and Category 3 Land Use – St. Louis Park/Minneapolis Segment) summarizes impacts of noise on the Kenilworth Channel and Kenilworth Lagoon Bank. A MOU between the MPRB and the Metropolitan Council addresses concerns related to noise at the Kenilworth Channel crossing and suggests that a design for the bridges would "incorporate strategies or features in the design of a bridge that respond to findings of MPRB's study of channel crossing concepts." The MOU indicates "The MPRB undertook a study of the channel crossing and determined visual quality and noise as the MPRB's highest priorities for consideration in the design of the bridge." Notwithstanding the statements of this section, the MPRB expects the Metropolitan Council will maintain adherence to the MOU and determine methods of reducing noise impacts in the area of the Kenilworth Channel and Kenilworth Lagoon Bank regardless of the type and number of impacts indicated in the SDEIS because, as is noted in this section of the SDEIS, "quietude is essential feature of the park."

- 6. Section 3.4.2.4 (Vibration), C. Mitigation Measures indicates mitigation for vibration impacts will be incorporated in a vibration mitigation plan. For the MPRB, vibration impacts at the Kenilworth Channel bridges remain a concern. Preliminary design directions for the bridges suggest the potential for a trail bridge separated from an LRT bridge. The MPRB believes this is significant in reducing vibration impacts for trail users, even as we understand that vibration for outdoor receptors are not a consideration.
- 7. Section 3.4.2.5 (Hazardous and Contaminated Materials) indicates the design of the tunnel would include measures that would, "In the unlikely event of a spill of hazardous or contaminated materials in the tunnel... prevent infiltration of groundwater through the tunnel bottom and allow contaminated materials to be collected... and not released into the groundwater." While these measures for unlikely events are appreciated, the MPRB remains concerned about the potential for construction activities to change conditions and allow contaminated materials to move toward lakes or other water bodies.
- 8. Section 3.4.4.5 (Bicycle and Pedestrian) describes the impacts of the LPA on bicycle and pedestrian facilities, many of which are under the jurisdiction of the MPRB in this segment of the corridor. The MPRB desires further information on the safe crossing of LRT and freight proposed in the area of the 21<sup>st</sup> Street Station due to its proximity to East Cedar Beach. The combination of rail crossings at this location poses concerns for pedestrian and bicycle access, in particular resulting from those users becoming suddenly and temporarily "trapped" between rail crossings. Recent discussions of the Metropolitan Council related to cost reductions suggest elimination of the North Cedar Lake Trail Bridge which would present the same concerns for the MPRB. Crossings for pedestrians in the area of the West Lake Street Station are also concerns for the MPRB, in part because of the attraction of Lake Calhoun and desires for movement to the Minneapolis Chain of Lakes Regional Park. This section notes Appendix G offers a conceptual design of improvements but the diagrams are too general to understand the ways in which pedestrian and bicycle safety will be provided.
- 9. Section 3.4.4.5 (Bicycle and Pedestrian) describes impacts related to LRT for pedestrians and bicyclists, but the significant change presented in the SDEIS is the presence of freight rail in the Kenilworth Corridor. The MPRB believes freight rail can be a safety concern for trail users and it should be addressed in a Final Environmental Impact Statement. Further, other portions of the SDEIS describe the potential for blockage of local roadways by freight trains, but the SDEIS does not describe the potential for blockage of trail intersections. In particular, if the proposed North Cedar

Lake Trail bridge is eliminated as a cost saving measure, an FEIS must address the blockage of the intersection of the North Cedar Lake Trail and address any safety concerns for trail users resulting from such a blockage. In addition, the MPRB is concerned about potential blockage by freight rail at West 21<sup>st</sup> Street, not only from the perspective of access to East Cedar Beach by park users but recognizing the need to maintain access to the beach for emergency vehicles.

10. Section 3.4 does not address the impacts on wildlife and wildlife migration in the Kenilworth Corridor or Cedar Lake Park. These are significantly large natural and habitat areas and the impacts of LRT and freight rail infrastructure, particularly fencing and walls, should be addressed by the project.

## **OUTCOMES**

- A. Any permanent dewatering methodologies applied to the corridor protect water table levels and quality, and habitat within the parklands that is dependent on those water levels.
- B. The groundwater management plan addresses impacts of all rail infrastructure, not just new LRT infrastructure.
- C. When dealing with construction impacts to water bodies within or near parklands, best practices are implemented as a baseline for project activities, not as a response to discovered excessive pH or turbidity levels.
- D. Noise and vibration impacts are minimized for park and trail users and maintained at levels not greater than the extant condition.
- E. Because co-location makes freight rail a permanent condition in the corridor, comparisons are made to conditions that do not use freight rail as a baseline to ensure proper mitigation is included as part of the project.
- F. Bridge crossings of the Kenilworth Channel are achieved with a separated trail structure to ensure vibrations from rail are not translated through the structures to pedestrians or bicyclists.
- G. Technologies are incorporated that reduce track noise and vibration.
- H. Potential contamination, spills, and leaks from freight rail operations will not impact the natural features or environmentally sensitive elements of the corridor, and the potential for combustion of conveyed freight is addressed with considerations of impacts on park and trail users and emergency response requirements.
- I. Fire, police, and emergency medical personnel and equipment are able to access parklands adjacent to the corridor and provide response times that meet relevant laws and standards.
- J. The potential for construction activities to change conditions and allow contaminated materials to move toward lakes or other water bodies is addressed as a core component of the implementation plan.

- K. Bicycle and pedestrian intersections with LRT and freight rail infrastructure if required to be at-grade are developed in ways that are equal in safety to grade separated crossings.
- L. Trail crossings of rail infrastructure does not create blockage for trail users except when trains are passing (in motion through) the crossing.
- M. The trail design meets the needs of current and projected users.
- N. All trail connections are maintained or improved.

## SDEIS SECTION 3.5 (DRAFT SECTION 4(F) IMPACTS)

## <u>REVIEW</u>

The MPRB provided information to the Metropolitan Council related to its park properties along and near the SWLRT corridor. The MPRB agrees that the list of properties included in the SDEIS is complete and correct.

The MPRB offers the following comments relative to Section 3.5 (Draft Section 4(f) Impacts) provided in the SDEIS:

- 1. Table 3.5-2 (Summary of FTA's Preliminary Section 4(f) Property Use Determinations) lists and describes the impacts of SWLRT on MPRB park properties. The MPRB agrees with the determinations provided the comments of this section are recognized and addressed by the project.
- 2. Section 3.5.1.4 (Section 4(f) Use Definitions and Requirements), A. Individual Section 4(f) Evaluation indicates "*de minimus* use is described below in Section 3.5.1.6." The SDEIS published by the Metropolitan Council does not include this section.
- 3. Section 3.5.4.1 (Publicly Owned Parks and Recreation Areas), I. Park Siding Park Preliminary No Section 4(f) Use Determination, Preliminary Determination of Temporary Section 4(f) Use indicates that 0.016 acre of the park would be used to construct and remove a temporary trail detour as a result of the SWLRT project. It has been discussed that changes made necessary by the SWLRT tunnel will result in the need to reconstruct a portion of sanitary sewer in the area of Cedar Lake Parkway, a part of which will impact Park Siding Park. The FEIS should identify this need, if in fact the park is required for this construction activity.
- 4. Section 3.5.4.1 (Publicly Owned Parks and Recreation Areas), J. Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) Preliminary *De Minimis* Determination, Preliminary Determination of Permanent Section 4(f) Use: Section 4(f) *de minimis* Use indicates the channel "would not be adversely impacted under the LPA and the horizontal clearances between the banks and the new piers [of bridges supporting the trail, LRT, and freight rail] would be of sufficient width to accommodate recreational activities that occur within the channel/lagoon." The MPRB has been active in the design of bridges and understands it is possible to span the channel for the purposes of the trail crossing with no piers extending into the water and that it may be possible to span the channel for the purposes of the LRT crossing with no piers extending into the water. The MPRB considers this possibility to be a positive feature of a proposed bridge as it maximizes the

open water available in the channel for recreation use. However, the bridge decks are more expansive than in the extant trail/freight rail bridge causing concerns for the amount of snow that might be collected on the channel under the bridge. Winter activities, including cross-country skiing are important features of this part of the park and must be considered as a part of the crossing.

- 5. Section 3.5.4.1 (Publicly Owned Parks and Recreation Areas), J. Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) Preliminary *De Minimis* Determination, Preliminary Determination of Permanent Section 4(f) Use: Section 4(f) Use indicates the new bridge crossings of the Kenilworth Channel "would have an attractive design that would become a positive focal point in the view." In the visual quality assessment, this view change is indicated to be Not Substantial, but in fact views of the bridges should be of secondary importance when compared to the channel—the historic resource.
- 6. Section 3.5.4.1 (Publicly Owned Parks and Recreation Areas), J. Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) Preliminary *De Minimis* Determination, Preliminary Determination of Permanent Section 4(f) Use: Section 4(f) *de minimis* Use indicates the areas of the Kenilworth Channel would be moderately impacted by noise. The MPRB, through an MOU with the Metropolitan Council, has identified noise generated by LRT to be a primary concern and one that will be addressed as a part of the bridge design process.
- 7. Section 3.5.4.1 (Publicly Owned Parks and Recreation Areas), K. Cedar Lake Park Preliminary *De Minimis* Determination, Preliminary Determination of Permanent Section 4(f) Use: Section 4(f) *de minimis* Use, Cedar Lake Junction indicates the realignment of an existing trail to create a grade-separated crossing of LRT and freight rail. Because of the intensity of trail use, managing crossings for pedestrian and bicyclist safety remains a primary concern for the MPRB. In addition, the MPRB recognizes this crossing, due to its height and length, would permanently alter the setting in the north portion of Cedar Lake Park. The design of the bridge should, in the opinion of the MPRB, find ways to minimize its visual impact on trail and park users. In the SDEIS, this bridge was not addressed in the section related to Visual Quality and Aesthetics.
- 8. Section 3.5.4.1 (Publicly Owned Parks and Recreation Areas), L. Bryn Mawr Meadows Park Preliminary *De Minimis* Determination, Preliminary Determination of Permanent Section 4(f) Use indicates a bridge and a new elevated section of the Luce Line Trail would be constructed in a portion of the park and trails connecting to this bridge would be reconstructed in a portion of the park. While the MPRB is supportive of the demonstrated alignment, the presence of the bridge in the park setting is significant. In the SDEIS, this bridge was not addressed in the section related to Visual Quality and Aesthetics.

## **OUTCOMES**

- A. Minneapolis Chain of Lakes Regional Park and adjoining parkland remains a quiet, tranquil, and natural park destination.
- B. The area between Lake Street and I-394 is naturally beautiful and serene.
- C. Bike and pedestrian trails remain with the same or better design quality and width as current trails; these include those that run along and across the corridor, as well as access trails.

- D. The trail design meets the needs of current and projected users.
- E. All trail connections are maintained or improved.
- F. At all points along the corridor, and especially at the narrowest locations, sufficient space remains for trails, trail users, and year-round maintenance vehicles and crews.
- G. Trail crossings of LRT and freight rail are safe and logical, and do not present unnecessary delays for trail or park users.
- H. The combination of LRT and freight rail does not impact the safety of park, trail or beach users.
- I. Fire, police, and emergency medical personnel and equipment are able to access parklands adjacent to the corridor and provide response times that meet relevant laws and standards.
- J. Structures introduced to parklands to support LRT or accommodate its presence or to support freight rail are designed to allow the park setting to remain the prominent feature of the park or recreation use.
- K. Recreation activities currently available in the Kenilworth Corridor and MPRB parks are equal to or better upon completion of the SWLRT project as those that exist.
- L. Park or recreation features are restored upon completion of temporary construction activities to match as closely as possible the extant conditions.

# Minneapolis Park and Recreation Board Southwest Transitway DEIS Comment Letter









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## **Transmittal Letter**



Minneapolis Park & Recreation Board

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December 5, 2012

Hennepin County Housing, Community Works & Transit ATTN: Southwest Transitway 701 Fourth Avenue South, Suite 400 Minneapolis, MN 55415

#### Re: Minneapolis Park and Recreation Board Comments on the Southwest Transitway Draft Environmental Impact Statement

Dear Project Manager:

The Minneapolis Park and Recreation Board (MPRB) welcomes this opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Southwest Transitway (LRT) project. In collaboration with its appointed Community Advisory Committee, the MPRB prepared the following comment letter for Segment A of the Locally Preferred Alignment (LPA) for the project. It contains the MPRB's desired outcomes for the project relative to historical, cultural, visual, recreational, social, environmental, and safety impacts on the park and recreation resources it owns, manages, or maintains.

In 1883, the Minneapolis Park and Recreation Board was created by an act of the Minnesota State Legislature and a vote of Minneapolis residents. It serves as an independently elected, semi-autonomous body responsible for governing, maintaining, and developing the Minneapolis park system. The MPRB's mission is as follows:

The MPRB shall permanently preserve, protect, maintain, improve, and enhance its natural resources, park land, and recreational opportunities for current and future generations.

The MPRB exists to provide places and recreation opportunities for all people to gather, celebrate, contemplate, and engage in activities that promote health, well-being, community, and the environment.

The MPRB is also one of 10 regional park implementing agencies. It works with the Metropolitan Council to acquire and develop regional parks and trails to protect natural resources and provide outdoor recreation for public enjoyment in the Metropolitan Area. In 2011, based on Metropolitan Council annual use estimates, the regional parks and trails that are impacted by this alignment received over 6 million visits.

The MPRB is obligated to ensure that parks and trails and the interests of current and future park and trail users are not substantially impaired by the project. It is within this context that the MPRB makes the comments contained in this letter. There are several overarching messages the MPRB wishes to express regarding the Southwest Transitway:

- MPRB, in general, is supportive of light-rail transit.
- Current development and public use of the corridor within Minneapolis has an open and natural character that includes portions of the Minneapolis Chain of Lakes Regional Park, Grand Rounds National Scenic Byway, Kenilworth Regional Trail, and Cedar Lake Regional Trail. Park design in this area focuses on serenity, habitat restoration, minimal development, and passive recreation. To retain the area's character the water table levels and quality, cultural landscapes, habitat, and open space must be protected and preserved.
- Several topics of keen interest to the MPRB, including noise, vibration, and visual impacts, are noted in the DEIS as requiring further analysis during preliminary engineering. To monitor and protect the parks, trails, and recreation areas of this project that are within its jurisdiction, the MPRB expects to have a central role in the design of Segment A.
- MPRB does not support the co-location alternative.

Thank you for this opportunity to comment on the DEIS for the LRT. If you have any questions, please do not hesitate to contact Jennifer Ringold, Manager of Public Engagement and Citywide Planning, at 612-230-6464 or jringold@minneapolisparks.org.

Sincerely,

John Erwin

President, Minneapolis Park and Recreation Board

# Introduction

The Minneapolis Park and Recreation Board (MPRB), a semi-autonomous government agency, was established in 1883 by the Minnesota State Legislature. It owns, operates, or maintains park land within the cities of Minneapolis, Golden Valley, Richfield, Robbinsdale, Saint Louis Park, and Saint Anthony. The MPRB is also one of 10 regional park implementing agencies that works with the Metropolitan Council to acquire and develop parks and trails to protect natural resources and provide outdoor recreation for public enjoyment in the Metropolitan Area.

In 2013, the MPRB will celebrate 130 years of providing outstanding park and recreation services to residents and visitors of Minneapolis. In citywide surveys, residents often remark that the Minneapolis park system is essential to their quality of life and to the identity of the city. Founders of the system, such as H. W. S. Cleveland and Theodore Wirth, understood the role parks play in a healthy, livable, and balanced city. They made preserving land for future generations a priority. Their success shaped the character of Minneapolis and continues to improve people's lives.

Segment A of the Locally Preferred Alterative (LPA) of the Southwest Transitway (LRT) and its station areas include, cross, and are adjacent to neighborhood and regional parks and regional trails that are owned or maintained by the MPRB. These include the following (see <u>map</u> below):

- Minneapolis Chain of Lakes Regional Park
  - o Cedar Lake Park
  - o Cedar Lake
  - Kenilworth Channel
  - $\circ$   $\$  Lake of the Isles
  - Lake Calhoun
  - o Cedar Lake Parkway and Trails (bicycle and pedestrian)
  - Dean Parkway and Trails
- Grand Rounds National Scenic Byway
- Kenilworth Regional Trail (bicycle and pedestrian)
- Cedar Lake Regional Trail (bicycle and pedestrian)
- Park Siding Park

With its extensive land holdings and maintenance responsibilities, the MPRB is obligated to identify the historical, cultural, visual, recreational, social, environmental, and safety issues and impacts related to Segment A of the LPA and ensure that these parks, trails, and the current and future interests of park and trail users are protected.

On 1 September 2010, the MPRB approved the following charge for the appointed Community Advisory Committee (CAC):

Prepare recommendations to the Board on the contents of a formal Comment Letter in response to the Draft Environmental Impact Statement for the proposed Southwest Light Rail Transit Alternative 3A. The recommendations of the CAC shall focus on desired outcomes relative to historical, cultural, visual, recreational, social, environmental, and safety issues as they relate to lands owned or managed by the Minneapolis Park and Recreation Board. Appointers and CAC members are below:

Appointing Person or Group	Appointee
Board President John Erwin	Scott Neiman, Chair
MPRB Commissioner Anita Tabb, District 4	Eric Sjoding
MPRB Commissioner Brad Bourn, District 6	Kendal Killian
MPRB Commissioner Annie Young, At-large	Caitlin Compton
MPRB Commissioner Bob Fine, At-large	Matt Perry
Bryn Mawr Neighborhood Association	Barry Schade
Cedar-Isles-Dean Neighborhood Association	John Erickson
Cedar Lake Park Association	Brian Willette
Kenwood Isles Area Association	Jeanette Colby
Lowry Hill Neighborhood Association	George Puzak
West Calhoun Neighborhood Council	Meg Forney
Harrison Neighborhood Association	Maren McDonell
Hennepin County Commissioner Dorfman	Tim Springer
Council Member Goodman – Ward 7	Neil Trembley
Council Member Tuthill – Ward 1	D'Ann Topoluk
Council Member Hodges – Ward 13	Ben Hecker
Council Member Samuels – Ward 5	Vicki Moore
Mayor of Minneapolis R.T. Rybak	Jerry Van Amerongen

Supported by MPRB staff lead Jennifer Ringold and consultant Anne Carroll (Carroll, Franck & Associates), the CAC began meeting in September 2010, suspended work for most of 2011 with the DEIS delays, and scheduled their 2012 meetings to coincide with the anticipated DEIS release. Working from comprehensive background information and their own knowledge and community connections, the CAC generated an increasingly detailed set of issues and preferred MPRB outcomes. Once the DEIS was released in October 2012, the CAC created a "crosswalk" connecting DEIS contents with their issues and outcomes, which was then converted to this Comment Letter. This final version of the Comment Letter was formally approved by the MPRB Board on *December 5, 2012.* 

Beginning with the entire corridor, the content of this comment letter is organized by location from north to south as shown in the Table of Contents and on the <u>map</u> below.

The first section presents MPRB's adopted opposition to the co-location alternative. The remaining sections focus on the locations where the MPRB has an interest in the design and implementation of the LRT project, they include the following subsections:

- Location and Description: This describes the location and why it was selected by the MPRB for DEIS comments.
- **Issues**: The issue and why it is important at the particular location is described. For each issue, the MPRB then provides one or more of the following:
  - <u>Outcomes</u>: Critical *outcomes* that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.
  - <u>Statements</u>: MPRB's adopted positions on critical issues or processes that must be resolved, reconciled, reevaluated, or otherwise included in near-term design work and decision-making.
  - <u>Corrections:</u> Identified errors in the DEIS that must be corrected for the FEIS and subsequent work.

Images are courtesy of MPRB unless otherwise noted; specifically, most aerials and maps are from Google and current to 2012, and are cited.

## **Corridor and Comment Location Map**



# **Co-Location Alternative**

According to the Section 4(f) review of the co-location alternative in the DEIS, this alternative will result in permanent loss of park land and impairment to MPRB properties and uses.

Below is the statement that the MPRB has adopted regarding co-location.

**Statement:** The MPRB opposes the co-location alternative and supports the co-location findings presented in the DEIS regarding Section 4(f) and Section 106 impacts to lands owned or maintained by the MPRB. Based on a review of the documents, the permanent loss of park lands, impacts to regional trail functionality and capacity, and harm to the Grand Rounds Historic District (eligible for the National Register of Historic Places) cannot be mitigated within the corridor.

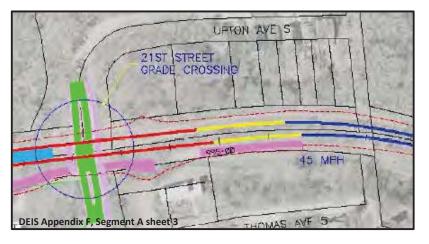
# **1 Entire Corridor**

## 1.1 Location and Description

This section includes issues and outcomes that apply to all or most of the corridor. The sections that follow this focus on issues and outcomes that are specific to certain locations. See <u>map</u> above.

A primary concern for the MPRB is protecting park land and recreational opportunities within and adjacent to the corridor for current and future generations. Chapter 7 of the DEIS contains the Section 4(f) evaluation of the project. It identifies potential permanent use, temporary use, and constructive use of park land for the project. For Segment A of the LPA it shows that 0.016 acres may be a potential temporary use and does not identify any potential permanent or constructive uses.

**Permanent and Temporary use:** Within an urban setting continuous park land and linear corridors are critical to habitat management and connectivity for park users. According to the Appendix F *LRT Alternative Segment Plan and Profile STA: 972+00 -1023+00* preliminary concepts for the area near 21<sup>st</sup> Street, additional park land may be needed to accommodate the westernmost LRT track. The analysis of park lands that are covered by Section 4(f) regulations in the DEIS does not account for this land.



**Constructive use:** The DEIS articulates (7.1) that "use" of a Section 4(f) resource occurs when, among other things, "There is no permanent incorporation of land, but the proximity of a transportation facility results in impacts so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (e.g., 'constructive use')." Based on this definition, the MPRB anticipates that park land and park users may experience long-term impacts of the LRT due to noise, vibration, visual impacts, and safety. Park lands that are eligible for the National Register of Historic Places are considered especially vulnerable to these impacts. Depending on final design, these impacts may be so severe that they would constitute a *constructive use* of protected properties under Section 4(f) regulations.

Below are the critical statements and outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 1.2.1 **Statement:** Park lands near 21<sup>st</sup> Street that are shown as being used for the LRT track in the conceptual designs must be reevaluated under Section 4(f) to identify all <u>permanent and temporary</u> uses.
- 1.2.2 **Statement:** As the design progresses, park lands must be evaluated under Section 4(f) to identify all permanent and temporary uses.
- 1.2.3 **Statement:** As the design progresses, park lands must be reevaluated under Section 4(f) to determine whether there are <u>constructive</u> uses of park land due to long-term noise, vibration, and visual impacts.
- 1.2.4 **Statement:** As the design progresses, park lands must be reevaluated under Section 4(f) to determine whether there are <u>constructive</u> uses of park land due to long-term impacts on parks that are considered eligible for the National Register of Historic Places.

- 1.2.5 **Outcome**: Park land along the corridor is preserved in the same or better condition.
- 1.2.6 **<u>Outcome</u>**: Park property is not used permanently as part of LRT development.

## 1.3 Issue: Design character

Aside from Park Siding Park, the park land the MPRB owns, manages, and maintains adjacent to the corridor is classified as a regional park. A regional park according to the Metropolitan Council's 2030 Regional Parks Policy Plan is "area of natural or ornamental quality for nature-oriented outdoor recreation such as picnicking, boating, fishing, swimming, camping, and trail uses." Park Siding is considered a neighborhood park by the MPRB which means it is a block or less in size and provides basic facilities within a neighborhood.

The MPRB recognizes that current development and public use of the corridor within Minneapolis from the St. Louis Park boundary to the Penn Station has an open and natural area character that includes portions of the Minneapolis Chain of Lakes Regional Park. Portions of this area are within the Grand Rounds Historic District that is eligible for the National Register of Historic Places and are included within an Important Bird Area as designated by the National Audubon Society. Park design in this area focuses on serenity, habitat restoration, minimal development, and passive recreation. Minimizing impacts to water table levels and quality, cultural landscapes, habitat and open space will be critical to retaining this area's character. LRT and station area design that is sensitive to these issues is essential to protect the activities, features, and attributes of the park land in this corridor.



The DEIS makes several references to this issue, including the following:

- 4.1.3.6 Groundwater Sensitivity, page 4-19: Several areas in the study area lie within zones of very high sensitivity to pollution of the water table system...Portions of the land between Cedar Lake and Lake of the Isles....
- 4.1.4.2 Groundwater, page 4-21: The Build Alternatives may have long-term impacts on groundwater if a permanent water removal system (dewatering) is required. Permanent water removal is anticipated where the cut extends below the water table. There is a probable need for permanent water removal at one cut on both Segment 1 and Segment 3, and possible needs on Segment A and at a second cut along Segment 3, because of shallow groundwater. Evaluations and associated impacts of permanent water removal at the major excavations are summarized in Appendix H.
- 4.3.3.1 Riparian Habitat Areas, page 4-50: The LRT 3A (LPA) passes over several riparian areas that are
  associated with Purgatory Creek, South Fork Nine Mile Creek, Nine Mile Creek, Minnehaha Creek and the
  unnamed channel [Kenilworth Channel] between Lake of the Isles and Cedar Lake. The alternative would
  impact native wetland or riparian habitats, which are typified by non-native woody wetland habitat, nonnative emergent wetland habitat or open water habitat (MLCCS 2008). The development of linear ROW
  along portions of this alignment has fragmented many wetland habitats on both sides of these features.
  Development of this alternative would likely increase the fragmented nature of wetland and riparian
  habitats.
- 3.1.2.4, Land Use and Socioeconomics, page 3-16: .... Northwest of Lake Calhoun and between Cedar Lake and Lake of the Isles the city has established the Shoreland Overlay District that specifies development guidelines within a half-mile radius around each of these lakes. Although the ordinance does not prohibit

transportation uses or facilities, it does specify guidelines for controlling both point source and non-point source pollutant discharge within the Shoreland Overlay District.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 1.3.1 **<u>Statement</u>**: MPRB insists that stormwater impacts to Minneapolis water bodies result in no increased volume of runoff and no increased pollutant loads.
- 1.3.2 **Outcome:** Minneapolis Chain of Lakes Regional Park and adjoining park land remains a quiet, tranquil, and natural park destination.
- 1.3.3 **Outcome:** The area between Lake Street and I-394 is naturally beautiful and serene.
- 1.3.4 **Outcome:** Natural wildlife habitat and serenity of the trail and park land are maintained.
- 1.3.5 **Outcome:** Any permanent dewatering methodologies applied to the corridor protect water table levels and quality, and habitat within the park lands that is dependent on those water levels.
- 1.3.6 **Outcome**: Permeable paving materials are incorporated to reduce stormwater impacts to park land when hard surfaces are added by the project.
- 1.3.7 **Outcome:** The Chapter 551, Article VI Shoreland Overlay District of the City of Minneapolis' Code of Ordinances is followed to preserve and enhance the environmental qualities of surface waters and the natural and economic values of shoreland areas within the city.

The MPRB owns or maintains trails that are within or cross the LPA Segment A corridor. The MPRB is concerned that the LRT frequency and speed will impact these trails and users by reducing access to the trail from local neighborhoods and park lands, inhibiting flow and speed, adding time delays, introducing use/user conflicts and safety problems, and making the trails more difficult to maintain year-round. The MPRB is concerned that the full cost of reconstructing <u>and resurfacing</u> these federally funded trails will not be included in the project budget.

The DEIS makes several references to the importance of retaining the trails. It also



mentions the anticipated increased use that will result from population increases and transit development. The references include:

- 10.5.3.1 Improved Multimodal Environment, page 10-18: Transitway project will improve the existing
  pedestrian and bicycle infrastructure along the alignment, and improve the safety of pedestrians and
  bicyclists through implemented design guidelines. All pedestrian facilities will be designed in accordance
  with current design standards and Americans with Disabilities Act (ADA) requirements to ensure access and
  mobility for all.
- 9.6.6.3 Anticipated cumulative impacts, page 9-23: The urban and suburban areas along the Southwest Transitway, as in the entire Twin Cities area, are expected to continue to develop and become denser. The Southwest Transitway's proposed stations in combination with RFFAs- especially residential projects will

be part of this trend. Because fully developed urban areas typically have little opportunity for the creation of new parks and recreation areas, the existing parks are likely to become more crowded and intensely used.

• Appendix F, Legend for Plan, page 5: The grading for the trails shown will be included in the project cost, however the surfacing for the trails will not be included with the project costs. Trail surfacing must be performed at the expense of others.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 1.4.1 **<u>Statement</u>**: As the implementing agency of regional parks and trails in the City of Minneapolis, the MPRB insists that the full cost of reconstructing and resurfacing trails that are impacted by the project is borne by the project budget.
- 1.4.2 **Statement:** The project should further examine the advantages and disadvantages of the trail being aligned on the west or east side of the LRT. The route analysis should consider the number of times the trail must cross the LRT, changes in trail length, trail connections, trail access points, and park land access.
- 1.4.3 **Outcome:** There is adequate access to the Kenilworth Regional Trail from both sides of the LRT tracks, and access points are a reasonable walking distance apart.
- 1.4.4 **Outcome:** The trail alignment minimizes the number of times that the trail crosses the LRT, optimizes trail connections, maintains similar travel distances, provides sufficient access points, and ensures access to park lands.
- 1.4.5 **Outcome**: Bike and pedestrian trails remain with the same or better design quality and width as current trails; these include those that run along and across the corridor, as well as access trails.
- 1.4.6 **<u>Outcome</u>**: The trail design meets the needs of current and projected users.
- 1.4.7 **Outcome:** The trail is designed for a 20 mph design speed (including straight-line ascents and descents at bridges).
- 1.4.8 **Outcome:** Bicycle and walking trail users have a positive, linear park-like experience, including being free of obstructions, having a 2-foot or greater buffer on each side of all trails, and retaining a sense of connection to open space.
- 1.4.9 **Outcome:** All trail connections are maintained or improved.
- 1.4.10 **Outcome:** At all points along the corridor, and especially at the narrowest locations, sufficient space remains for trails, trail users, and year-round maintenance vehicles and crews.

The MPRB is concerned about the LRT noise and vibration impacts on park lands and park and trail users due to the high number of trains that will travel through the corridor daily. An increase from a few freight trains per day to hundreds of LRT trains will dramatically increase the amount of time that park and trail users are exposed to noise and vibration. This could substantially diminish the park and recreation experience for park and trail users.

For noise, the MPRB is particularly concerned that park lands in the corridor are erroneously classified as a Category 3 land use. In FTA's land use categories for Transit Noise Impact Criteria, Category 3 is most commonly associated with institutional land uses and can be used for some types of parks. By contrast, Category 1 is for tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use. Category 1 is more closely aligned with the regional park classification that applies to the majority of park land in the area.

The DEIS makes several references to this issue, including the following:

- 4.7.3.5 Assessment, page 4-92: There is one moderate impact to a Category 3 land use. The impact is due to very low ambient background noise levels found in the walking trails of the Cedar Lake portion of the Minneapolis Chain of Lakes Regional Park combined with close proximity to the tracks and bell use at grade crossings and crosswalks. This may not apply to the entire Cedar Lake portion of the park, especially in areas where park-goers themselves create higher noise levels, and area of the park farther from the tracks.
- 4.8.6 Mitigation, page 4-118: Detailed vibration analyses will be conducted during the Final EIS in coordination with Preliminary Engineering. The Detailed Vibration Assessment may include performing vibration propagation measurements. These detailed assessments during the Final EIS/preliminary engineering phase have more potential to reduce project-related effects than assessments of mitigation options at the conceptual engineering phase of the project. Potential mitigation measures may include maintenance, planning and design of special trackwork, vehicle specifications, and special track support systems such as resilient fasteners, ballast mats, resiliently supported ties, and floating slabs.

Below are the critical statements and outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

1.5.1 **Statement**: Category 1 is most consistent with the type of parks and open space the MPRB owns or maintains adjacent to or within the corridor. Noise impacts on park lands and users must be reevaluated under the standards set for Category 1 land uses.



- 1.5.2 **Outcome:** The vibration impacts are minimized for park and trail users.
- 1.5.3 **Outcome**: The noise impacts are minimized for users of parks and trail and park users and do not exceed the noise standards set for Category 1 in adjacent park land and along the trail.
- 1.5.4 **<u>Outcome</u>**: Technologies are incorporated that reduce track noise and vibration.
- 1.5.5 **Correction**: In 4.7.3.5 page 4-92, it appears that Segment 4 is referenced instead of Segment A.

The MPRB is concerned about the impacts on park land and users of the parks and trails by visual impacts of the LRT. These concerns include the impacts on view sheds within and outside of the parks, especially those that are part of the Grand Rounds Historic District, which is eligible for listing on the National Register of Historic Places.

The DEIS makes several references to this issue, including the following:

• 3.6.3.3 Visual impacts, page 3-115: The proposed alignment is on a bridge over Cedar Lake Parkway. Visual impacts on sensitive receptors adjacent to the corridor in the multi-family residential parcel and Cedar Lake Parkway could be substantial.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

1.6.1 **Outcome**: The visual impact of the LRT and related infrastructure is minimized for trail and park users and honors the historic character of the Grand Rounds when it crosses Cedar Lake Parkway and the Kenilworth Channel.

1.6.2 **Outcome:** The train lights have minimal visual impacts on trail users.

## 1.7 Issue: Safety

Safety of park and trail users is a critical objective for the MPRB. This includes using design to reduce risks from user conflicts or unexpected hazards and ensuring adequate access to park facilities when the LRT is in operation. Delays in fire, police, and emergency medical response to park facilities, especially beaches, may result from the high number and frequency of trains that are projected to travel through the corridor.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 1.7.1 **Outcome**: Adequate fire safety infrastructure exists within or proximate to the corridor such that fire suppression and response times meet relevant laws and standards.
- 1.7.2 **Outcome**: Fire, police, and emergency medical personnel and equipment are able to access park lands adjacent to the corridor and provide response times that meet relevant laws and standards.
- 1.7.3 **Correction:** The Minneapolis Park Police should be included in the references to police agencies related to the corridor.



Timely public safety access is essential

## 1.8 Issue: Construction

The MPRB recognizes that Minneapolis has become one of the top bicycling communities in the country. As such, trail users rely on high quality trail facilities year round for recreation and commuting. A detour that requires significant rerouting of trail users or an extended closure of a trail will be a barrier to trail users on the western side of Minneapolis and the metro area.

Construction can result in extensive damage to vegetation and trees through removals and introduction of invasive species. The former results in a diminished quality of the park and recreation experience for trail and park users, the later results in long-term habitat management issues for MPRB staff. Additionally, construction can result in the altering the ground and surface water levels and quality if Best Management Practices (BMPs) are not implemented.

The DEIS makes several references to this issue, including the following:

 6.3.3.1 page 6-60: Short-term construction effects to bicyclists and pedestrians are also anticipated in all Build Alternatives. In Segments 1, 4, A, and C, some disruptions to the existing regional trails are anticipated during construction. The extent to which the trails would be available for use throughout the process of relocation will be determined during Preliminary Engineering. Disruptions to the existing sidewalk network are anticipated in all Build Alternatives.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 1.8.1 **Outcome:** Surface and groundwater quality is protected during construction.
- 1.8.2 **Outcome:** Reasonable and safe alternative routes are provided for trail users when sections are closed

during construction.

- 1.8.3 **Outcome:** Any flora that is lost to construction or LRT use is replaced with flora that is in accordance with MPRB plans, with monitoring through a plant survey and replacement for five (5) years after construction is complete.
- 1.8.4 **Outcome:** Soils and slopes are stabilized during construction.
- 1.8.5 **Outcome**: Construction dewatering protects water table levels and habitat within park lands that is dependent on those water levels.
- 1.8.6 **Outcome:** Construction practices prevent introduction of new invasive species to park lands and waters.



MPRB Prairie Maintenance near Cedar Lake Park

# 2 Linden Avenue

## 2.1 Location and Description

Linden Avenue serves as an informal trail access point, as it is used primarily by city maintenance vehicles to access the asphalt and concrete recycling facility. Trail users at this access point regularly deal with high vehicular traffic with the nearby entrance to I-394. At this location, the LRT line and trail separate from MPRB-owned land.

The MPRB is concerned that all future work in this area be based on a comprehensive design and coordinated approach. This location requires formal and safe trail access, and cyclists need continuous flow and speed on the federally funded Cedar Lake Regional Trail.



Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 2.2.1 **Outcome:** Trail users easily and safely access the Cedar Lake Regional Trail.
- 2.2.2 **Outcome:** Bicyclists in this area maintain continuous flow and speed.
- 2.2.3 **Outcome:** Trail development is coordinated with rail, residential and commercial development in the area.
- 2.2.4 <u>**Outcome:**</u> The federally funded, nonmotorized Cedar Lake Regional Trail is fully functional, with uninterrupted flow and speed.



From Linden Avenue junction, looking southwest along Cedar Lake Regional Trail



From Linden Avenue junction, looking northeast along Cedar Lake Regional Trail

# 3 Luce Line Regional Trail Junction

## 3.1 Location and Description

At this location the Luce Line Regional Trail intersects with the Cedar Lake Regional Trail, currently via a bridge over the industrial area and freight rail line, and spiral ramps at each end.

This is a critical connection in the regional trail system, and also provides access to Bryn Mawr Meadows Park.

The MPRB is concerned that all future work in this area be based on a comprehensive design and coordinated approach so that trail



and park access be maintained, as well as flow and speed on the regional trails.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 3.2.1 <u>Outcome:</u> Trail users easily and safely make connections between Bryn Mawr Meadows Park, the Luce Line Regional Trail, and the Cedar Lake Regional Trail.
- 3.2.2 **Outcome:** Bicyclists in this area maintain continuous flow and speed.
- 3.2.3 **Outcome:** Trail development is coordinated with rail, residential and commercial development in the area.
- 3.2.4 **Outcome:** The federally funded, nonmotorized Cedar Lake Regional Trail is fully functional, with uninterrupted flow and speed.



Luce Line Regional Trail crossing to connect with the Cedar Lake Regional Trail

# 4 Spring Lake Trail Junction

## 4.1 Location and Description

At this location Cedar Lake Regional Trail users pass under I-394 and easily connect to the nearby parks and trails including Spring Lake, Kenwood Parkway, and Parade Stadium, and travel beyond to the Minneapolis Sculpture Garden, Loring Park, and the Grand Rounds National Scenic Byway.

As a critical access point to MPRB park lands and the Grand Rounds, the MPRB is concerned that safe and easy access and connectivity is retained. Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 4.2.1 <u>Outcome</u>: Cedar Lake Regional Trail users easily and safely connect to Spring Lake Park, Grand Rounds, other parks, parkways, and Van White Boulevard.
- 4.2.2 **Outcome:** Bicyclists in this area maintain continuous flow and speed.
- 4.2.3 **Outcome:** The design prioritizes connectivity to neighborhoods and natural amenities.

In this small space under I-394, the MPRB is concerned about public safety and emergency vehicle access. Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.





From junction, looking southeast toward Spring Lake

4.3.1 **Outcome:** Fire, police, and emergency medical personnel and equipment can access the trail and Spring Lake and provide response times that meet relevant laws and standards.

As with many locations along the LRT, this area will likely be subject to future development. The MPRB is concerned about protecting the integrity and natural features of Spring Lake and full functionality of the Cedar Lake Regional Trail. Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 4.4.1 **Outcome:** Spring Lake and the area's natural features are preserved and protected.
- 4.4.2 **Outcome:** The federally funded, nonmotorized Cedar Lake Regional Trail is fully functional, with uninterrupted flow and speed.
- 4.4.3 **Outcome:** Trail development is coordinated with rail, residential and commercial development in the area.

# 5 Bryn Mawr Meadows Park

## 5.1 Location and Description

Bryn Mawr Meadows Park is an active neighborhood park with citywide appeal. Amenities include ball fields, tot-lots, wading pools, and tennis courts. The park is adjacent to the Cedar Lake Regional Trail and LRT line. Currently parks users are connected to the Cedar Lake Regional Trail via a bridge over the industrial area and freight rail line, and spiral ramps at each end.

The MPRB is concerned about ensuring that people from throughout the community can access both this heavily used park *and* the Cedar Lake Regional Trail from this area, and that the trail remains fully functional.



Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

5.2.1 <u>Outcome</u>: Communities on both sides of the LRT safely and easily access the Cedar Lake Regional Trail and Bryn Mawr Meadows Park.

The MPRB is concerned that this large and active park retain its open and natural feel. Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

5.3.1 **Outcome:** The LRT blends in visually with the natural setting of the area.

The MPRB is concerned that all future work in this area be based on a comprehensive design and coordinated approach.

- 5.4.1 <u>Outcome</u>: The federally funded, nonmotorized Cedar Lake Regional Trail is fully functional, with uninterrupted flow and speed.
- 5.4.2 **Outcome:** Trail development is coordinated with rail, residential and commercial development in the area.



Bryn Mawr Park, looking south from Morgan Avenue

# 6 Cedar Lake Regional Trail and LRT Crossing Area

## 6.1 Location and Description

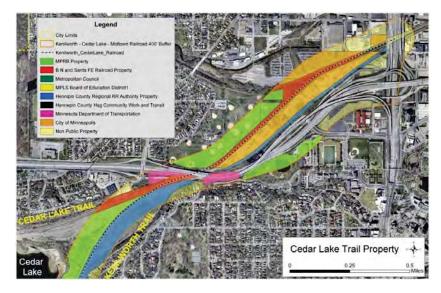
The federally funded Cedar Lake Regional Trail carries commuter and recreational bicyclists and pedestrians between downtown Minneapolis and the western suburbs.

At this location the trail junctions with the Kenilworth Regional Trail and the LRT follows the Kenilworth alignment

south. In this area the bike trails are separated into north- and south-bound, and there is a separate pedestrian trail. The land in this area is owned by the County and the MPRB. Per agreement, all of the trails are maintained by the MPRB.

Into this already complex area the LRT brings dramatically increased challenges (6.3.2.4).

# Cedar Lake Regional Trail Cedar Lake Regional Trail Cedar Lake Regional Trail Cedar Lake Regional Trail Cedar Lake Regional Trail



## 6.2 Issue: Safety, use, access, connectivity

In 2011, according to the Metropolitan Council's annual visit estimates, Kenilworth Regional Trail had approximately 624,400 visits and the Cedar Lake Regional Trail had 381,400 visits. The MPRB is very concerned about retaining safe and high-quality use and access to these regional trails in this area for all users and from designated access points.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 6.2.1 **Outcome:** Walkers, runners, bicyclists, and other nonmotorized trail users safely and efficiently get from one side of the LRT tracks to the other, year-round and without interruption.
- 6.2.2 **Outcome:** The federally funded, nonmotorized Cedar Lake Regional Trail is fully functional, with uninterrupted flow and speed.
- 6.2.3 **Outcome:** All users have adequate access to the trails.

- 6.2.4 **Outcome:** All trail connections are safe and easy to navigate, and space is allowed for future expansion to meet demand.
- 6.2.5 **Outcome**: The Cedar Lake Regional Trail meets commuter bicycle standards of 20 mph design speed.
- 6.2.6 **Outcome:** Communities north of the LRT easily access the Cedar Lake Regional Trail, Cedar Lake, and Cedar Lake Park.



At junction of Kenilworth Regional Trail (center left) and Cedar Lake Regional Trail (top left and bottom right)



At junction, looking west along divided Kenilworth Regional Trail

## 6.3 Issue: Environmental protection

The MPRB park lands in this area bring significant benefits to park and trail users, support native plant species, and are serve as important wildlife habitat.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 6.3.1 **Outcome:** Park lands retain their natural character.
- 6.3.2 **Outcome:** Wildlife habitat supports local and migratory fauna.



Cedar Lake Park and Cedar Lake Regional Trail - Prairie

# Intersection with West 21<sup>st</sup> Street

## 7.1 Location and Description

The intersection of the Kenilworth Regional Trail and 21st Street is a proposed station location. The station would sit on Hennepin County property, however the west side of the rail line is MPRB property, Cedar Lake Park.

At 21st Street, Cedar Lake has a very popular beach and provides access to a trail network as well as informal foot paths.



#### 7.2 Issue: Park access



At intersection, look west into Cedar Lake Park

This location is the sole access point for Cedar Lake Park and beach. Visitors arrive at this pristine area on foot, by bicycle, and using motorized vehicles, and via 21<sup>st</sup> Street, the Kenilworth Regional Trail, and in the future the LRT. Given that "Implementation of LRT service and stations along the Segment A alignment would likely result in some land use changes surrounding the stations..." (3.1.5.1), the natural character of this area and clear access must be ensured.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

7.2.1 **Outcome:** Access to Cedar Lake Park at West 21<sup>st</sup> Street is attractive, natural, and welcoming.

7.2.2 **Outcome:** People on the east side of the corridor safely and easily access park lands on the west side.

With thousands of park and park land users and multiple modes of transport across and along the corridor at this point, safety is of utmost importance. Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 7.3.1 **Outcome:** All Cedar Lake Park users have safe and pleasant access to and from the park, regardless of mode of transport.
- 7.3.2 **Outcome:** Station design *enhances* safety and access for Cedar Lake Park users.

The MPRB is concerned that the anticipated 1,000+ daily LRT boardings (Appendix F, Transit Effects, Figure 2) at

this location would seriously compromise the quality of experience for users of this secluded park area.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 7.4.1 **Outcome:** Cedar Lake Park remains a quiet, tranquil, and natural park destination.
- 7.4.2 **Outcome:** The area between Burnham Boulevard and 21<sup>st</sup> Street is naturally beautiful and serene.



Looking SW from 21st Street



Minneapolis Park and Recreation Board: Southwest Transitway Comment Letter

# 8 Kenilworth Channel, Bridge

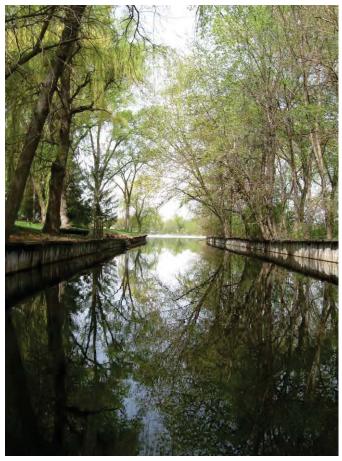
## 8.1 Location and Description

The proposed alignment of the LRT crosses the Kenilworth Channel, a body of water constructed in 1913 to connect Cedar Lake and Lake of the Isles to form the Minneapolis Chain of Lakes. The Channel has yearround recreational use, from boaters in the summer to skiers and skaters in the winter.

The Channel also provides access for wildlife. The bridge over the Channel for the existing freight tracks and trails is narrow and relatively low to the water.



8.2 Issue: Historic character, aesthetics, tranquility



Kenilworth Channel

The MPRB is concerned about preserving the historic character of the 1913 Kenilworth Channel in its critical role within the Minneapolis Chain of Lakes Regional Park. The channel is part of the Grand Rounds Historic District that is eligible for the National Register of Historic Places.

According to the DEIS (3.6.3.3) ...the bridge design, bank treatment, and aesthetics for the new facility and the potential replacement or modification of the existing pedestrian bridge would have a substantial effect on this historic landscape... In addition, (3.4.5.3) ...Potential long-term effects may occur at the following properties: Kenilworth Lagoon/Channel, Grand Rounds (potential effects of the construction of new bridge structures within the historic district; the design and footprint of these structures may affect the banks of the historic channel and may affect the district's overall feeling and setting).

While the DEIS notes that these issues will be addressed during preliminary engineering, the MPRB is concerned that they receive the most serious attention very early in the process. Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

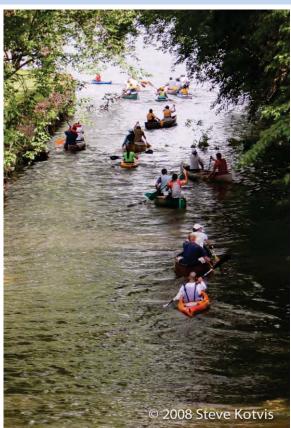
- 8.2.1 **Outcome:** Support and safety structures are harmonious, beautiful, and both historically and context sensitive.
- 8.2.2 **Outcome**: The Kenilworth Channel retains its natural beauty and serenity and historic character.

## 8.3 Issue: Connectivity and recreational use

The Kenilworth Channel was central to creating the Minneapolis Chain of Lakes and provides a critical connection between Cedar Lake and Lake of the Isles. Trail access is necessary for people as is year-round channel access for both people and wildlife. It is also a critical link in the City of Lakes Loppet (winter ski race) and City of Lake Tri-Loppet.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 8.3.1 <u>Outcome:</u> Users have access to the Kenilworth Regional Trail, Cedar Lake, and Lake of the Isles from both sides of the LRT/Kenilworth Regional Trail.
- 8.3.2 **Outcome:** People and wildlife on both sides of the LRT/Kenilworth Regional Trail have access to and along the undeveloped channel shoreline.
- 8.3.3 **Outcome:** Users have unfettered, year-round passage along the channel (in the water/on the ice) between Lake of the Isles and Cedar Lake.
- 8.3.4 **Outcome:** The historic water connection between Cedar Lake and Lake of the Isles remains a defining characteristic of the Minneapolis Chain of Lakes Regional Park.



From Kenilworth Regional Trail looking along

## 8.4 Issue: Safety



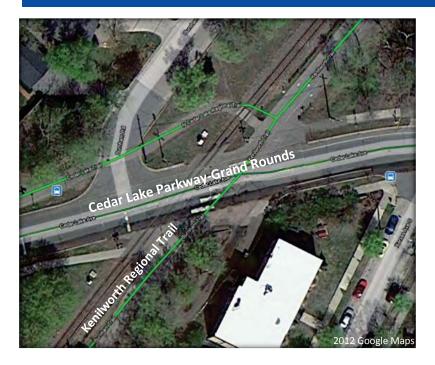
From Kenilworth Regional Trail looking alon Kenilworth Channel – City of Lakes Loppe

The MPRB is concerned about protecting the safety of land and water users of the Kenilworth Channel and shoreland.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

8.4.1 **Outcome**: Year-round channel users are safe from falling debris and ice.

## 9 Cedar Lake Parkway Grand Rounds





Cedar Lake Section of Grand Rounds

## 9.1 Location and Description

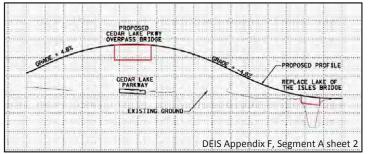
At this location the LRT intersects with actively used Cedar Lake Parkway, which is an essential section of the <u>Grand Rounds National Scenic Byway</u> (see Grand Rounds map) and within the Minneapolis Chain of Lakes Regional Park (Cedar Lake Beach, Parkway, and Trail). Directly to the west of this location is Cedar Lake South Beach.

The MPRB is concerned about LRT impacts on the Kenilworth Regional Trail and Chain of Lakes Regional Park users and properties that contribute to the Grand Rounds Historic District. In 2011, according to the Metropolitan Council's annual visit estimates, Kenilworth Regional Trail had approximately 624,400 visits and the Chain of Lakes Regional Park had 5,122,900 visits (Chain of Lakes estimate does **not** include motorized or nonmotorized traffic counts on the parkway). Cedar Lake Parkway, as part of the Grand Rounds Historic District, is considered eligible for the National Register of Historic Places (7.4.1.4 page 7-20).

## 9.2 Issues: Integrity, flow, and access

The MPRB is concerned that adding LRT into this intersection could result in frequent delays of parkway and trail

users along or parallel to Cedar Lake Parkway, and create visual obstructions. The MPRB finds that both of these impacts would significantly diminish the quality of experience for parkway, park, and trail users. Further, such impacts are inconsistent with one of the basic design characteristics of the Grand Rounds: a continuous recreational driving experience.



The MPRB is also concerned that the proposal to elevate the LRT above the parkway at this intersection (see image above) will increase noise and create visual impacts that will significantly diminish the quality of experience for parkway, park, and trail users of a property that is eligible for the National Register of Historic Places.

The anticipated frequency of trains along the corridor will also increase potential conflicts between the trains and users of the trail parallel to Cedar Lake Parkway, thus raising serious safety concerns.

The DEIS makes several references to this issue, including the following:

- 7.4.1.4 Section 4(f) Properties Potentially Used by the Project, page 7-20: Cedar Lake Parkway and the Cedar Lake-Lake of the Isles Channel have been determined eligible for inclusion on the NRHP as part of the Grand Rounds Historic District.
- 3.4.5.3 Cultural Resources, page 3-79: Potential long-term effects may occur at the following properties: Cedar Lake Parkway, Grand Rounds (potential effects of the changes to the intersection of the LRT corridor with the historic parkway, including the LRT overpass bridge, and, under the co-location alternative, the effects of widening the trail/rail corridor; these changes may affect the parkway itself and may alter its setting.)

Below are the critical statements and/or outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 9.2.1 <u>Statement:</u> The MPRB conducted a preliminary feasibility study of a grade-separated crossing at this intersection, which revealed that lowering the tracks and trail, and bridging portions of the parkway would allow the train and trail to travel beneath the parkway (see Appendix A for illustrations). The MPRB recommends further exploration of this type of integrated solution that significantly reduces safety hazards, noise impacts, visual impacts, and delays for motorized and nonmotorized vehicles.
- 9.2.2 **Outcome:** The Grand Rounds (eligible for National Register of Historic Places) fully retains its integrity and intention.
- 9.2.3 Outcome: Motorized and nonmotorized vehicles and pedestrians along the trail parallel to Cedar Lake Parkway experience continuous and safe flow.
- 9.2.4 <u>Outcome:</u> Trail users have direct access to the trails and trail connections that are currently provided at this location.
- 9.2.5 <u>Outcome:</u> Recreational and commuter trail traffic on both the Kenilworth Regional Trail and the trail parallel to Cedar Lake Parkway follows substantially the same route as at present.



On Cedar Lake Parkway-Grand Rounds; at junction looking SW along Kenilworth Regional Trail; Cedar Lake and beach at right

- 9.2.6 **Outcome:** The view of and from Cedar Lake and surrounding parkland is preserved.
- 9.2.7 **Outcome:** The parkland around Cedar Lake remains a natural visual buffer between Cedar Lake and the LRT corridor.

Safety of park and trail users is a critical objective for the MPRB. This includes using design to reduce risks from user conflicts or unexpected hazards, and ensuring adequate access to park facilities when the LRT is in operation.

Delays in fire, police, and emergency medical response to park facilities, especially beaches, may result from the high number and frequency of trains that are projected to travel through the corridor. Due to the proximity of South Cedar Lake Beach, timely emergency medical access across this intersection is critical.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

9.3.1 **Outcome:** Fire, police, and emergency medical personnel and equipment can access South Cedar Lake beach and provide response times that meet relevant laws and standards.

### 9.4 Issue: Noise and air quality

The MPRB is concerned about the noise and air quality impacts of LRT at this intersection due to the high frequency of trains that will cross here. For an at-grade crossing, high levels of track, bell, and whistle noise would significantly diminish the quality of experience in adjacent parkland and along the trails. Noise generated by a flyover condition is also a concern. Frequent traffic delays for train crossings are expected to diminish air quality for park and trail users.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 9.4.1 **Outcome:** LRT and crossing-related noise does not diminish the enjoyment and use of the trails, adjacent park land, and Grand Rounds National Historic Byway.
- 9.4.2 **Outcome:** Air quality at this location meets state and federal standards.



At junction, looking NE along Kenilworth Regional Trail



From Kenilworth Regional Trail looking toward Cedar Lake, Grand Rounds

# 10 Park Siding Park

# **10.1** Location and Description

The MPRB owns Park Siding Park, a small neighborhood park, which is immediately adjacent to the LRT corridor and an access point to the Kenilworth Regional Trail. With play equipment as well as formal gardens, it is actively used by children and adults from neighborhoods on both sides of the corridor.

Although the DEIS commits to improving the pedestrian and bicycle infrastructure along the alignment and improving the safety of pedestrians and bicyclists through implemented design guidelines (10.5.3.1), the MPRB has particular access and safety concerns at this location. Park visitors, including small children, come from both sides of the corridor as well as from the Kenilworth Regional Trail. This is



also a popular bicycle and pedestrian trail ingress and egress point.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 10.2.1 **Outcome:** All users have formal and safe access to the park from both sides of the LRT.
- 10.2.2 **Outcome:** As an important trail access point, the trail design accommodates a safe ingress and egress.
- 10.2.3 **<u>Outcome</u>**: Trail users have safe access to and from the park.

This small neighborhood park provides play equipment for children and formal gardens for adults. The heavily planted berm between Dean Court and the Kenilworth Regional Trail currently provides a visual screen, but the MPRB is concerned with ensuring that during and after construction there is a strong visual barrier that remains compatible with this important neighborhood park.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

10.3.1 **Outcome:** The LRT's visual impact does not disrupt park visitors' enjoyment, nor detract from the park's character.

The MPRB is deeply concerned about the impact of LRT noise on Park Siding visitors, especially the very young children who frequent this neighborhood park.

Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

10.4.1 <u>Outcome</u>: Park users, especially young children, are not subject to LRT noise levels that exceed the noise standards set for Category 1 land uses.



Park, looking SE from Kenilworth Regional Trail access



Kenilworth Regional Trail access, looking toward corridor



A heavily landscaped berm between Dean Court and the corridor provides a safety and visual barrier for Park Siding users

# 11 Trail Access at Abbott Avenue S (by new West Lake Station)

# **11.1 Location and Description**

This is an actively used trail access to the to the Kenilworth Regional Trail and Midtown Greenway and is the closest access point to the Chain of Lake Regional Park. West Calhoun Neighborhood Association contributed park-like features to this location including a kiosk, picnic table, bike racks, decorative fencing, and a drinking fountain.

### 11.2 Issue: Park and trail access

The MPRB is committed to preserving this important trail access, ensuring safe and convenient wayfinding between the trail and nearby Lake Calhoun, and advocating for sufficient bicycle parking for all visitors to the area. The access was originally designed with input from Hennepin County to accommodate future LRT.



Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

- 11.2.1 **Outcome:** West Lake station users and all other users have safe and convenient access to and from Lake Calhoun and the Kenilworth Regional Trail.
- 11.2.2 <u>Outcome</u>: Wayfinding is provided between the West Lake station and Lake Calhoun and the trails.
- 11.2.3 **Outcome:** Safe and adequate bike parking is provided for recreational and commuter users of the trail and for Lake Calhoun visitors.





# **12 Northwest Corner of Lake Calhoun Area**

# 12.1 Location and Description

This location within the Minneapolis Chain of Lakes Regional Park is the closest major park land to the proposed West Lake station. It is a primary visitor portal to the Grand Rounds National Scenic Byway. The Calhoun Executive Center parking lot next to Lake Calhoun sits on land that is partially owned by the **Minneapolis Park and Recreation** Board as part of the Minneapolis Chain of Lakes Regional Park. On weekends and weekday evenings, visitors use this area for parking and to access the regional park and the Grand Rounds.



#### 12.2 Issue: Park and trail access

Millions of annual park visits to this area originate by foot, bicycle, motorized vehicle, and in the future the LRT.

Traffic patterns altered by the addition of a West Lake station will have a direct impact on the park visitor experience and all modes of traffic on Lake Calhoun Parkway and Dean Parkway. The MPRB is concerned that the introduction of the high-volume West Lake station increases the complexity of this area and is committed to ensuring that all visitors have a positive, easy, and safe experience accessing and using the park lands and trails in this area.



Below are the critical outcomes that the MPRB has adopted and must be addressed in the FEIS and preliminary engineering.

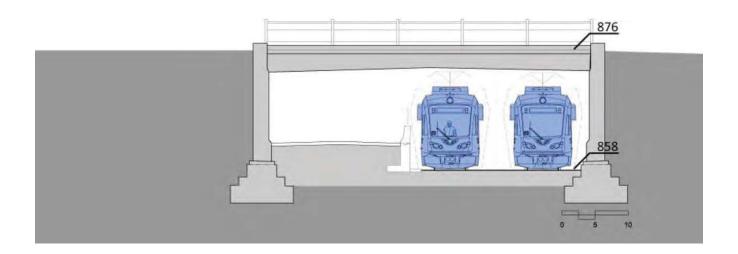
12.2.1 <u>Statement:</u> Multimodal traffic patterns in a roughly 1/2-mile radius of the West Lake station must be studied in partnership with the street/trail property owners (Hennepin County, City of Minneapolis, MPRB). Deliverables of the study should include traffic volume and flow projections, and recommendations for 1) long-term street/trail network modifications and 2) short-term network modifications to be implemented with station development.

- 12.2.2 **Outcome:** LRT and West Lake station area design decisions for this area are based on design recommendations from a comprehensive and multimodal (bicycle, pedestrian, transit, vehicle) circulation analysis that addresses impacts to the Grand Rounds parkways and trails.
- 12.2.3 **Outcome:** The design of this area makes clear that it is a "gateway" to the Minneapolis park system.
- 12.2.4 **Outcome:** A safe, free-flowing pedestrian and bicycle route with exceptional wayfinding exists between the LRT station area and Lake Calhoun and adjacent park land.
- 12.2.5 **Outcome**: There is no loss of vehicle parking for park and trail users.
- 12.2.6 **Outcome:** Greenspace at the northwest corner of Lake Calhoun is preserved for park visitors and recreational purposes.

# 13 Appendix A – Cedar Lake Parkway/ Southwest Transitway

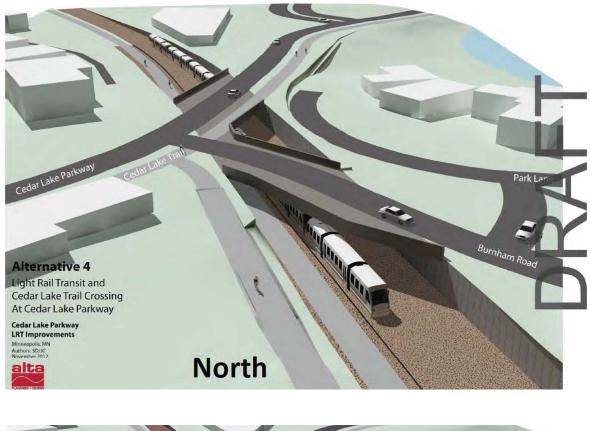
Appendix A is intended to illustrate the concept of lowering the train and trail and bridging Cedar Lake Parkway at the Cedar Lake Parkway/Southwest Transitway intersection. This concept is discussed in Section 9 of this comment letter. The following pages contain a few key images of the analysis conducted on this concept by Steve Durrant of Alta Planning + Design for the MPRB.

# **Below Grade**



Above is a potential cross-section showing elevations for Cedar Lake Parkway (above) and the trail and train.

These are examples of grade separated crossings with trail on east (North version) or west (Crossover version) side of tracks. These are provided to illustrate the concept, not to provide a complete overview of the feasibility study.





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10. United States Department of the Interior Comment Letter on the SDEIS/Draft Section 4(f) Evaluation Update, 2015 This page intentionally left blank.



IN REPLY REFER TO

# United States Department of the Interior

OFFICE OF THE SECRETARY Office of Environmental Policy and Compliance Custom House, Room 244



Philadelphia, Pennsylvania 19106-2904

July 17, 2015

9043.1 ER 15/0311

Ms. Marisol Simon Regional Administrator, Region 5 Federal Transit Administration 200 West Adams Street, Suite 320 Chicago, Illinois 60606

Dear Ms. Simon:

As requested, the Department of the Interior (Department) has reviewed the Supplemental Draft Environmental Impact Statement (SDEIS) and Section 4(f) Evaluation for the Southwest Light Rail Transit (Metro Green Line Extension), Hennepin County, Minnesota. The Department offers the following comments and recommendations for your consideration.

# **Section 4(f) Comments**

This document considers effects to properties identified in the project study area as eligible to be considered under Section 4(f) of the Department of Transportation Act of 1966 (codified at 49 U.S.C. 303 § 771.135) associated with a 15-mile light rail transit (LRT) line in the Minneapolis/St. Paul region, the proposed Southwest Transitway (Project). The Federal Transit Administration (FTA), along with the Hennepin County Regional Railroad Authority (HCRRA) and the Metropolitan Council Regional Transit Board (RTB), have proposed the Project that connects downtown Minneapolis to the cities of St. Louis Park, Hopkins, Edina, Minnetonka, and Eden Prairie. The intent of the Project is to improve access and mobility to the jobs and activity centers in the Minneapolis Central Business District, as well as to the expanding suburban employment centers. The Project was identified by the RTB in the late 1990's as warranting a high-level of transit investment to respond to increasing travel demand in a highly congested area of the region. A draft environmental impact statement (EIS) for the Project was released in the late fall of 2012 and the Department provided comments on the Section 4(f) impacts. We felt at that time the analysis in the Section 4(f) was too preliminary to be able to concur in any findings.

In 2013 and 2014, the FTA determined that design adjustments made to the preferred alternative that was identified in the Draft EIS needed to be evaluated for environmental impacts not documented in the Draft EIS and with the potential to result in new adverse impacts. The FTA, with the RTB, further determined those design changes in the preferred alternative warranted a specific review in a supplemental draft EIS document.

In the SDEIS, the FTA considered the impacts to several 4(f)-eligible resources; 12 were parks or recreation areas and 28 were historic properties either individually eligible for or listed on the National Register of Historic Places (NRHP), or were contributing elements to historic districts. A few properties were eligible both as park/recreation and historic properties. After considering the changes to the preferred alternative and its impacts on these resources, the FTA has made preliminary determinations that of the 12 park properties, 1 property (Purgatory Creek Park) would be affected only temporarily by construction (no permanent use), and 3 properties (Kenilworth Channel/Lagoon, Cedar Lake Park, and Byrn Mawr Meadows Park) would have *de minimis* impacts; the rest of the eligible park properties would have no 4(f) use. Of the 28 eligible historic properties, the FTA made preliminary determinations that the Project would have adverse effects on two properties (the Grand Rounds Historic District and Kenilworth Lagoon), and a *de minimis* effect on one property (the St. Paul, Minneapolis & Manitoba Railroad Historic District). In addition, two properties (the Minikahda Club and Cedar Lake Parkway/Grand Rounds Historic District) would be temporarily affected by construction activities, but no permanent use would occur.

The FTA will allow the public to comment on the SDEIS and this 4(f) evaluation before finalizing their determinations. For now, the FTA has concluded at least preliminarily that there are no feasible or prudent avoidance alternatives, other than the preferred alternative, that results in disturbances to 4(f) eligible properties. The Department concurs with the preliminary determinations of effect by the FTA, assuming that there are no subsequent changes to the preferred alternative or in the impacts to the eligible properties. We have no authority to agree to the determinations of *de minimis* impacts, but we would state that those determinations appear to have been decided correctly. The Department would likely concur with the preliminary determination that all measures to minimize harm have been employed concerning the two historic resources that will be subject to 4(f) use. This concurrence assumes the FTA and the State Historic Preservation Officer, along with the Section 106 consulting parties, come to some agreement on the mitigation necessary for the two resources, and an agreement document is signed by all parties. We will reserve our concurrence until we are provided a copy of the signed agreement.

The Department has a continuing interest in working with the FTA and the RTB to ensure impacts to resources of concern to the Department are adequately addressed. For issues concerning section 4(f) resources, please contact Regional Environmental Coordinator Nick Chevance, Midwest Region, National Park Service, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1844.

We appreciate the opportunity to provide these comments.

Sincerely,

Vin j >

Lindy Nelson Regional Environmental Officer

cc: SHPO-MN (Barbara Howard barbara.howard@mnhs.org) HCRRA (Peter McLaughlin commissioner.mclaughlin@hennepin.us) This page intentionally left blank.

11. Hennepin County Regional Railroad Authority Interim Trail Use Agreements

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Cedar Lake Park

### RESOLUTION NO. <u>37-HCRRA-92</u>

The following resolution was offered by Commissioner Andrew, seconded by

WHEREAS, The City of Minneapolis Park and Recreation Board (Park Board) and CAVE Cedar Lake Park have discussed interim use of portions of the Hennepin County Regional Railroad Authority (HCRRA) property in the Cedar Lake-Kenwood Peaa. Bryn Mawr area, and the near northside Harrison area in Minneapolis; and

WHEREAS, Such use is consistent with similar activities currently allowed w Henmepin County in several municipalities on the Southwest Corridor between the cities of Hopkins and Victoria; and

WHEREAS, The Park Board has already acquired portions of land adjacent to Cadam Lake in Golden Valley, St. Louis Park, and Minneapolis; and

WHEREAS, The Park Board has offered to police and maintain this area at no cost to the HCRRA and would like to lease the property for open space purposes,

BE IT RESOLVED, That staff is directed to negotiate a lease with the City of Mimmeapolis Park and Recreation Board for interim use of specific properties when by the HCRRA in the City of Minneapolis until such time that those properties become necessary for light rail transit; and

INE IT FURTHER RESOLVED, That the negotiated lease be brought to the HCRRA for approval prior to execution; and

WE IT FURTHER RESOLVED, That no permanent structures or fixtures be Installed during the interim use of HCRRA properties, and that HCRRA staff be directed to explore means of retaining recreational uses of said properties as a compatible use with light rail transit when and if such properties are determined to be utilized for light rail transit.

The question was on the adoption of the resolution and there were <u>7</u>

127

MOARD OF COMMISSIONERS MENNEPIN COUNTY REGIONAL RATINOAD AUTHORITY

ATTEST: 🔼

	<u>YEA</u>	NAY	<u>OTHER</u>
Peter McLaughlin Mandy Johnson John Keefe John E. Derus Tad Jude Judy Makowske			
Mark Andrew, Chairman	<u>    X    </u>		÷
	a manager and an of the state o		

Tad Jude, Secretary

Hopkins to Chaska Trail

# RESOLUTION NO. 52R-HCRRA-92

The following resolution was offered by Commissioner Keefe, seconded by Commissioner Johnson:

WHEREAS, the Hennepin County Regional Railroad Authority (HCRRA) has purchased a system of linear rail corridors for implementation of Light Rail Transit (LRT); and

WHEREAS, integrated use of portions of the property for trail use is deemed compatible with implementation of LRT; and

WHEREAS, the Interim Use Policy established by HCRRA provides for utilization of the rail corridors for hiking trails until LRT is established within the corridors; and

WHEREAS, interim use is not consistent across municipal boundaries and the Suburban Hennepin Regional Park District is prepared to assume administrative responsibility and provide for consistent use of the LRT corridors from Hopkins to Victoria and Chaska until such time as LRT is implemented,

BE IT RESOLVED, that Lease No. A09222 and Lease No. A09922 with the Suburban Hennepin Park Reserve District providing for interim use of Light Rail Transit corridors between Hopkins and Victoria and Chaska, including the cities of Hopkins, Minnetonka, Eden Prairie, Chanhassen, Deephaven, Greenwood, Excelsior, Shorewood and Victoria be approved, and that the Chairman be authorized to sign the Lease on behalf of the Authority.

The question was on the adoption of the resolution and there were <u>7</u> YEAS and <u>0</u>NAYS as follows:

BOARD OF COMMISSIONERS HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY	<u>YEA</u>	NAY	<u>other</u>
Peter McLaughlin Randy Johnson John Keefe	<u>X</u> X X		
John E. Derus Tad Jude Judy Makowske	<u>X</u> <u>X</u>		
Mark Andrew, Chairman	<u>_X</u> _		

**RESOLUTION ADOPTED JULY 14, 1992** 

ATTEST: Jude, Secrétary

# HOPKINS TO CHASKA

#### PERMIT AGREEMENT

ALL A

This agreement, entered into by and between the Hennepin County Regional Rail Authority, a Minnesota political subdivision, ("Permittor") and Suburban Hennepin Regional Park District, a Minnesota political subdivision ("Permittee").

In consideration of the covenants by and between the parties, it is hereby agreed:

1. <u>Premises</u>.

Permittor hereby agrees to grant certain rights and benefits to Permittee hereinafter described with regard to that certain real property located in Hennepin and Carver Counties, Minnesota, described as follows:

> The center 16 feet generally conforming to the track bed of all that part of the HCRRA right-of-way, formerly the Chicago and NorthWestern Transportation Company's rightof-way from State Highway 169 in Hopkins southwesterly to Mile Post 32 in Chaska westerly of U.S. Highway 212 in Carver County.

The said real estate shall be hereinafter described as the "Premises."

2. <u>Uses</u>.

The Premises shall be for the use of Permittee, its agents, officers, employees, subpermittees and invitees for trail purposes only, including but not limited to pedestrian use, cross county skiing, and the riding of horses, bicycles and other vehicles, and for all uses and requirements necessary to the enjoyment of the Premises for said uses. Permittee shall be granted temporary use of adjacent lands controlled by Permittor as reasonably required for construction and maintenance of the Premises.

a shi

3. <u>Term</u>.

The term of this permit shall be for an indefinite period, commencing on \_\_\_\_\_, until termination in accordance with Paragraph 4.

4. <u>Termination</u>.

Either party may at any time terminate this permit by giving thirty (30) days' written notice of its intention to do so. Such notice may be served upon the Hennepin County Regional Rail Authority by delivering a copy thereof to the executive director of the principal office in the Hennepin County Government Center, Minneapolis, Minnesota 55487 or by depositing the same in the United States post office directed to the Executive Director of the principal office. Such notice may be served on the Suburban Hennepin Regional Park District by delivering a copy thereof to its Superintendent, 12615 County Road 9, Plymouth, Minnesota 55441. Except as provided herein, this agreement may not be terminated or revoked by either party hereto.

5. <u>Temporary Nature of Use</u>.

Permittee acknowledges that the Premises was acquired by Permittor specifically and solely for the purpose of constructing a light rail transit system or other permitted transportation uses and its associated facilities and that it is Permittor's intention to allow Permittee to use the Premises only until it is needed for that purpose. Nothing in this Permit shall be deemed to evidence any change by Permittor of its intended use of the Premises for light rail transit purposes or other permitted transportation uses. Rather, Permittor has agreed to the terms of this Permit to provide

a temporary use for the Premises during the time required for further planning and development of the light rail transit system or other permitted transportation uses.

### 6. <u>Rights Upon Termination</u>.

On the expiration of thirty (30) days after such service of said notice, this permit and all rights hereunder shall thereupon terminate and be at an end, saving and excepting such rights as may have accrued to either party hereunder prior to such termination. Permittee shall without further notice or demand, deliver possession of the Premises to the Permittor at the expiration of said thirty (30) days and shall before the expiration of said thirty (30) days, remove all buildings and property placed upon the Premises which it may desire and have the right to remove. If it shall fail to remove buildings and property, its right shall, at the option of the Permittor, cease and Permittee's interest thereto shall be forfeited and at the same time shall belong to Permittor or, in such case, if the Permittor shall elect, it may, at any time after the expiration of said period of thirty (30) days, tear down and/or remove any or all such buildings and property at the expense of Permittee without any liability for damages thereof in any respect whatsoever and Permittee shall thereupon promptly reimburse Permittor for all expenses incurred by it in doing so.

7. <u>Rent</u>.

Upon any such termination of this permit, rent shall be paid by the Permittee to the date of termination fixed by said notice at the rate of \$1.00 per year.

#### 8. Other Users.

The Hennepin County Regional Rail Authority shall assume responsibility for securing such permissions as may be required from the Minnesota Department of Transportation in connection with this permit. In addition, Permittor shall use its best efforts to terminate or amend any permits or leases, or other written permission to the Premises which may previously have been extended to others by Permittor and which conflict with this permit.

9. <u>Subpermits</u>.

Permittee shall have the right to grant permits to subpermittees on the same terms and conditions and for the same uses as are contained in this permit. The Permittor shall have the right to review and approve said subpermits, but such approval shall not be unreasonably withheld. Said subpermits may provide for the survival of such subpermits by consent of Permittor in the event of any failure to perform on the part of Permittee.

10. <u>Signage</u>.

Permittee shall maintain signage, including kiosks, on the Premises identifying the Premises as a temporary trail corridor of the Suburban Hennepin Regional Park District. Any such signage must receive the prior approval of Permittor and also identify the Hennepin County Regional Railroad Authority as the owner of the corridor and that the corridor is reserved for light rail transit or other future transportation uses.

11. <u>Nuisance</u>.

Permittee shall not permit the existence of any nuisance on said Premises. Permittee at all time shall keep said Premises

clean and shall comply with all laws, ordinances and regulations respecting Permittee's business and use and occupation of said Premises. Permittee at its sole cost shall make any and all improvements, alterations, repairs and additions and install all appliances required on said Premises by or under any such regulations, ordinances or laws. No bills, posters or advertising matter of any kind shall be posted on said Premises; provided, however, that Permittee may post on appropriate structures, informational materials relating to the trail.

12. Utilities, Title.

Permittee accepts said Premises subject to the rights of any person, firm or corporation, including the Permittor in and to any existing telephone, telegraph and/or other wires, poles and facilities of any kind whatsoever, whether or not of record, and should it at any time become necessary because of Permittee's use of the Premises to relocate any of said poles, wires or facilities by reason of this permit, Permittee shall bear and pay the cost of so doing.

Permittee also accepts said Premises subject to any want or failure at any time of Permittor's title to said Premises or any part thereof and Permittee shall assume any damages sustained by Permittee in connection therewith. Permittee also accepts such Premises subject to rights of any party, including Permittor, in and to any existing roadways and easements. Permittee agrees to provide to Permittor or other tenants of Permittor access over and through the Premises on these roadways and easements should such access be deemed necessary by Permittor. Permittee accepts said

Premises subject to the right of Permittor, its employees, agents and contractors to walk upon said Premises to repair adjacent property and the right of Permittor, its employees, agents and contractors to temporarily place equipment upon the property at Permittor's own responsibility and risk for the purpose of maintaining, repairing or inspecting or constructing upon Permittor's adjacent property.

13. Indemnification.

Permittee shall defend, indemnify and hold harmless Permittor, its Commissioners, officers, agents, and employees from any liability, claims, demands, personal injury, costs, judgments, or expenses, including reasonable attorney's fees, resulting directly or indirectly from an act or omission of Permittee, its agents, employees, customers, invitees, subpermittees or other occupiers of the Premises.

Permittor shall not be liable to Permittee or those claiming by, through, or under Permittee for any injury, death or property damage occurring in, on or about the Premises based upon the construction, operation or maintenance of the Premises by Permittee or any subpermittee, nor for the loss or damage by reason of the present or future condition of repair of the Premises, or for the loss or damage arising from the acts or omissions or Permittee, its agents, employees, customers, invitees, subpermittees or other occupiers of the Premises.

14. Insurance.

Permittee further agrees that if in any case the release and indemnity provided in this section shall not be valid,

Permittor shall have the full benefit of any insurance effected by the Permittee upon the property injured, destroyed or damaged and/or against the hazard involved; and Permittee agrees that any and all such insurance shall be so written that the insurer shall have no claim or recourse of any kind whatsoever against Permittor in connection therewith.

15. Waste.

Permittee, in consideration of the permitting of the said Premises, as herein provided, hereby covenants and agrees to pay the rent therefor promptly, as above provided, and fully to abide by and perform all and singular the conditions, covenants and agreements herein contained and to be observed and performed by said Permittee and to yield up said Premises unto the Permittor at the expiration or termination of this permit agreement in as good condition as when entered upon.

16. Quiet Enjoyment.

Permittor has the right and authority to enter into this agreement and if Permittee pays the rent required hereby and otherwise performs the terms hereof to be performed by Permittee, Permittee shall, during the term hereof, be entitled to quiet enjoyment and possession of the Premises subject to the termination provisions hereof. Notwithstanding the foregoing, Permittee acknowledges that the rights provided to it by virtue of the Permit are subject to the provisions of Paragraph 12.

17. Waiver.

No receipt of money by Permittor from Permittee after any default by Permittee or after the expiration of this permit or

after the service of any notice or after the commencement of any suit or after final judgment for possession of said Premises, shall waive such default or reinstate, continue or extend the term of this permit or affect any such notice or suit, as the case may be. No waiver of any default of Permittee shall be implied from omission by Permittor to take any action on account of such default, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated.

18. Breach.

It is further agreed between the parties hereto, that if the said Permittee shall breach or make default in any of the conditions, covenants or agreements of this permit, which breach or default shall continue for fifteen (15) days after Permittee's receipt of written notice thereof from Permittor, then it shall be lawful for the Permittor, then or at any time thereafter, to declare this permit ended, and to reenter said Premises and take possession thereof, with or without process of law, and to use any reasonable or necessary lawful force for regaining possession; whereupon the rights and obligations of the parties shall be the same as above specified in the case of termination at the end of thirty (30) days' notice; and it is hereby further agreed and provided that any waiver at any time of a breach of any condition, covenant or agreement of this permit shall extend only to the particular breach so waived and shall, in no manner, impair or affect the existence of such condition, covenant or agreements, or the right of Permittor thereafter to avail itself of same and any

subsequent breach thereof. In the event Permittor has to take action for repossession of said property, Permittee, its assigns or heirs shall be liable for reasonable attorney's fees incurred by Permittor.

19. Assignment.

The benefits and obligations of this permit shall extend to and shall bind the heirs, administrators, executors, leases, successors or assigns of the parties hereto, but no interest in this permit shall be assigned, nor said Premises or any part thereof shall be subpermitted, used or occupied by any party other than the Permittee unless specifically stated herein. Permittor reserves the right to review and revise the rental applicable to this permit upon any change in the status of this permit, the Permittee, or person occupying in the Premises during the term of this permit or any renewal thereof.

20. Improvements.

Permittee shall be responsible for the construction of all improvements necessary to the maintenance of a trail corridor on the Premises and the maintenance of said trail corridor. Permittee shall also be responsible for the construction of all bridges and crossings deemed necessary for Permittee to maintain the trail corridor. Construction plans, if any, shall be submitted to the Permittor for review and comment. Permittor reserves the right to reject any plans for construction proposed by Permittee on the grounds, in Permittor's sole discretion, that said plans are incompatible with its future use of the Premises.

## 21. Law Enforcement.

Permittee shall have primary responsibility for the promulgation of rules, regulations and ordinances relating to the Premises. The parties hereto recognize that municipal ordinances and law enforcement may also be involved in regulating the Premises. Permittee agrees to use its best efforts to coordinate regulation and law enforcement of the Premises with the several municipalities in which the Premises lie.

## 22. Environmental Concerns.

Permittee shall not create or permit any condition of the Premises that could present a threat to human health or to the environment. Permittee shall bear the expense of all practices or work, preventative or remedial, which may be required because of conditions of the Premises introduced by Permittee, any Subpermittees or Invitees during Permittee's period of use, including conditions introduced by Permittee which affect other lands. Permittee expressly agrees that the obligations it hereby assumes shall survive cancellation of this Permit. Permittee agrees that statutory limitation periods on actions to enforce these obligations shall not be deemed to commence until Permittor discovers any such health or environmental impairment, and Permittee hereby knowingly and voluntarily waives the benefits of any shorter limitation period.

Permittor shall have the right, but not the duty, to enter upon the Premises from time to time as set forth below to inspect the premises for environmental contamination and in the course thereof to conduct soil and groundwater testing. Permittor may

enter the Premises during regular business hours of Permittee without prior notice, and may enter the Premises during periods other than regular business hours either with prior written consent of Permittee or without if Permittor reasonably believes that an emergency exists on the Premises. Permittor shall conduct any such inspections or testing so as to minimize interference with Permittee's operations. Permittor's entry on to the Premises pursuant to this paragraph shall not relieve the Permittee's obligation to pay rent under this Permit.

#### 23. Compliance with Laws, Ordinances and Rules.

Permittee agrees to comply with all laws, ordinances and regulations of federal, state, municipal and local government agencies as they apply to use of the Premises.

## 24. Condition of Premises Inspection.

Permittee accepts the premises in an "AS IS CONDITION" with no express or implied representations or warranties by Permittor as to the physical condition or fitness or suitability for any particular purpose, express or implied. Permittee is responsible for and has had ample opportunity to inspect the Premises, is familiar with the same, and has determined to its satisfaction the fitness of the Premises for its intended use.

IN WITNESS WHEREOF, the parties hereto have signed this Permit

Agreement as of \_\_\_\_\_, 1992.

Upon proper execution, this agreement will be legally valid and binding.

Assistant County Attorney 7-24-92 Date:

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

C hairman, Board of Commissioners

rector D. ve

SUBURBAN HENNEPIN REGIONAL PARK DISTRICT

Superintendent

Attorney for Suburban Hennepin Regional Park District Date:

Approved as to execution:

Assistant County Attorney Date: 7-24-92

Chair, Board of Commissioners

\$21612\SWTRAIL\PERMIT.CAR\7-7-92\gfs

#### RESOLUTION NO. 42-HCRRA-89

The following resolution was offered by Commissioner Keefe, seconded by Commissioner Spartz:

HOPKINS

WHEREAS, Resolution 89R-HCRRA-88 authorized staff to negotiate with the Chicago and NorthWestern Transportation Company (CNW) for the purchase of an abandoned railroad right of way together with necessary connections to currently owned Hennepin County Regional Railroad Authority (HCRRA) properties, all lying between the cities of Hopkins and Chaska;

BE IT RESOLVED, That the purchase agreement with CNW for acquisition of the railroad right of way between Milepost 19.9 in the City of Hopkins and Milepost 32 in the City of Chaska, Carver County in the maximum amount of \$2,700,000 be approved and that the Chairman is authorized to sign the agreement on behalf of the Authority; and that the Deputy Executive Director be authorized to accept the necessary documents to complete the transaction;

BE IT FURTHER RESOLVED, That staff is directed to pursue funding participation from the State of Minnesota Railbank program, State of Minnesota Department of Transportation, City of Eden Prairie, and Carver County Regional Railroad Authority to support the acquisition of the CNW right of way.

The question was on the adoption of the resolution and there were 6 YEAS and 0 NAYS as follows:

COUNTY OF HENNEPIN BOARD OF COUNTY COMMISSIONERS	YEA	NAY	OTHER
Jeff Spartz	<u></u>		
Randy Johnson	<u></u>		
John Keefe	<u></u>		
John E. Derus	<u>x</u>		
Tad Jude	<u></u>		
Mark Andrew			ABSENT
Sam S. Sivanich, Chairman	<u></u>		

RESOLUTION ADOPTED JULY 25, 1989

ATTEST: Secretary

#### HOPKINS TO CHASKA RIGHT OF WAY

#### CHICAGO AND NORTHWESTERN TRANSPORTATION COMPANY

Parcel 1:	Milepost 21-Milepost 32 Length - 11 miles PRICE		\$1,750,000
	Proposed Sources of Fund: City of Eden Prairie MnDOT MN Rail Bank Program Carver County Regional Railroad Authority HCRRA	250,000 250,000 750,000 77,000 423,000	\$1,750,000
Parcel 2:	Milepost 19.9-Milepost 21 Length - 1.1 Miles PRICE		\$950,000
,	Proposed Sources of Funds: MN Rail Bank Program HCRRA	475,000 475,000	\$950,000

TOTAL COST TO HCRRA

\$898,000

\$ 2,700,000

HOPK-INS TO 5754384 CHASKA DEED NO. BC

Authorization No. 7246

DEED NO. 86511

	$\begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $	THE GRANTOR, CHICAGO AND NORTH WESTERN TRANSPORTATION ANY, a Delawara corporation, whose principal office is located at N. Canal Street, Chicago, Illinois, for the consideration of AND NO/100 (\$10.60) DOLLARS, conveys and quitclaims to KENNEPIN TY REGIONAL RAILROAD AUTHORITY, a Minnesota political subdivision local government unit of the State of Minnesota, 2400-A Government er, Minneapolis, Minnesota 55487, GRANTEE, all interest in the powing described real est.te situated in the Counties of Hennepir	
		Carver, and the State of Minnesota, to wit:	
	19-116-000 000 000 000 000 000 000 000 000 00	HENNEPIN COUNTY, MINNESOTA Strips of land of varying widths being part of Grantor's railroad right of way from Hopkins to Chaska located in the County of Hennepin, State of Minnesota, including all of Grantor's rights of way and other real property associated therewith, not previously conveyed and not excluded and excepted herein, all as located over, across and upon the following described lands, to wit: Beginning at the South line of Excelsior Avenue in the Southwest Quarter of Section 19, Township 117 North, Range 21 West of the Fifth Principal Meridian; thence extending Southwesterly and continuing	
	0 1/1	across the following described sections:	
	-17 2 6	TOWNSHIP 117 NORTH, RANGE 21 WEST OF THE FIFTH PRINCIPAL MERIDIAN	
0 4	r (1)	Section 19 - Southwest Quarter 57 X	
	100/5	TOWNSHIP 117 NORTH, RANGE 22 WEST OF THE FIFTH PRINCIPAL MERIDIAN (30)	
0	21- 0007 13 - 0007 44- 0017	Section 24 - South Half of the Southeast Quarter Section 25 - Northwest Quarter of the Northeast Quarter; (34) North Half of the Northwest Quarter Section 26 - East Half of the Northeast Quarter; Government Lot 4; Government Lot 3; Government Lot 2;	
	1 X	Government Lot 1 Section 27 - Southeast Quarter of the Southeast Quarter Section 34 - Northeast Quarter; West Half of the Southeast Quarter; East Half of the Southwest Quarter	
11	- 0004	TOWNSHIP 116 NORTH, RANGE 22 WEST OF THE FIFTH PRINCIPAL MERIDIAN	
		Section 3 - Northwest Quarter Section 4 - Southeast Quarter of the Northeast Quarter part of which is described in Certificate of Title	
	200	Section 9 - Northeast Quarter; West Half of the Southeast Quarter	
	0003 & 41-0002 2001 2001 0003	Quarter; Southwest Quarter Section 16 - Northwest Quarter Section 17 - East Half of the Northeast Quarter; Southeast Quarter; Southeast Quarter of the Southwest Quarter	
1000 - 2	1111	Section 20 - Northwest Quarter Section 19 - Southeast Quarter of the Northeast Quarter; North Half of the Southeast Quarter; Government	
22 23	0	Lot 3 Section 30 - Government Lot 1; Government Lot 2; Northwest Quarter of the Southwest Quarter.	
0-12		CARVER COUNTY, MINNESOTA	
03-116-	4601	Strips of land of varying width being part of Grantor's railroad right of way from Hopkins to Chaska located in the County of Carver, State of Minnesota, including all of	
Page 1 of 4 Pages			

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DEED NO. 86511

Authorization No. 7246

Grantor's rights of way and other real property associated therewith, not previously conveyed and not excluded and excepted herein, all as incated over, across and upon the following described lands, to wit:

TOWNSHIP 116 NORTH, RANGE 23 WEST OF THE FIFTH PRINCIPAL MERIDIAN

Section 25 - Government Lot 3: Southeast Quarter Section 36 - Northwest Quarter of the Northeast Quarter; Northeast Quarter of the Northwest Quarter; Government Lot 3; Government Lot 4 Section 35 - South Half of the Northeast Quarter; South Half

of the Northwest Quarter; Northwest Quarter of the Southwest Quarter

Section 34 - Northeast Quarter of the Southeast Quarter; Northwest Quarter of the Southeast Quarter

thence continuing Southwesterly across the Southwest Quarter of the Southeast Quarter of said Section 34, Township 116 North, Range 23 West of the Fifth Principal Meridian to Grantor's Milepost 32, Station 1157+40, being a line drawn at right angles to Grantor's original main track center line at a point thereon distant 1,245 feet Southwesterly from its intersection with the North line of the Southwest Quarter of the Southeast Quarter of said Section 34.

All according to the Government Survey thereof.

Together with and including all of Grantor's right, title and interest in "as is" condition as of the date of this deed, in and to all bridges and culverts (but not trackage, signal and communication facilities) situated upon said real estate.

Subject to:

e status

- (1) Roads and highways, if any.
- (2) Covenants, easements, conditions, and restrictions of record.
- (3) Rights of any government agency, public or quasi-public utilities to occupy said premises for the use and maintenance of existing conduits, sewers, drains, water mains, gas lines, electric power liros, and other utilities, whether or not of record.

By the acceptance of this conveyance, the Grantee, for itself and/or its heirs, successors, transferees and assigns, hereby agrees

Page 2 of 4 Pages

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DEED NO. 86511

#### Authorization No. 7246

to, at its sole cost and expense to take all steps necessary to comply with any and all governmental requirements relating to the conveyance of said real estate, including land subdivision or use requirements and payments for any a..d all transfer taxes or other taxes and fees incidontal to the recordation of the deed, except for documentary stamps. In the event Grantee fails to comply with any such requirement and Grantor is obligated so to comply, then Grantee shall be liable for all costs, fees, expenses, interests and judgments against Grantor, and the same shall constitute a lien against said real estate until full payment by Grantee.

Further, this conveyance is made upon the express condition that the Grentor, its successors and assigns, shall have the right to enter upon the above described real estate, for a period of ninety (90) days (weather permitting) from the date of this conveyance or until June 30, 1991, whichever is later, within which to remove all railroad tracks and appurtenances thereto, or any signal and communication facilities from said real estate and adjoining real estate. After said removal, Grantor will make the necessary repair of street, road and highway crossing surfaces.

The Seller certifies tha	t the Seller does not know of any
wells on the described real propert	y,
1990 AND PRIOR TAXES PAID UCPT. OF PAOFCRITY TAX & PUBLIC RECORDS C. V. FILED NOT REQ.	DEED TAX DUE HEREON \$ 7.576.80
FEB 27 1991 FEB 20 1991	HEANER IN COUNTY PROPERTY TAY OUR
HENNIG -UNTY MINN. TOTAL MELE DEPUTY	144 0560 FOX 2010 02/23/91 8:5148 (Photo 47%)%.30
DATED this 20th day o	f, 1990.
Signed, Sealed and Delivered in Presence of:	CHICAGO AND NORTH WESTERN TRANSPORTATION COMPANY
Carthelia Aaster	By Prolent B. TAYLOR, WARE, Bresydent
Cerry neckay	Attest Anne E. KEATING ESST. SECRETATION
V	
Page 3 o	f 4 Pages

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1997 - A

STATE OF ILLINOIS) COUNTY OF C O O K

I, RICHARD S. KENNERLEY, a Notary Public duly commissioned and qualified in and for the County and State aforesaid, DO HEREBY CERTIFY that RICHARD B. TAYLOR and ANNE E. KEATING , to me personally known and known to me to be, respectively, Vice President and Assistant Secretary of CHICAGO AND NORTH WESTERN TRANSPORTATION COMPANY, a Delaware corporation, and the identical persons whose names are subscribed to the foregoing instrument, appeared before me this day in person, and being first duly sworn by me, severally acknowledged to me that they are, respectively, Vice President and Assistant Secretary of said corporation; that as such officers they signed, sealed and delivered said instrument in behalf of said corporation by authority and order of its Board of Directors, as the free and voluntary act and deed of said corporation, and as their own free and voluntary act; that the seal affixed to said instrument is the seal of said corporation; and that said corporation executed said instrument for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal as such Notary Public, at Chicago, Illinois, this <u>20th</u> day of <u>December</u>, 19<u>90</u>.

of cook, In the State of Il nois RICHARD S. KENNERLEY Notary Publica

i,

My Commission Expires: <u>November 8, 1992</u>

"Benia tox statements to: "Benia tox statements to: Hennepin Count: Regional Ruilroad Authority Southwest Street Level Covernment Center Mpls, Mn 55487-0016 (Mort. Code 763)

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OPVICIAL MAL

RICHARD S, KENNERLEY

MOTARY PUBLIC STATE OF SLUMOIS MY COMMISSION STP. NOV. 8, 1992

This instrument was prepared by Chicago and North Western Transportation Company, 165 North Canal Street, Chicago, Illinois 60606.

L-131-17

Page 4 of 4 Pages

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# HOPKINS TO CHASKA MNDOT MORTGUAGE

AGREEMENT No. 66279 AGREEMENT BETWEEN HENNEPIN COUNTY REGIONAL

RAILROAD AUTHORITY

AND

THE STATE OF MINNESOTA

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#### AGREEMENT

This Agreement is made by and between the State of Minnesota, acting by and through its Department of Transportation (hereinafter referred to as "MN/DOT"), and the Hennepin County Regional Railroad Authority (hereinafter referred to as "HCRRA").

WITNESSETH THAT:

WHEREAS, pursuant to Minn. Stat. 222.50, Subd. 7.e., The Commissioner of Mn/DOT is authorized to pay, from the Minnesota Rail Service Improvement Account, a portion of the costs of acquiring a rail line by a regional railroad authority established pursuant to Minn. Stat. Ch. 398A; and

WHEREAS, HCRRA is established as a regional rail authority pursuant to Minn. Stat. Ch. 398A, and has received a certificate of incorporation from the Secretary of State; and

WHEREAS, MN/DOT is interested in preserving a rail line including the railroad bed, right-of-way, and other appurtenances of railroad right-of-way, including public use sidings, and railroad buildings from milepost 19.9 (approximately) to milepost 32.0 from Hopkins to Chaska, and from milepost 19.9 to milepost 21.0 in Hopkins, hereafter referred to as the "Line", for possible continued transportation purposes; and

WHEREAS, the Interstate Commerce Commission has authorized the abandonment of the Line and the Chicago and North Western Transportation Company intends to cease rail service on the Line; and

WHEREAS, HCRRA has reached agreement to acquire the Line pursuant to Minn. Stat. 398A.04, Subd. 1(b) for continuation of transportation service,

NOW, THEREFORE, IT IS AGREED BY AND BETWEEN THE PARTIES:

Pursuant to the following terms and conditions, MN/DOT will provide to HCRRA up to 50% of the cost of acquiring the Line, not to exceed \$1,225,000.00.

#### ARTICLE I. Use of Funding

The funds provided by MN/Dot to HCRRA hereunder shall be used exclusively for acquisition of the Line. Should the HCRRA fail to use the property for transportation purposes within 20 years from the date this agreement is entered into. The HCRRA shall return to the state the sum of \$1,225,000.00 used to purchase the line or 50% of the then value of the property, which ever is greater.

#### ARTICLE II. Notifications.

The HCRRA shall notify MN/DOT through its Director of the Office of Railroads and Waterways in writing at least 30 days before the effective dates of the following agreements, events or arrangements:

1. All contract agreements, or amended agreements, with any party for rail operations, maintenance and management or sale of the Line or portion of the Line;

2. The receipt of the final payment of any Agreement of Sale embodying the HCRRA's sale of the railroad assets; and

3. Changes in HCRRA organizational structure, address, telephone number, and chairman.

In the event that HCRRA decides to change the Line from transportation to non-transportation use or to sell, trade or abandon the Line, HCRRA shall notify MN/DOT no later than 180 days prior to implementation of that decision. Nothing in this section shall relieve HCRRA of the obligations set out in Article III of this agreement.

#### ARTICLE III. Disposition of Line.

For the purposes of Article III of this Agreement the reference "Line" refers to the entire Line or any portion thereof.

Section 1. HCRRA shall have the right to enter into an agreement to sell the Line as long as the terms of the agreement to sell include the following provisions:

- a. The sale of the Line will be complete no sooner than 20 years from the date of this agreement.
- b. Any provision for prepayment of the purchase price or any part thereof will be subject to MN/DOT approval.

- c. MN/DOT and all contributors to the initial acquisition of the Line by MN/DOT shall receive payment pursuant to Article III, Section 4 of this Agreement prior to the effective date of the transfer of title to the Line from HCRRA to the purchaser.
- d. HCRRA shall retain the title to the Line until c. above is complete.
- e. The purchaser shall neither assign nor transfer any rights or obligations under the Agreement to sell by HCRRA without the prior written consent of HCRRA and MN/DOT.
- f. Any sale agreement shall be subject to MN/DOT review and approval.

Section 2. If the Line is not sold pursuant to Article III, Section I, and it is to be otherwise sold, traded, abandoned; or if HCRRA ceases to exist, MN/DOT shall have the first option to buy the Line pursuant to the procedures of the State Rail Bank Program, Minn. Stat. 222.63 and 14 MCAR 1.4010-1.4016.

a. MN/DOT's cost shall be no more than 50% of the then value of the line or equal to the percentage of their investment in the initial acquisition of the Line, plus the cost of any value added improvements to the line.

Section 3. The following shall govern under MN/DOT's option to buy the Line:

a. Under MN/DOT's option, MN/DOT and HCRRA will attempt to negotiate a purchase price. If a purchase price cannot be agreed upon, each party will appoint an arbitrator. The two arbitrators will select a third arbitrator and the two parties shall share equally the cost of the arbitration panel. The panel of arbitrators will consider the positions of both parties and will recommend a reasonable purchase price.

MN/DOT may then purchase the property at the arbitrator's recommended purchase price. If MN/DOT decides not to purchase at the recommended purchase price, it retains the right to purchase the Line at the same price which is agreed upon by HCRRA and the next bona fide prospective purchaser of the Line.

b. In the event that MN/DOT does not purchase the Line under the procedures in 3a. and HCRRA receives a bona fide offer to purchase the Line and HCRRA agrees to accept the offer, MN/DOT shall have a right to purchase the Line for the same amount. This right to purchase requires that HCRRA notify MN/DOT of its decision to sell and of the terms and conditions of the bona fide offer. MN/DOT shall then have 30 days to accept an offer to sell for the same amount as set forth in the bona fide offer to purchase.

If MN/DOT agrees to purchase the Line, it will have a reasonable period of time not to exceed one year to obtain the financial encumbrance to complete the purchase. If MN/DOT fails to exercise this option to purchase, HCRRA is free to accept the bona fide offer.

Section 4. Any agreement between the HCRRA and any purchaser shall include a specific time frame and schedule indicating how MN/DOT and all contributors to the initial acquisition of the Line shall be paid. MN/DOT's share of the sale, and that of all the contributors, shall be at a percentage equal to the percentage of their investment in the initial acquisition of the Line.

Section 5. All agreements between the HCRRA and any other parties participating in the purchase of the Line shall include provisions recognizing MN/DOT's rights pursuant to Article III, Sections 1, 2, 3, 4 and Article IV of this Agreement.

#### ARTICLE IV. Indebtedness of Loan

The indebtedness of the Loan shall be evidenced by this Loan Agreement and by separate mortgage agreement which shall be recorded with the appropriate county or counties.

#### ARTICLE V. Conditions of Payment.

MN/DOT will provide the HCRRA with the funding provided herein upon receipt of an acceptable final purchase agreement with the Chicago and North Western Transportation Company that has been approved by the HCRRA and all other participants in the purchase. In addition, the HCRRA shall also notify MN/DOT in writing of the actual purchase price, the names of all contributors to the purchase and the amount contributed by each party, and shall provide copies of all agreements with such contributors. Prior to release of MN/DOT's funding, HCRRA shall also verify to the satisfaction of MN/DOT that all contributors to the purchase price are bound by the conditions of Article III, Sections 1, 2, 3, 4 and Article IV of this Agreement.

#### ARTICLE VI. State and Federal Laws Applicable.

The HCRRA shall comply with and enforce all applicable state and federal laws relating to the acquisition and operation of the Line by itself and its contractors, lessees and agents including but not limited to Minn. Stat. 222.64.

#### ARTICLE VII. Effective Date of Contract.

This agreement shall be effective when executed by all parties or upon such date as it is executed as to encumbrance by the Commissioner of Finance, whichever occurs later.

#### ARTICLE VIII. Assignment.

The HCRRA shall neither assign nor transfer any rights or obligations under this Agreement without the prior written consent of MN/DOT.

#### ARTICLE IX. Amendments.

Any amendment to this Agreement shall be in writing and shall be executed by the same parties who executed the original agreement, or their successors in office.

#### ARTICLE X. Liability.

HCRRA agrees to defend, indemnify and save, and hold MN/DOT, its agents and employees, harmless from any and all claims or causes of action arising from the performance of this Agreement by the HCRRA or its agents or employees and from the ownership, operation and maintenance of the Line by the HCRRA.

#### ARTICLE XI. State Audits.

The books, records, documents, and accounting procedures and practices of the HCRRA relevant to this Agreement shall be subject to examination by the MN/DOT's auditors, the state auditor, and the legislative auditor.

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed, intending to be bound thereby.

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| HENNEPIN COUNTY REGIONAL<br>RAILROAD AUTHORITY | MINNESOTA DEPARTMENT OF<br>TRANSPORTATION            |
|------------------------------------------------|------------------------------------------------------|
| By Mark Andrew                                 | By Dany E Juger                                      |
| Title: Chair, HCRRA                            | Title: Asst Commu                                    |
| Date: <u>5-8-91</u>                            | Date: 6/4/9/                                         |
| By Charling<br>Title: Actor Admint.            | As to Form and Execution by<br>the Attorney General: |
| Date: 5-7-9/                                   | By there a                                           |
| Ву                                             | Date:                                                |
| Title:                                         | COMMISSION Original signed TRATION                   |
| Date:                                          | ву JUN 10 1991                                       |
| Approved as to form                            | Date: By Gerald T. Joyce                             |
| Title: Asst Henn. Co. Attorney                 | COMMISSIONER OF FINANCE                              |
| Date: 4-26-91                                  | COMMISSIONER OF FINANCE                              |
|                                                | ByUAN_HOFER                                          |
|                                                | Date:                                                |

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#### STATUTORY MORTGAGE AND ASSIGNMENTS OF RENTS

THIS STATUTORY MORTGAGE AND ASSIGNMENT OF RENTS (the "Mortgage"), made this <u>177</u> day of <u>1991</u>, between the Hennepin County Regional Rail Authority, a Minnesota Political corporation, with an address in care of Mark Andrew, Chairman Hennepin County Regional Railroad Authority, A-2307 Government Center, Minneapolis, Mn55487.0237, hereinafter (whether one or more in number) called the "Mortgagor" and the State of Minnesota acting through its Department of Transportation, hereinafter called the "Mortgagee",

#### WITNESSETH:

To secure the payment of One Million Two Hundred Twenty Five Thousand and No/100 (1,225,000.00) DOLLARS, without interest, according to the terms of that certain Loan Agreement bearing even date herewith between the Mortgagor and Mortgagee (hereinafter called the "Debt"):

Mortgage. Mortgagor hereby mortgages to Mortgagee the tracts of land lying in the County of Hennepin, State of Minnesota, legally described on Exhibit A hereto, subject to liens, encumbrances, and defects of title of record;

Assignment of Rents. Mortgagor hereby assigns to the Mortgagee all rents and profits due or to become due with respect to the mortgaged premises, whether before or after foreclosure or during any redemption period after a sheriff's foreclosure sale, provided that mortgagee hereby consents to all existing and hereafter arising leases of the mortgaged premises so that the same shall survive the foreclosure of this mortgage (and the taking by the mortgagee of a deed in lieu thereof) provided that:

- The terms of leases hereafter arising do not exceed five
   years; and
- Rental under such leases are not prepaid for a period of more than one (1) year.

- 1. Statutory Covenants. Mortgagor makes and includes in this Mortgage the statutory covenants and other provisions set forth in Minnesota Statutes Section 507.15 or in any future Minnesota Statute providing for a statutory form of real estate mortgage and, the Mortgagor covenants with the Mortgagee the following additional covenants:
  - (a) To pay the indebtedness as herein provided;
  - (b) To pay all taxes.
  - (c) That the premises shall be kept in repair and no waste shall be committed.
  - (d) That the whole of the principal sum shall be come due after default, in the payment of any installment of principal or interest, or of any tax, or in the performance of any other covenant, at the option of the Mortgages.
- 2. Events of Default/Acceleration of Maturity. Mortgagor agrees that at the option of the Mortgagee and in addition to Mortgagee's right to accelerate the maturity of the indebtedness secured hereby as set forth above in the Statutory Covenants, the entire remaining principal balance plus accrued interest shall become due and payable in full upon the occurrence of any of the following (each of which is herein referred to as an "Event of Default"):
  - (i) Failure by mortgagor to make any payment on the Debt when due; or
  - (ii) The default by Mortgagor in the performance of other covenants or agreements contained herein or in the Debt; or
  - (iii) Any default under the terms of any security agreement, loan agreement, or any other writing securing or governing the repayment of the Debt; or
    - (iv) The bankruptcy or insolvency of the Mortgagor; or
      - (v) The transfer of title of the property securing this Mortgage and described in Exhibit A by the mortgagor to any third party.

3. Statutory Power of Sale, Waiver and Agreement. At maturity, whether at the stated time or prior thereto by the acceleration of maturity pursuant thereto, Mortgagee (in addition to any other remedies provided for herein or which it may have at law or equity) shall have the statutory power of sale, and on foreclosure may retain statutory costs and attorneys' fees. MORTGAGOR HEREBY: EXPRESSLY CONSENTS TO THE FORECLOSURE AND SALE OF THE MORTGAGED PREMISES BY ADVERTISEMENT PURSUANT TO MINNESOTA STATUTES CHAPTER 580, WHICH PROVIDES FOR SALE AFTER SERVICE OF NOTICE THEREOF UPON THE OCCUPANT OF THE MORTGAGED PREMISES AND PUBLICATION OF SAID NOTICE FOR SIX WEEKS IN THE COUNTY OF MINNESOTA WHERE THE MORTGAGED PREMISES IS SITUATED; ACKNOWLEDGES THAT SERVICE NEED NOT BE MADE UPON MORTGAGOR PERSONALLY (UNLESS MORTGAGOR IS AN OCCUPANT) AND THAT NO HEARING OF ANY TYPE IS REQUIRED IN CONNECTION WITH THE SALE; AND EXPRESSLY WAIVES ANY AND ALL RIGHT TO PRIOR NOTICE OF SALE OF THE MORTGAGED PREMISES AND ANY AND ALL RIGHTS TO A PRIOR HEARING OF ANY TYPE IN CONNECTION WITH THE SALE OF THE MORTGAGED PREMISES.

4. Miscellaneous. This Mortgage shall be governed by and construed in accordance with the laws of the State of Minnesota and shall inure to the benefit of Mortgagee, its successors and assigns. In the event any provision hereof is determined to be unenforceable or invalid shall be deemed severed from this Mortgage and the remaining provisions carried out with the same force and effect as if the severed provisions or part thereof had not been made a part hereof.

Mortgagor or its assigns shall have the right to enter into leases of the mortgaged properties the estates of which shall be prior and superior in all respects to the lien of this Mortgage.

> Hennepin County Regional Railroad Authority a Minnesota political corporation

Mark Andrew

STATE OF MINNESOTA ) ) ss COUNTY OF \_\_\_\_\_ )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_\_, 1991, by \_\_\_\_\_\_ the Attorney for the Hennepin County Regional Railroad Authority, a Minnesota political Corporation, on behalf of the corporation.

Notary Public

Contract Number 66279

#### ACKNOWLEDGEMENT OF RECIPIENT'S AUTHORIZED SIGNATURES

STATE OF MINNESOTA

÷.

| COUNTY OF HENNEPIN                                                                    |
|---------------------------------------------------------------------------------------|
| On this 17 day of May, 1991, before me appeared<br>Mark Andrew and Vern T. Genzlinger |
| to me personally known, who being by me duly sworn, did say they are                  |
| respectivelyChairman and Deputy Executive Director of                                 |
| Hennepin County Regional Railroad Authority .<br>RECIPIENT                            |
| By <u>Hadling</u><br>Title <u>Deputy Executive Pirector</u>                           |
| By Mark Andreas Anald Algurence<br>Title Chairman                                     |
|                                                                                       |

DONALD A. LAWRENCE My commission expires 2-28-94

Cedar Lake Trail

#### RESOLUTION NO. <u>18-HCRRA-94</u>

The following resolution was offered by Commissioner Andrew, seconded by Commissioner Staples:

WHEREAS, Resolution 51-HCRRA-93 directed Hennepin County Regional Railroad Authority (HCRRA) staff to cooperate with the City of Minneapolis and the Minneapolis Park and Recreation Board to develop an agreement for HCRRA participation in the Cedar Lake Bike Trail; and

WHEREAS, the City of Minneapolis has developed plans and has obtained federal funding (ISTEA) to support construction of the bike trail; and

WHEREAS, the City of Minneapolis and the Minneapolis Park and Recreation Board will provide local matching funds and assume all maintenance and operating responsibilities,

BE IT RESOLVED, that Permit Agreement No. A09304, between the Hennepin County Regional Railroad Authority (HCRRA) and the City of Minneapolis providing for use of HCRRA property between Lyndale Avenue and Seventh Street in the City of Minneapolis for a bicycle trail, in the receivable amount of \$1.00 annually, be approved and that the Chair be authorized to sign the Agreement on behalf of the Authority.

The question was on the adoption of the resolution and there were <u>7</u> YEAS and <u>0</u> NAYS as follows:

| BOARD OF COMMISSIONERS<br>HENNEPIN COUNTY REGIONAL |                  |     |              |
|----------------------------------------------------|------------------|-----|--------------|
| RAILROAD AUTHORITY                                 | YEA              | NAY | <u>OTHER</u> |
| Mike Opat                                          | <u>    X    </u> | ·   | <u></u>      |
| Mark Andrew                                        | <u>    X    </u> |     |              |
| Peter McLaughlin                                   | <u> </u>         |     |              |
| Randy Johnson                                      | <u>    X    </u> |     |              |
| John Keefe                                         | <u>    X    </u> |     |              |
| Emily Anne Staples                                 | <u>_X</u>        |     |              |
| Sandra Hilary, Chair                               | <u>    X    </u> | ·   |              |

RESOLUTION ADOPTED APRIL 5, 1994

ATTEST: Randy Johnson. Secretary

CEDAR LAKE TRAIL

### **Permit Agreement**

3631

Accement A09304

ANDROVED BY CITY COUNCEL

This agreement, entered into by and between the Hennepin County Regional Railroad Authority, a Minnesota political subdivision, ("Permittor") and the Public Works and Engineering Department of the City of Minneapolis ("Permittee") a political subdivision.

In consideration of the covenants by and between the parties, it is hereby agreed:

1. <u>Premises</u>

Permittor hereby agrees to grant certain rights and benefits to Permittee hereinafter described with regard to that certain real property described as follows:

That part of the Hennepin County Regional Railroad Authority (HCRRA) right of way, in the City of Minneapolis, as delineated and colored green on HCRRA Property Maps numbered 9, and 10 and 11 and attached hereto as Exhibit A.

A more complete legal description will be prepared upon the completion of construction of the bike trail, and will replace and supersede the above description. The said real estate shall be hereinafter described as the "Premises."

2. <u>Uses</u>

The Premises shall be for the temporary use of Permittee, its agents, officers, employees, subpermittees and invitees for trail purposes. Permittor reserves the right to limit, reject or refuse to permit the use of the Premises by Permittee or any subpermittees for any purpose which Permittor, in its sole discretion, deems inappropriate or incompatible with its future use of the Premises or the operations of the Chicago Northwestern Transportation company or any other railroad operating on the right of way adjacent to the Premises. Permittee shall submit any proposed development or other physical alterations to the Premises to Permittor to determine

Agrmts.1/2/11/94/14:06

its acceptability to Permittor prior to contracting any obligations or commitments in connection therewith.

3. <u>Term</u>

The term of this Permit shall be for an indefinite period, commencing on execution of this Agreement by the Chair of the Hennepin County Regional Railroad Authority until termination in accordance with Paragraph 4.

4. <u>Termination</u>

Either party may, at any time and for any reason, terminate this Permit by giving thirty (30) days' written notice of its intention to do so. Such notice may be served upon the Hennepin County Regional Railroad Authority by delivering a copy thereof to the Executive Director at the principal office in the Hennepin County Government Center, Minneapolis, Minnesota, 55487, or by depositing the same in the United States Post Office directed to the Executive Director at the principal office. Such notice may be served on the Public Works and Engineering Department of the City of Minneapolis by delivering a copy thereof to Room 203, City Hall, 350 South Fifth Street, Minneapolis, Minnesota 55415. Except as provided herein, this Agreement may not be terminated or revoked by either party hereto.

#### 5. <u>Temporary Nature of Use</u>

Permittee acknowledges that the Premises was acquired by Permittor specifically and solely for the purpose of constructing a light rail transit system or other permitted transportation uses and its associated facilities and that it is Permittor's intention to allow Permittee to use the Premises only until it is needed for that purpose. Nothing in this Permit shall be deemed to evidence any change by

Permittor of its intended use of the Premises for light rail transit purposes or other permitted transportation uses. Rather, Permittor has agreed to the terms of this Permit to provide a temporary use for the Premises during the time required for further planning and development of the light rail transit system or other permitted transportation uses.

#### 6. <u>Rights Upon Termination</u>

On the expiration of thirty (30) days after such service of said notice, this Permit, and all rights hereunder, shall thereupon terminate and be at an end, saving and excepting such rights as may have accrued to either party hereunder prior to such termination. Permittee shall, without further notice or demand, deliver possession of the Premises to the Permittor at the expiration of said thirty (30) days and shall, before the expiration of said thirty (30) days, remove all buildings and property placed upon the Premises which it may desire and have the right to remove. If it shall fail to remove buildings and property, its right shall, at the option of the Permittor, cease and Permittee's interest thereto shall be forfeited and at the same time shall belong to Permittor or, in such case, if the Permittor shall elect, it may, at any time after the expiration of said property at the expense of Permittee without any liability for damages thereof in any respect whatsoever and Permittee shall thereupon promptly reimburse Permittor for all expenses incurred by it in doing so.

7. <u>Rent</u>

Upon any such termination of this Permit, rent shall be paid by the Permittee to the date of termination fixed by said notice at the rate of \$1.00 per year.

#### 8. <u>Subpermits</u>

Permittee may grant permits to subpermittees only upon written agreement of Permittor. Any subpermit shall be on the same terms and conditions and for the same uses as are contained in this Permit.

9. <u>Signage</u>

Permittee shall provide, install and maintain signage, including kiosks, on the Premises identifying that the Premises are being used by the Minneapolis Public Works and Engineering Department by permission of the owner, the Hennepin County Regional Railroad Authority, until the Premises are used for light rail transit or other transportation uses.

#### 10. Nuisance, Waste

Permittee shall not permit the existence of any nuisance on said Premises. Permittee, at all times, shall keep said Premises clean and shall comply with all laws, ordinances and regulations respecting Permittee's business and use and occupation of said Premises. Permittee, at its sole cost, shall make any and all improvements, alterations, repairs and additions, and install all appliances required on said Premises by or under any such regulations, ordinances or laws. No bills, posters or advertising matter of any kind shall be posted on said Premises; provided, however, that Permittee may post on appropriate structures, informational materials relating to the permitted uses. Permittee shall use all reasonable precautions to prevent any waste, injury, death or property damage and shall modify, repair or replace any railings, pathways or other improvements on the Premises when necessary.

#### 11. Utilities, Title, Existing Rights of Others

Permittee accepts said Premises subject to the rights of any person, firm or corporation, including the Permittor in and to any existing telephone, telegraph and/or other wires, poles and facilities of any kind whatsoever, whether or not of record, and should it, at any time, become necessary because of Permittee's use of the Premises to relocate any of said poles, wires or facilities by reason of this Permit, Permittee shall bear and pay the cost of so doing.

Permittee also accepts said Premises subject to any want or failure at any time of Permittor's title to said Premises or any part thereof and Permittee shall assume any damages sustained by Permittee in connection therewith. Permittee also accepts such Premises subject to rights of any party, including Permittor, in and to any

roadways, easements, leases and permits, whether granted, at Permittor's sole discretion, either prior to or after the date of this Permit Agreement. Permittee agrees to provide to Permittor or other tenants of Permittor access over and through the Premises on these roadways and easements should such access be deemed necessary by Permittor. Permittee accepts said Premises subject to the right of Permittor, its employees, agents, permittees, lessees, and contractors when reasonably necessary to walk upon said Premises to repair adjacent property and the right of Permittor, its employees, agents, permittees, lessees, and contractors to temporarily place equipment upon the property when reasonably necessary for the purpose of maintaining, repairing, inspecting or constructing upon Permittor's property.

#### 12. <u>Indemnification</u>

Permittee shall defend, indemnify and hold harmless Permittor, its Commissioners, officers, agents, and employees from any liability, claims, demands, personal injury, costs, judgments, or expenses, including reasonable attorney's fees, resulting directly or indirectly from an act or omission of Permittee, its agents, employees, customers, invitees, subpermittees, permittees, lessees or other occupiers of the Premises.

Permittor shall not be liable to Permittee or those claiming by, through, or under Permittee for any injury, death or property damage occurring in, on or about the Premises based upon the construction, operation or maintenance of the Premises by Permittee or any subpermittee, nor for the loss or damage by reason of the present or future condition of repair of the Premises, or for the loss or damage

arising from the acts or omissions of Permittee, its agents, employees, customers, invitees, subpermittees, permittees, lessees, or other occupiers of the Premises.

13. Insurance

Permittee further agrees that if in any case the release and indemnity provided in this section shall not be valid, Permittor shall have the full benefit of any insurance effected by the Permittee upon the property injured, destroyed or damaged and/or against the hazard involved; and Permittee agrees that any and all such insurance shall be so written that the insurer shall have no claim or recourse of any kind whatsoever against Permittor in connection therewith.

14. Covenant

Permittee, in consideration of the permitting of the said Premises, as herein provided, hereby covenants and agrees to pay the rent therefor promptly, as above provided, and fully to abide by and perform all and singular the conditions, covenants and agreements herein contained and to be observed and performed by said Permittee and to yield up said Premises unto the Permittor at the expiration or termination of the Permit Agreement in as good condition as when entered upon.

15. <u>Ouiet Enjoyment</u>

Permittor has the right and authority to enter into this Agreement and if Permittee pays the rent required hereby and otherwise performs the terms hereof to be performed by Permittee, Permittee shall, during the term hereof, be entitled to quiet enjoyment and possession of the Premises subject to the termination provisions hereof. Notwithstanding the foregoing, Permittee acknowledges that the rights provided to it by virtue of the Permit are subject to the provisions of Paragraph 11.

16. <u>Waiver</u>

No receipt of money by Permittor from Permittee after any default by Permittee or after the expiration of this Permit or after the service of any notice or after the commencement of any suit or after final judgment for possession of said Premises, shall waive such default or reinstate, continue or extend the term of this Permit or affect any such notice or suit, as the case may be. No waiver of any default of Permittee shall be implied from omission by Permittor to take any action on account of such default, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated.

17. Breach

It is further agreed between the parties hereto, that if the said Permittee shall breach or make default in any of the conditions, covenants or agreements of this Permit, which breach or default shall continue for fifteen (15) days after Permittee's receipt of written notice thereof from Permittor, then it shall be lawful for the Permittor, then or at any time thereafter, to declare this Permit ended, and to reenter said Premises and take possession thereof, with or without process of law, and to use any reasonable or necessary lawful force for regaining possession; whereupon the rights and obligations of the parties shall be the same as above specified in the case of termination pursuant to Paragraph 4; and it is hereby further agreed and provided that any waiver at any time of a breach of any condition, covenant or agreement of this Permit shall extend only to the particular breach so waived and shall, in no manner, impair or affect the existence of such condition, covenant or

agreements, or the right of Permittor thereafter to avail itself of same and any subsequent breach thereof. In the event Permittor has to take action for repossession of said property, Permittee, its assigns or heirs shall be liable for reasonable attorney's fees incurred by Permittor.

#### 18. Assignment

The benefits and obligations of this Permit shall extend to and shall bind the heirs, administrators, executors, leases, successors or assigns of the parties hereto, but no interest in this Permit shall be assigned, nor said Premises or any part thereof shall be subpermitted, used or occupied by any party other than the Permittee unless specifically stated herein. Permittor reserves the right to review and revise the rental rate applicable to this Permit upon any change in the status of the Permit, the Permittee or person occupying the Premises during the term of this Permit or any renewal thereof.

#### 19. Improvements, Maintenance

Permittee shall be responsible for the construction of all improvements necessary to its us of the Premises and shall be responsible for the maintenance of said Premises. Permittee shall also be responsible for the construction of all bridges and crossings deemed necessary for Permittee to provide for any trails on the Premises or to otherwise use the Premises. Construction plans, if any, shall be submitted to the Permittor for review and comment. Permittor reserves the right to reject any plans for construction proposed by Permittee on the grounds, in Permittor's sole discretion, that said plans are inappropriate or incompatible with its future use of the Premises or with the operations of the Chicago and Northwestern

Transportation Company or other railroad operating on the right of way adjacent to the Premises.

#### 20. Environmental Concerns

Permittee shall not create or permit any condition of the Premises that could present a threat to human health or to the environment. Permittee shall bear the expense of all practices or work, preventative, investigative or remedial, which may be required because of any conditions of the Premises introduced by Permittee, subpermittees or invitees during Permittee's period of use, including conditions introduced by Permittee, subpermittees, or invitees which affect other lands. Permittee expressly agrees that the obligations it hereby assumes shall survive cancellation of this Permit. Permittee agrees that statutory limitation periods on actions to enforce these obligations shall not be deemed to commence until Permittor discovers any such health or environmental impairment, and Permittee hereby knowingly and voluntarily waives the benefits of any shorter limitation period.

Permittor shall have the right, but not the duty, to enter upon the Premises from time to time as set forth below to inspect the Premises for environmental contamination and in the course thereof to conduct soil and groundwater testing and to perform environmental investigation, remediation or mitigation. Permittor may enter the Premises during regular business hours of Permittee without prior notice, and may enter the Premises during periods other than regular business hours either with prior written consent of Permittee or without if Permittor reasonably believes that an emergency exists on the Premises. Permittor shall conduct any such inspections or testing so as to minimize interference with Permittee's operations.

Permittor's entry on to the Premises pursuant to this paragraph shall not relieve the Permittee's obligation to pay rent under this Permit.

In addition to the foregoing provisions of this Paragraph 20, and in exchange for the rights and privileges granted in this Permit Agreement, Permittee hereby agrees to bear the expense of all practices or work, preventative, investigative or remedial necessary to comply with all federal, state, local and other governmental statutes, rules and regulations necessary for Permittee's use of the Premises for trail and park purposes regarding any hazardous waste, pollutant, contaminant or petroleum related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. Further, Permittee agrees to defend, indemnify and hold harmless Permittor, its Commissioners, officers, agents and employees from any liability, claims, demands, personal injury, costs, judgments, or expenses, including reasonable attorney's fees arising from exercise of the rights granted by this Permit Agreement and resulting from the presence of any hazardous waste, pollutant, contaminant or petroleum related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. Permittee expressly agrees that the obligations it hereby assumes shall survive the cancellation of this Permit.

21. Compliance with Laws, Ordinances and Rules

Permittee agrees to comply with all laws, ordinances and regulations of federal, state, municipal and local government agencies as they apply to use of the

Premises. Permittee agrees to comply with rules as may be promulgated from time to time by Permittor.

#### 22. Condition of Premises Inspection

Permittee accepts the Premises in an "AS IS" condition with no express or implied representations or warranties by Permittor as to the physical condition or fitness or suitability for any particular purpose, express or implied. Permittee is responsible for and has had ample opportunity to inspect the Premises, is familiar with the same, and has determined to its satisfaction the fitness of the Premises for its intended use.

Permittee acknowledges and assumes all risks associated with the proximity of the Premises to the railroad right of way adjacent to the Premises and to any railroad operations thereon including, but not limited to, operations of The Chicago and Northwestern Transportation Company.

#### 23. Liens and Encumbrances

Permittee shall not permit any liens or encumbrances to be established or remain against the Premises, including but not limited to, encumbrances with respect to work performed or equipment or materials furnished in connection with use of the Premises by Permittee, its agents, employees, customers, invitees, subpermittees, lessees or other occupiers of the Premises pursuant to this Permit.

IN WITNESS WHEREOF, the parties hereto have signed this Permit Agreement as of

, 1994.

Upon proper execution, this agreement will be legally valid and binding.

Assistant/County Attorney Date: 3-7-94

Hennepin County Regional Railroad Authority

Chair, Board of Commissioners Date:

Execut Date!

**City of Minneapolis** 

Mayor Date:

Attorney for the City of Minneapolis Date:

Approved as to execution:

Assistant/County Attorney

Date: <u>3-7-94-</u>

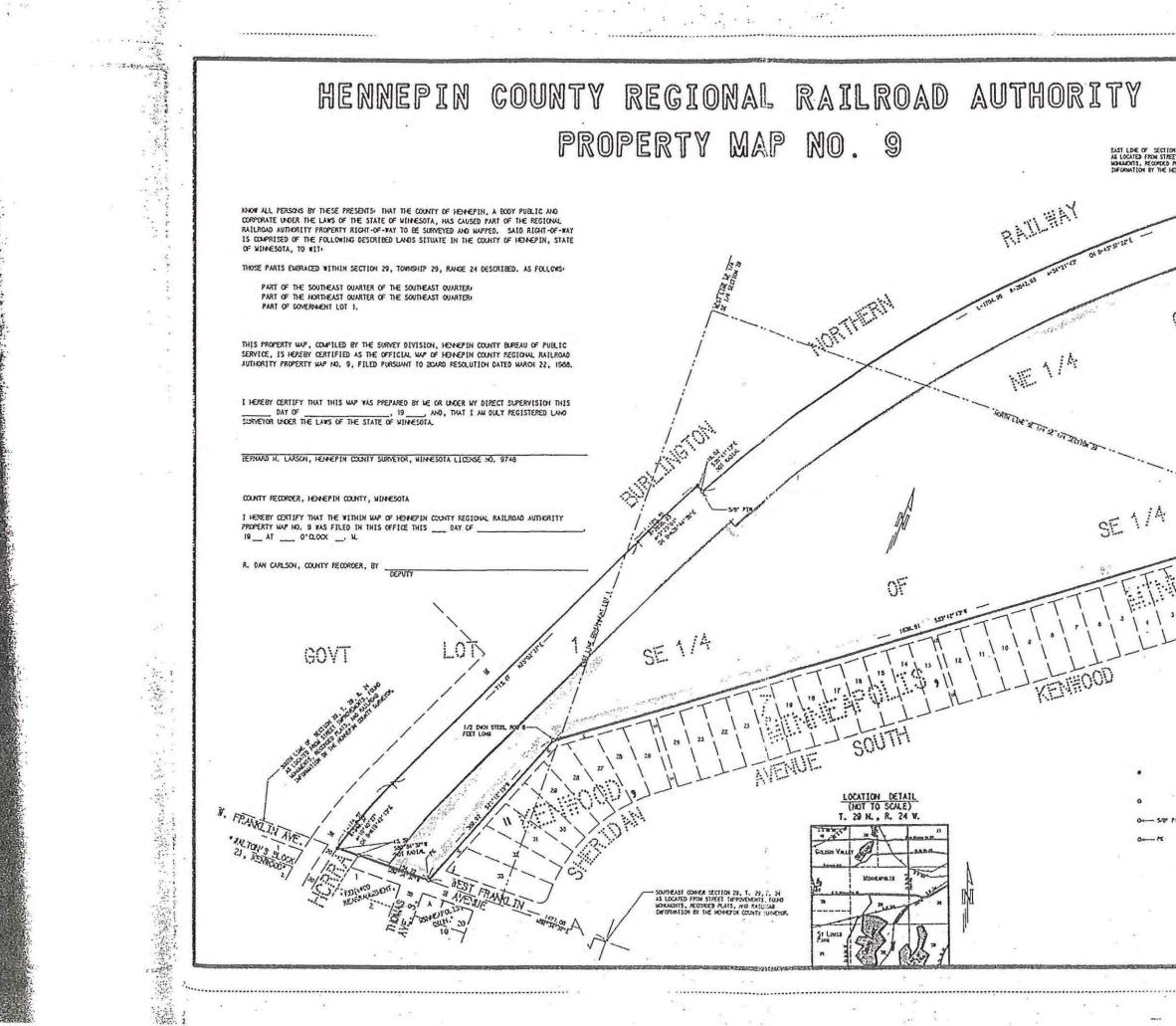
Attorney for the City of Minneapol Date:

City Finance Officer Date: 2/28/94

ATTESTED BY:

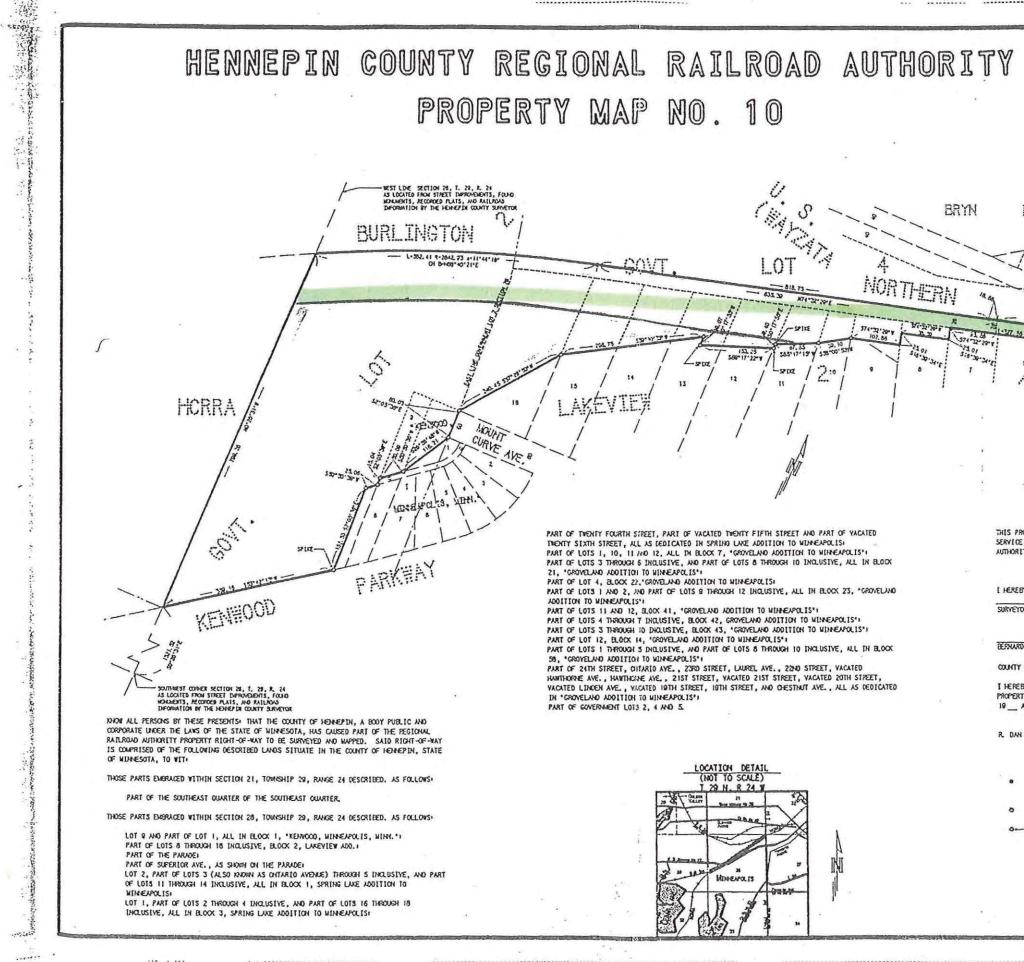
City Clerk

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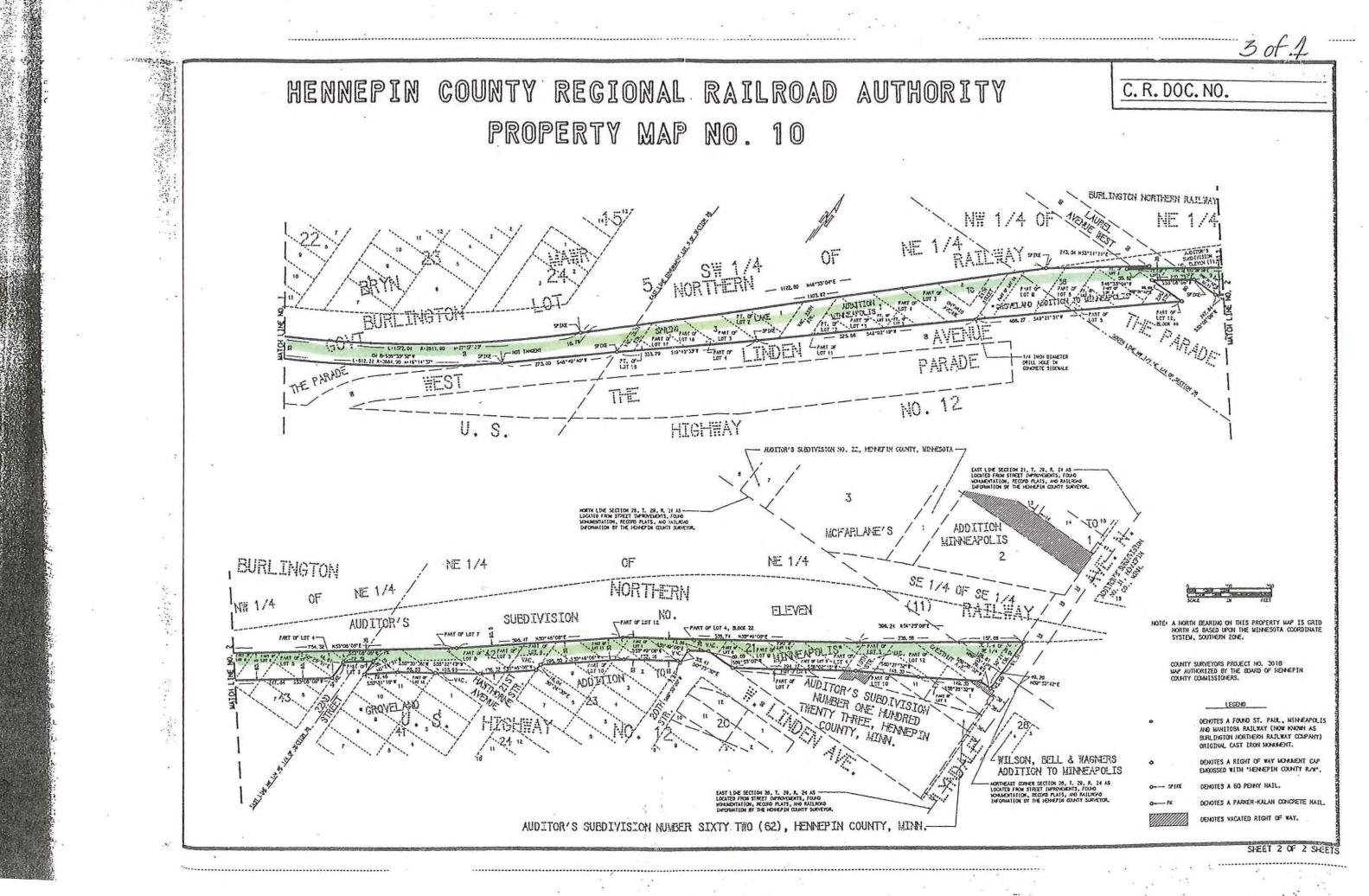
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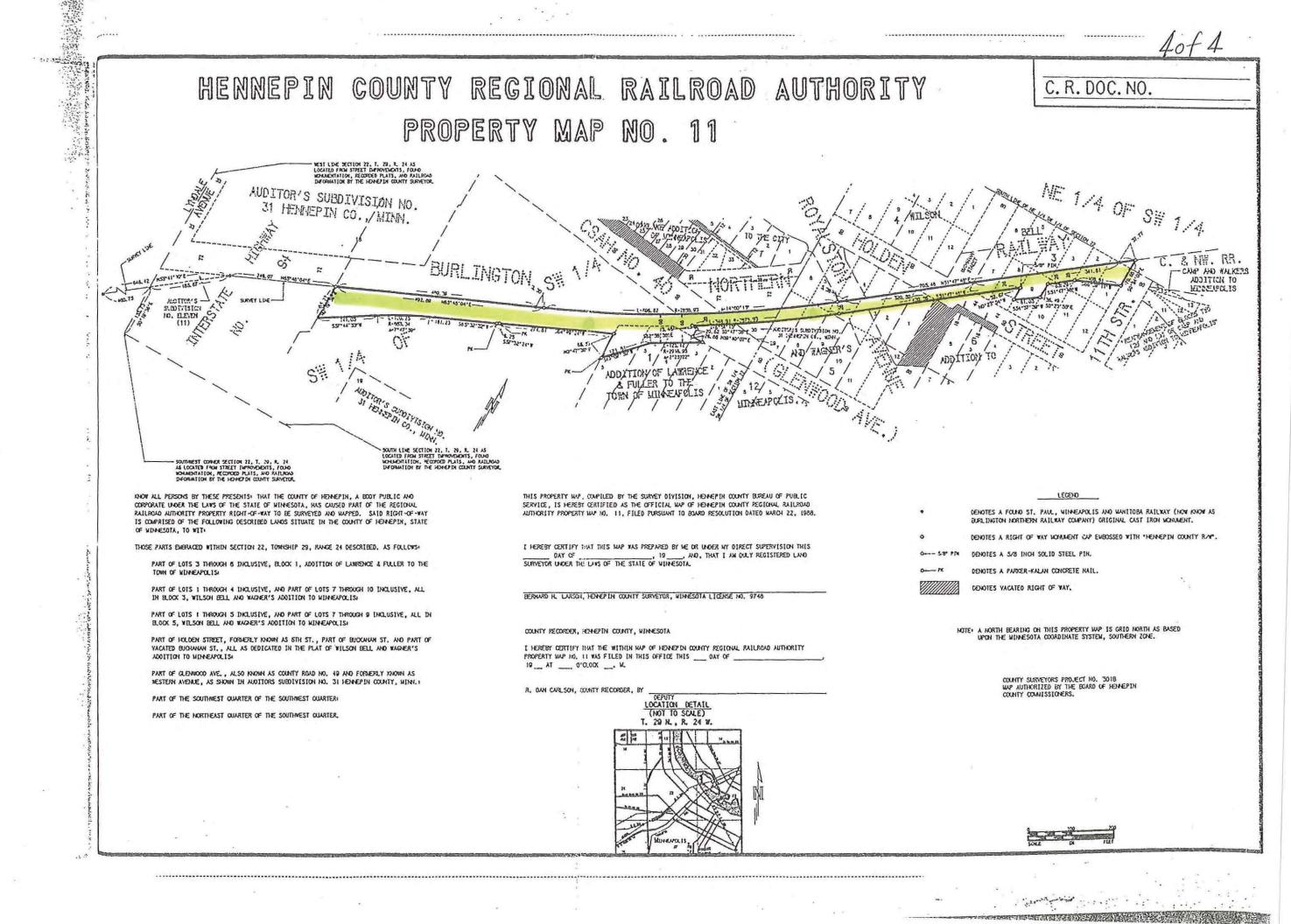
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2of4 ...... C. R. DOC. NO. MAWR MEADO#S 241 0" TAST 2 Lat 16 1 1 To Just or Lot is SOVT. R -377. 39 X-2539. 40 1.5" NORTH LIDE CONSIDERED LOT & SECTION 28 THIS PROPERTY WAP, COMPILED BY THE SURVEY DIVISION, HEMEPIN COUNTY BUPEAU OF PUBLIC SERVICE, IS HEREBY CERTIFIED AS THE OFFICIAL WAP OF HEMEPIN COUNTY REGIONAL RAILROAD AUTHORITY PROFERTY WAP NO. 10, FILED PLRSUARI TO BOARD RESOLUTION DATED WARDA 22, 1588. I HEREBY CERTIFY THAT THIS WAP WAS PREPARED BY WE OR UNDER WY DIRECT SUPERVISION THIS DAY OF \_\_\_\_\_, 19 \_\_\_, 10, THAT I AN OULY REGISTERED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF WINESOTA. ESNARD H. LARSON, HENEPIN COUNTY SURVEYOR, WINESOTA LICENSE NO. 9748 OWNTY RECORDER, HENEPIN COUNTY, WINESOIA I HEREBY CERTIFY THAT THE WITHIN WAP OF HEINEPIN COUNTY REGIONAL RAILROAD AUTHORITY PROPERTY WAP HO, 10 WAS FILED IN THIS OFFICE THIS \_\_ DAY OF 19\_ AT \_\_ 0"CLOCK \_\_ 4 R. DAN CARLSON, COUNTY RECORDER, ST DEPUT LECENO DENOTES A FOUND ST. PAUL, WINNEAPOLIS IND WINITOBA RAILWAY (NOW DADW AS BURLINGTON NORTHERN RAILVAY COLPANY) ORIGINAL CAST ISON MONAMENT. DENOTES A RIGHT OF WAY NORMENT CUP ENBOSSED WITH "HENREPTH COUNTY RAN". DENDIES A 60 PENNY HAIL. 30% ~0 NOTE: A NORTH BEARING ON THIS PROPERTY WAP IS GRID NORTH AS BASED UPON THE MIMESOTA COORDINATE SYSTEM, SOUTHERN ZONE. COUNTY SURVEYORS PROJECT NO. 3018 WAP AUTHORIZED BY THE BOARD OF HEMEPIN CONNTY COMISSIONERS SHEET 1 OF 2 SHEETS S ......

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Kenilworth Trail

# RESOLUTION NO. 46R1-HCRRA-98

The following resolution was offered by Commissioner Andrew, seconded by Commissioner Stenglein:

WHEREAS, the Hennepin County Regional Railroad Authority (HCRRA) owns property known as the Kenilworth Corridor running between the 29<sup>th</sup> Street Rail Corridor and the Burlington Northern Santa Fe (BNSF) main line north of Cedar Lake; and

WHEREAS, the City of Minneapolis (City) desires to construct a recreational trail between the proposed 29<sup>th</sup> Street Greenway Trail and the existing Cedar Lake Trail; and

WHEREAS, the City desires to enter into a permit agreement with the HCRRA for the purpose of constructing and maintaining a recreational trail in the Kenilworth Corridor,

BE IT RESOLVED, that Permit Agreement 73-31016 with the City of Minneapolis for recreational trail purposes, which includes standard Hennepin County liability language, be approved, and that the Chair be authorized to sign the Agreement on behalf of the Authority.

The question was on the adoption of the resolution and there were <u>7</u> YEAS and <u>0</u> NAYS as follows:

000091

| BOARD OF COMMISSIONERS<br>HENNEPIN COUNTY REGIONAL<br>RAILROAD AUTHORITY | YEA      | NAY | OTHER |
|--------------------------------------------------------------------------|----------|-----|-------|
| Mike Opat                                                                | X        |     |       |
| Mark Stenglein                                                           | X        |     |       |
| Mark Andrew                                                              | X        |     |       |
|                                                                          |          |     |       |
| Peter McLaughlin                                                         | <u> </u> |     |       |
| Randy Johnson                                                            | <u> </u> |     | ·     |
| Penny Steele                                                             | <u> </u> |     |       |
| Mary Tambornino, Chair                                                   | X        |     |       |
|                                                                          |          |     |       |

**RESOLUTION ADOPTED AUGUST 18, 1998** 

Secretary

# PERMIT AGREEMENT KENILWORTH TRAIL

-93-2310H 73-31016

19 City Clark

Parcel <u>73-31016</u>

VID BY CITY COUNCIL

Agreement No. 73-31614

JUN 1 2 1998

THIS AGREEMENT, entered into by and between the HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY, a Minnesota political subdivision, ("Permittor"), and the City of Minneapolis ("Permittee") a political subdivision.

# WITNESSETH:

WHEREAS, the Hennepin County Regional Railroad Authority (Permittor) has invested in a transportation corridor between the City of Hopkins and the City of Minneapolis known as the Hopkins to Minneapolis Corridor (Corridor), principally for the purpose of implementing Light Rail Transit (LRT) and other permitted future transportation uses; and

WHEREAS, a portion of the Corridor extends from the westerly limits of the City of Minneapolis to downtown Minneapolis (the Kenilworth Route).

WHEREAS, the City of Minneapolis (Permittee) has applied and received approval for an ISTEA grant for construction of a bicycle trail (the Kenilworth Trail) within the Minneapolis portion of the Permittor Corridor as more fully set forth in the Kenilworth Trail plan dated October 23, 1997. The Kenilworth trail plan extends north from the 29<sup>th</sup> Street Greenway to the Cedar Lake Trail. Both the 29<sup>th</sup> Street Greenway and the Cedar Lake Trail are Permittee's trails also located by permit on Permittor's right of way which has been acquired for future LRT and other permitted transportation uses.

WHEREAS, the Soo Line Railroad Company and Twin Cities and Western Railroad Company have railroad operating rights over Permittor owned tracks located on the Kenilworth Route.

WHEREAS, the Permittee and Permittor desire to enter into an agreement for the use of the Kenilworth Route for trail purposes jointly with use of the Corridor for rail traffic and future LRT and other transportation purposes.

In consideration of the covenants by and between the parties, IT IS HEREBY AGREED:

# 1. PREMISES

Permittor hereby agrees to grant certain rights and benefits to Permittee hereinafter described with regard to that certain real property located in the City of Minneapolis, Minnesota,

described as follows:

Hennepin County Regional Railroad Authority property, marked in green, as shown on the construction plans for the Kenilworth Trail and attached hereto as, Exhibit "A"

The said real estate shall be hereinafter described as the "Premises."

# 2. USES

The Premises shall be for the temporary use of Permittee, its agents, officers, employees, and invitees for trail purposes and for all uses and requirements necessary to the enjoyment of the Premises for said uses. Permittor reserves the right to limit, reject or refuse to permit the use of the Premises by Permittee or any assignees for any purpose which Permittor, in its sole discretion, deems inappropriate or incompatible with its future use of the Premises or the operations of any railroad operating on the right of way adjacent to the Premises. Permittee shall submit any proposed development or other physical alterations to the Premises to Permittor to determine its acceptability to Permittor prior to contracting any obligations or commitments in connection therewith.

# 3. TERM

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The term of this Permit shall be for an indefinite period, commencing on execution of this Agreement by the Chair of the Hennepin County Regional Railroad Authority until termination in accordance with Paragraph 4.

## 4. TERMINATION

Either party may at any time terminate this permit by giving ninety (90) days' written notice of its intention to do so. Such notice may be served upon the Hennepin County Regional Railroad Authority by delivering a copy thereof to the Executive Director of the principal office in the Hennepin County Government Center, Minneapolis, Minnesota 55487, or by depositing the same in the United States Post Office directed to the Executive Director of the principal office. Such notice may be served on the Director, Transportation Division, Minneapolis Department of Public Works, City of Minneapolis, by delivering a copy thereof to room 233, City Hall, 350 South Fifth Street, Minneapolis, MN 55415. Except as provided herein, this agreement may not be terminated or revoked by either party hereto.

#### 5. TEMPORARY NATURE OF USE

Permittee acknowledges that the Premises was acquired by Permittor specifically and solely for the purpose of constructing a light rail transit system or other permitted transportation uses and its associated facilities and that it is Permittor's intention to allow Permittee to use the Premises only until, in Permittor's sole discretion, it is needed for that purpose. Nothing in this Permit shall be deemed to evidence any change by Permittor of its intended use of the Premises for light rail transit purposes or

other permitted transportation uses. Rather, Permittor has agreed to the terms of this Permit to provide a temporary use for the Premises during the time required for further planning and development of the light rail transit system or other permitted transportation uses.

# 6. RIGHTS UPON TERMINATION

On the expiration of ninety (90) days after such service of said notice, this Permit and all rights hereunder shall thereupon terminate and be at an end, saving and excepting such rights and obligations as may have accrued to either party hereunder prior to such termination. Permittee shall, without further notice or demand, deliver possession of the Premises to the Permittor at the expiration of said ninety (90) days and shall, before the expiration of said ninety (90) days, remove all buildings and property placed upon the Premises which it may desire and have the right to remove. If it shall fail to remove all buildings its right shall, at the option of the Permittor or, in such case, if the Permittor shall elect, it may, at any time after the expiration of said period of ninety (90) days, tear down and/or remove any or all such buildings and property at the expense of Permittee without any liability for damages thereof in any respect whatsoever, and Permittee shall there upon promptly reimburse Permittor for all expenses incurred by it in doing so.

## 7. RENT

Upon such termination of this permit, rent shall be paid by the Permittee to the date of termination fixed by said notice at the rate of \$1.00 per year.

# 8. OTHER USERS

Permittee hereby acknowledges the presence and use of the adjacent property for railroad purposes by the Soo Line Railroad Company and other users, including without limitation, Permittor and the Twin Cities and Western Railroad. Permittee agrees to coordinate activities with the adjacent railroad use to avoid disrupting or otherwise adversely affecting continued railroad use.

# 9. SIGNAGE

Permittee shall maintain signage identifying the Hennepin County Regional Railroad Authority as the owner of the Premises and that the Premises are reserved for light rail transit or other future transportation uses. Any such signage must receive the prior approval of Permittor.

#### 10. NUISANCE

Permittee shall not permit the existence of any nuisance on said Premises. Permittee, at all times, shall keep said Premises clean and shall comply with all laws, ordinances and regulations respecting Permittee's business and use and occupation of said Premises. Permittee, at its sole cost, shall

make any and all improvements, alterations, repairs and additions and install all appliances required on said Premises by or under any such regulations, ordinances or laws. No bills, posters or advertising matter of any kind shall be posted on said Premises; provided, however, that Permittee may post on appropriate structures, informational materials relating to the permitted uses. Permittee shall use all reasonable precautions to prevent any waste, injury, death or property damage and shall modify, repair or replace any railings, pathways or other improvements on the Premises when necessary. This provision may be enforced by and runs to the benefit of only the Permittor, its successors and assigns. The Permittee does not, in any way, waive any of the immunity provided by Minnesota Statutes, Chapter 466 or by other law.

# 11. UTILITIES, TITLE

}

Permittee accepts said Premises subject to the rights of any person, firm or corporation, including the Permittor in and to any existing water, sewer, gas, electrical power, telephone, telegraph and/or other wires, poles and facilities of any kind whatsoever, whether or not of record, and should it at any time become necessary, because of Permittee's use of the Premises, to relocate any of said utilities or facilities by reason of this Permit, Permittee shall bear and pay the cost of so doing.

Permittee also accepts said Premises subject to any want or failure at any time of Permittor's title to said Premises or any part thereof and Permittee shall assume any damages sustained by Permittee in connection therewith. Permittee also accepts such Premises subject to rights of any party, including Permittor, in and to any existing roadways and easements, leases and permits, whether or not granted, at Permittor's sole discretion, either prior to or after the date of this Permit Agreement. Provided, however, that the Permittor shall not grant an easement, lease or permit after the date of this Agreement which substantially impairs the intended use of this permit (except as provided in Paragraph 4). Permittee agrees to provide to Permittor, or other tenants of Permittor, access over and through the Premises on these roadways and easements should such access be deemed necessary by Permittor. Permittee accepts said Premises subject to the right of Permittor, its employees, agents and contractors to walk upon said Premises to repair adjacent property and the right of Permittor's own responsibility and risk for the purpose of maintaining, repairing or inspecting or constructing upon Permittor's adjacent property.

# **12. INDEMNIFICATION**

Permittee shall defend, indemnify and hold harmless the Permittor, its Commissioners, officers, agents, volunteers, and employees from any liability, claims, causes of action, judgments, damages, losses, costs, or expenses, including reasonable attorney's fees, resulting directly or indirectly from any act or omission of the Permittee, its agents, anyone directly or indirectly employed by them, customers, invitees, other occupiers of the Premises and/or anyone for whose acts and/or omissions they may be liable.

Permittor shall not be liable to Permittee or those claiming by, through, or under Permittee

for any injury, death or property damage occurring in, on, or about the Premises based upon the construction, operation on, use, or maintenance of the Premises by Permittee (including those liabilities related to railroad operations adjacent to the Premises), nor for any loss or damage by reason of the present or future condition of repair of the Premises, or for the loss or damage arising from the acts or omissions of Permittee, its agents, anyone directly or indirectly employed by them, customers, volunteers, invitees, or other occupiers of the Premises.

Nothing is intended or should be construed as creating or establishing Permittee or Permittee's contractors, agents, employees, customers, invitees, volunteers, or other occupiers of the Premises as copartners, agents, representatives or employees of the Permittor.

Permittee represents that it has or will secure at its own expense all personnel, consultants, volunteers or other persons necessary for its use of the Premises. Any and all personnel, consultants, volunteers, or other persons used by Permittee shall have no contractual relationship with the Permittor and shall not be considered employees of the Permittor. Any and all claims that may or might arise under the Unemployment Compensation Act or the Workers Compensation Act of the State of Minnesota on behalf of said personnel, consultants, volunteers, or other persons arising out of employment or alleged employment, including, without limitation, claims of discrimination against Permittee, its officers, agents, contractors, or employees shall in no way be the responsibility of the Permittor. Permittee shall defend, indemnify and hold the Permittor, its Commissioners, officers, agents, and employees harmless from any and all such claims irrespective of any determination of any pertinent tribunal, agency, board, commission, or court. Such personnel or other persons shall neither require nor be entitled to any compensation, rights or benefits of any kind whatsoever from the Permittor, including, without limitation, tenure rights, medical and hospital care, sick and vacation leave, Workers Compensation, Unemployment Insurance, disability, severance pay and PERA.

# **13. INSURANCE**

The Permittee represents that it has a program of risk management for managing its potential liability and is certified as a self insurer for the purposes of Minnesota Statute; Chapter 65B. The City agrees that it shall be responsible for its losses pursuant to law, will maintain a program of risk management, and a program of self insurance when such self insurance is required by law.

# 14. COVENANTS

Permittee, in consideration of the permitting of the said Premises, as herein provided, hereby covenants and agrees to pay the rent therefor promptly, as above provided, and fully to abide by and perform all and singular the conditions, covenants and agreements herein contained and to be observed and performed by said Permittee, and to yield up said Premises unto the Permittor at the expiration or termination of this Permit Agreement in as good conditions as when entered upon.

#### **15. QUIET ENJOYMENT**

Permittor has the right and authority to enter into this agreement, and if Permittee pays the rent required hereby and otherwise performs the terms hereof to be performed by Permittee, Permittee shall, during the term hereof, be entitled to quiet enjoyment and possession of the Premises subject to the termination provisions hereof and the close proximity of the premises to railroad operations. Notwithstanding the foregoing, Permittee further acknowledges that the rights provided to it by virtue of the Permit are subject to the provisions of Paragraph 11 and as otherwise limited by the terms of this Permit.

# 16. WAIVER

No receipt of money by Permittor from Permittee after any default by Permittee, or after the expiration of this Permit or after the service of any notice or after the commencement of any suit or after final judgment for possession of said Premises, shall waive such default or reinstate, continue or extend the term of this Permit or affect any such notice or suit, as the case may be. No waiver of any default of Permittee shall be implied from omission by Permittor to take any action on account of such default, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated.

#### **17. BREACH**

It is further agreed between the parties hereto that if the said Permittee shall breach or make default in any of the conditions, covenants or agreements of this Permit, which breach or default shall continue for fifteen (15) days after Permittee's receipt of written notice thereof from Permittor, then it shall be lawful for the Permittor, then, or at any time thereafter, to declare this Permit ended, and to reenter said Premises and take possession thereof, with or without process of law, and to use any reasonable or necessary lawful force for regaining possession; whereupon the rights and obligations of the parties shall be the same as above-specified in the case of termination at the end of ninety (90) days notice; and it is hereby further agreed and provided that any waiver at any time of a breach of any condition, covenant or agreement of this Permit shall extend only to the particular breach so waived and shall, in no manner, impair or affect the existence of such condition, covenant, or agreements, or the right of Permittor thereafter to avail itself of same and any subsequent breach thereof. In the event Permittor has to take action for repossession of said property, Permittee, its assigns, or heirs, shall be liable for reasonable attorney's fees incurred by Permittor.

# **18. ASSIGNMENT**

The benefits and obligations of this Permit shall extend to and shall bind the heirs, administrators, executors, leases, successors, or assigns of the parties hereto, but no interest in this Permit shall be assigned, nor said Premises or any part thereof shall be subpermitted, used, or occupied by any party other than the Permittee unless specifically stated herein. Permittor reserves the right to review and revise the rental applicable to this Permit upon any change in the status of this Permit, the Permittee, or person occupying in the Premises, during the term of this Permit or any renewal thereof.

# **19. IMPROVEMENTS, MAINTENANCE, LIENS AND ENCUMBRANCES**

Permittee shall be responsible for the construction of all improvements necessary to its use of the Premises and shall be responsible for the maintenance of said Premises, and all trail operations on the Premises. Permittee shall also be responsible for the construction of all bridges and crossings deemed necessary for Permittee to provide for any trails on the Premises or to otherwise use the Premises. Construction plans shall be submitted to the Authority for review and comment. Authority reserves the right to reject any plans for construction proposed by Permittee on the grounds, in Authority's sole discretion, that said plans are inappropriate or incompatible with its future use of the Premises or with the operations of any railroad operating on the right of way adjacent to the Premises.

Permittee shall not permit any liens or encumbrances to be established or to remain against the Premises. Liens or encumbrances for purposes of this section mean any mortgage, pledge, security interest, lien, or encumbrance on (or affecting) any portion of the Premises, including, without limitation, tax liens or encumbrances and liens or encumbrances with respect to work performed or equipment or material furnished in connection with Permittee's use of the Premises.

# 20. ENVIRONMENTAL CONCERNS

Permittee shall not create or permit any condition on the Premises that could present a threat to human health or to the environment. Permittee shall bear the expense of all practices or work, preventative, investigative or remedial, which may be required because of any conditions of the Premises introduced by Permittee, assignees or invitees during Permittee's period of use, including conditions introduced by Permittee, assignees, or invitees which affect other lands. Permittee expressly agrees that the obligations it hereby assumes shall survive cancellation of this Permit. Permittee agrees that statutory limitation periods on actions to enforce these obligations shall not be deemed to commence until Permittor discovers any such health or environmental impairment, and Permittee hereby knowingly and voluntarily waives the benefits of any shorter limitation period.

Permittor shall have the right, but not the duty, to enter upon the Premises from time to time as set forth below to inspect the Premises for environmental contamination and in the course thereof to conduct soil and groundwater testing and to perform environmental investigation, remediation or mitigation. Permittor may enter the Premises during regular business hours of Permittee without prior notice, and may enter the Premises during periods other than regular business hours either with prior written consent of Permittee or without if Permittor reasonably believes that an emergency exists on the Premises. Permittor shall conduct any such inspections or testing so as to minimize interference with Permittee's operations. Permittor's entry on to the Premises pursuant to this paragraph shall not relieve the Permittee's obligation to pay rent under this Permit.

In addition to the foregoing provisions of this Paragraph 20, and in exchange for the rights and privileges granted in this Permit Agreement, Permittee hereby agrees to bear the expense of all practices or work, preventative, investigative or remedial necessary to comply with all federal, state, local and other governmental statutes, rules and regulations necessary for Permittee's use of the

Premises for trail and park purposes regarding any hazardous waste, pollutant, contaminant or petroleum related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. Further, Permittee agrees to defend, indemnify and hold harmless Permittor, its Commissioners, officers, agents and employees from any liability, claims, demands, personal injury, costs, judgments, or expenses, including reasonable attorney's fees arising from exercise of the rights granted by this Permit Agreement and resulting from the presence of any hazardous waste, pollutant, contaminant or petroleum related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. Permittee expressly agrees that the obligations it hereby assumes shall survive the cancellation of this Permit. The Permittee agrees to immediately notify the Permittor of any environmental concerns that arise during the construction or operation of the trail.

# 21. COMPLIANCE WITH LAWS, ORDINANCES AND RULES

Permittee agrees to comply with all laws, ordinances, and regulations of federal, state, municipal, and local government agencies as they apply to use of the Premises.

# 22. CONDITION OF PREMISES INSPECTION

Permittee accepts the Premises in an "AS IS CONDITION" with no express or implied representations or warranties by Permittor as to the physical condition or fitness or suitability for any particular purpose, express or implied. Permittee is responsible for and has had ample opportunity to inspect the Premises, is familiar with the same, and has determined to its satisfaction the fitness of the Premises for its intended use.

Permittee acknowledges and assumes all risks associated with the location of the Premises and its proximity to the railroad right of way adjacent to the Premises and to any railroad operations by any railroad company thereon, including without limitation, the Soo Line Railroad Company and the Twin Cities and Western Railroad Company, and shall defend, indemnify and hold harmless Permittor, its Commissioners, officers, agents, volunteers, and employees from and against, any and all liability, claims causes of action, judgments, damages, losses, costs, or expenses, including reasonable attorney's fees related to the same.

# 23. RAILROAD OPERATIONS

Permittee agrees that the rights contained in this Permit Agreement are subject to and subordinate to the rights granted and contained in any agreements entered into by Permittor as to railroad operations over right of way adjacent to the Premises, including without limitation, agreements with the Soo Line Railroad Company, Twin Cities and Western Railroad and the Chicago and North Western Transportation Company whether or not entered into on or after the commencement of this Permit Agreement. Permittee shall comply with all rules and regulations in regards to railroad operations on the right of way, including without limitation, those regarding safety. This Permit and all provisions thereof

shall be subject to revision at any time if made necessary by any order or finding of the Surface Transportation Board or state authorities having jurisdiction over railroad operations.

Without limiting the foregoing, Permittee agrees that the rights contained in this Agreement are subject to and subordinate to the rights granted in the Trackage Rights Agreement between Soo Line Railroad Company, Twin Cities and Western Railroad Company and Hennepin County Regional Railroad Authority entered into on August 10, 1998, Contract No. A18158, and Permittee agrees to be bound by the terms therein regarding the Kenilworth Trail including without limitation those contained in Sections 4.5 and 4.8. A copy of the Trackage Rights Agreement is attached hereto as Exhibit "B" and made a part of this agreement.

IN WITNESS WHEREOF, the parties hereto have signed this Permit Agreement as of \_\_\_\_\_\_, 199\_\_\_\_\_.

# Approved as to form:

Assistant County Attorne

Date: 8/19/98

Attorne Date:

# Approved as to execution:

Assistant County Attorney Date:

of Minneapolis Attorney Date:

# HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

By: Mary Mary fambanino Chair, Board of Commissioners

2ant And: \_

# **CITY OF MINNEAPOLIS**

Mayor Date:

City Finance Date:

**ATTESTED BY:** Assistant City Clerk Date:

# PLAN STMBOLS

|   | PLAN STMOOLS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                         |
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|   | RETAINING WALL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |
|   | RAL ROAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |
|   | RALHOND RIGHT-OF-WAY LINE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         |
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|   | CROSSING GATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                         |
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| • | MEANDER CORRER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |
|   | MEANDER CORRER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |
|   | MEANDER CORTER           SPRENDS           SANSH           TBADER           ORCHARD           SRUSH           CATCH BASH           CATCH BASH           FEE HYDRAHT           CATCH BASH           CATCH BASH |                                         |
| • | MEANDER CORRER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |
| • | MEANDER CORTER           SPRENDS           SANSH           TBADER           ORCHARD           SRUSH           CATCH BASH           CATCH BASH           FEE HYDRAHT           CATCH BASH           CATCH BASH |                                         |
|   | MEANDER CORRER<br>SPRINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         |
|   | MEANDER CORRER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                         |
|   | MEANDER CORRER<br>SPRINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         |

#### UTILITY SYMBOLS

| POWER POLE LENE<br>TELEPHONE OR TELEGRAPH<br>POLE LINE           |               |
|------------------------------------------------------------------|---------------|
| JOHT TELEPHONE AND POYER<br>ON POYER POLES<br>ON TELEPHONE POLES | - <b>oo</b> - |
| ANCHOR                                                           | ₩             |
| - Congre                                                         | -             |
| STEEL TOWER                                                      | Δ             |
| STREET LICHT                                                     | -C: NO 🟠      |
| PEDESTAL (TELEPHONE CABLE TERMINAL)                              | đ             |
| GAS MARY                                                         | GG            |
| WATER MAN                                                        |               |
| CONDUIT                                                          |               |
| TELEPHONE CABLE IN CONOUT                                        |               |
| ELECTRIC CHILE IN CONDUIT                                        |               |
| TELEPHONE NANHOLE                                                | ET 1          |
| ELECTRIC MANHOLE                                                 | 20            |
| BURED COMMANICATION CABLE                                        |               |
| BURNED TELEPHONE CABLE                                           | T+ BL#        |
| BUNNED ELECTING CABLE                                            | P-8.#         |
| ACMAL TELEPHONE CABLE                                            | + +           |
| SEWER, (SANTARY)                                                 | >>            |
| SEWER, (STORIO                                                   |               |
| SCHER MANNOLE                                                    | >             |
| KHICHOLE                                                         | H2H           |
| CATCH BASH                                                       | ä             |
| DPOP NLET                                                        | ä             |
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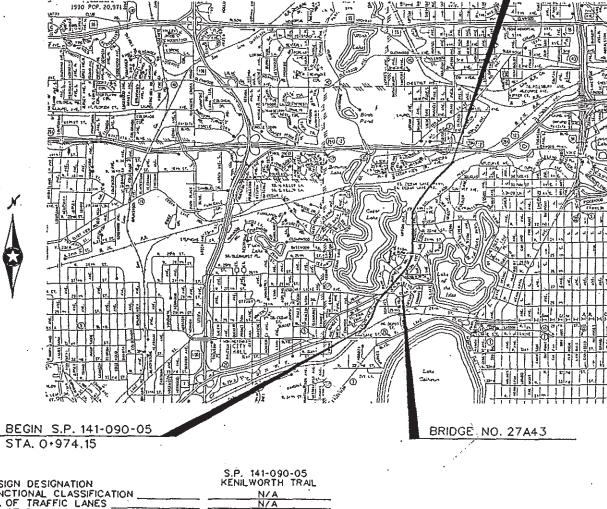
# MINNESOTA DEPARTMENT OF TRANSPORTATION MINNEAPOLIS DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLAN FOR GRADING, AGGREGATE BASE, BITUMINOUS SURFACING, BRIDGE NO. 27A43 MODIFICATIONS, FENCING, RETAINING WALL, SIGNING AND STRIPING

# KENILWORTH TRAIL STATE PROJECT NO. 141-090-05

LOCATED ON CANADIAN PACIFIC RAILROAD CORRIDOR FROM 29TH STREET GREENWAY TO CEDAR LAKE TRAL

END S.P. 141-090-05 STA. 3+350.15



SCALES 250 PLAN 250 1 1 PROFILE 1000 INDEX MAP 1000 GENERAL LAYOUT X-SECTION 

ALL DIMENSIONS ARE IN METRIC UNLESS NOTED OTHERWISE

PROJECT LOCATION COUNTY HENNEPIN DISTRICT METRO

|        | PLAN REVISIONS              |          |
|--------|-----------------------------|----------|
| DATE   | SHEET NO.                   | APPROVED |
| 2-6-98 | 5,8-10,24,28,29,31-33,38,39 | DJJ      |
|        |                             |          |
|        |                             |          |
|        |                             |          |
|        |                             |          |
|        |                             |          |

| DESIGN DESIGNATION                | S.P. 141-090-05<br>KENILWORTH TRAIL |
|-----------------------------------|-------------------------------------|
| FUNCTIONAL CLASSIFICATION         | NZA .                               |
| NO. OF TRAFFIC LANES              | N/A                                 |
| NO. OF PARKING LANES              | N/A                                 |
| STRUCTURAL DESIGN                 | N/A                                 |
| R-VALUE                           | N/A                                 |
| DESIGN SPEED                      | 30 km/h                             |
| STOPPING SIGHT DISTANCE BASED ON: |                                     |
| HEIGHT OF EYE                     | 1400 mm                             |
| HEIGHT OF OBJECT                  | 0 mm                                |
| ADT (CURRENT YEAR) (1996)         | N/A ,                               |
| ADT (FUTURE YEAR) (2016)          | N/A                                 |
| ΣN18                              | N/A                                 |

DESIGN SPEED NOT ACHIEVED AT: NAME: COV 589.PLN DATE: Sep. 23, 1997 TELE: 14:17:06 STA. 0+976.831 TO STA. 0+996.869 (STOP CONDITION)

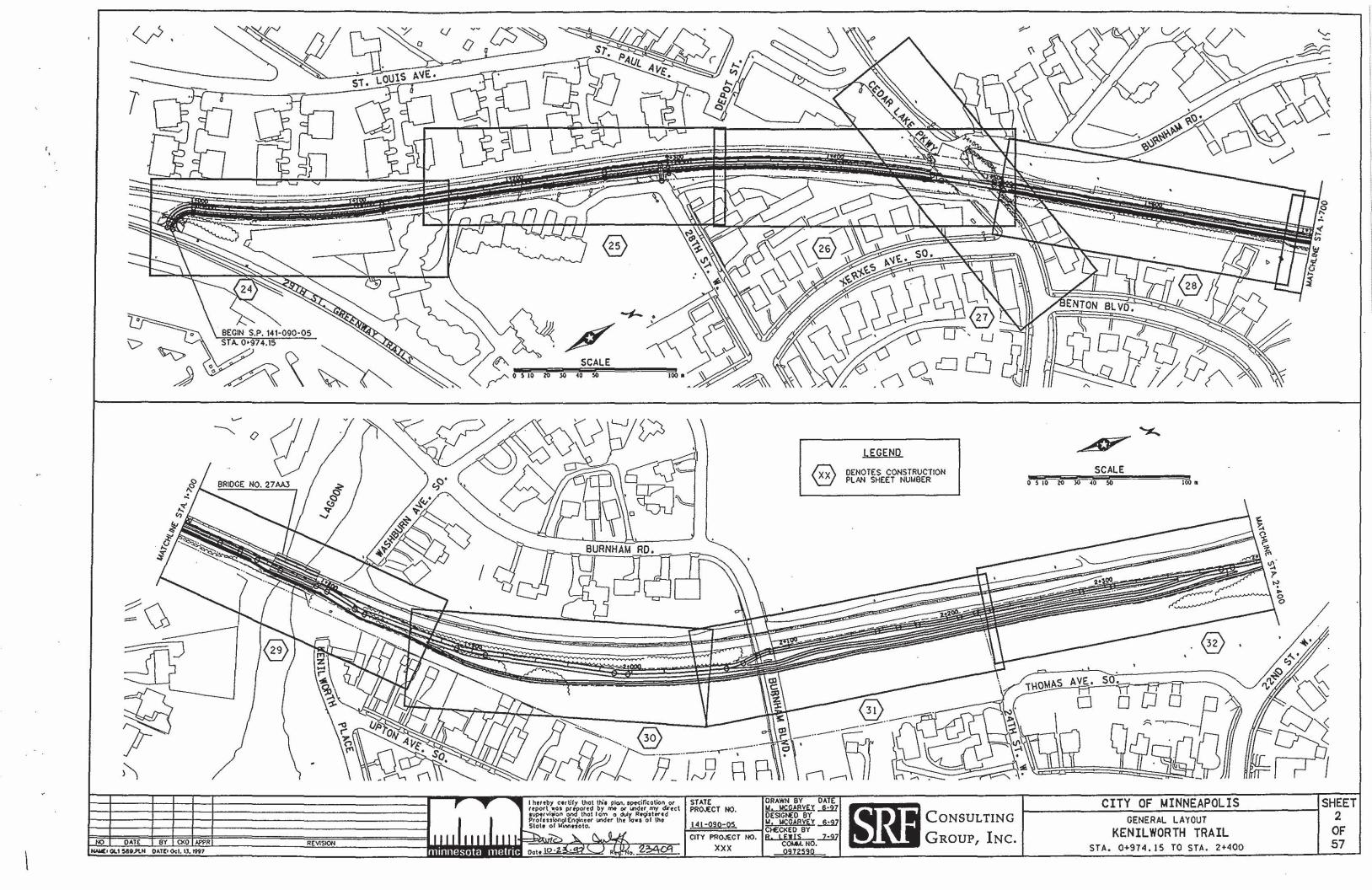
HENNEPIN COUNTY

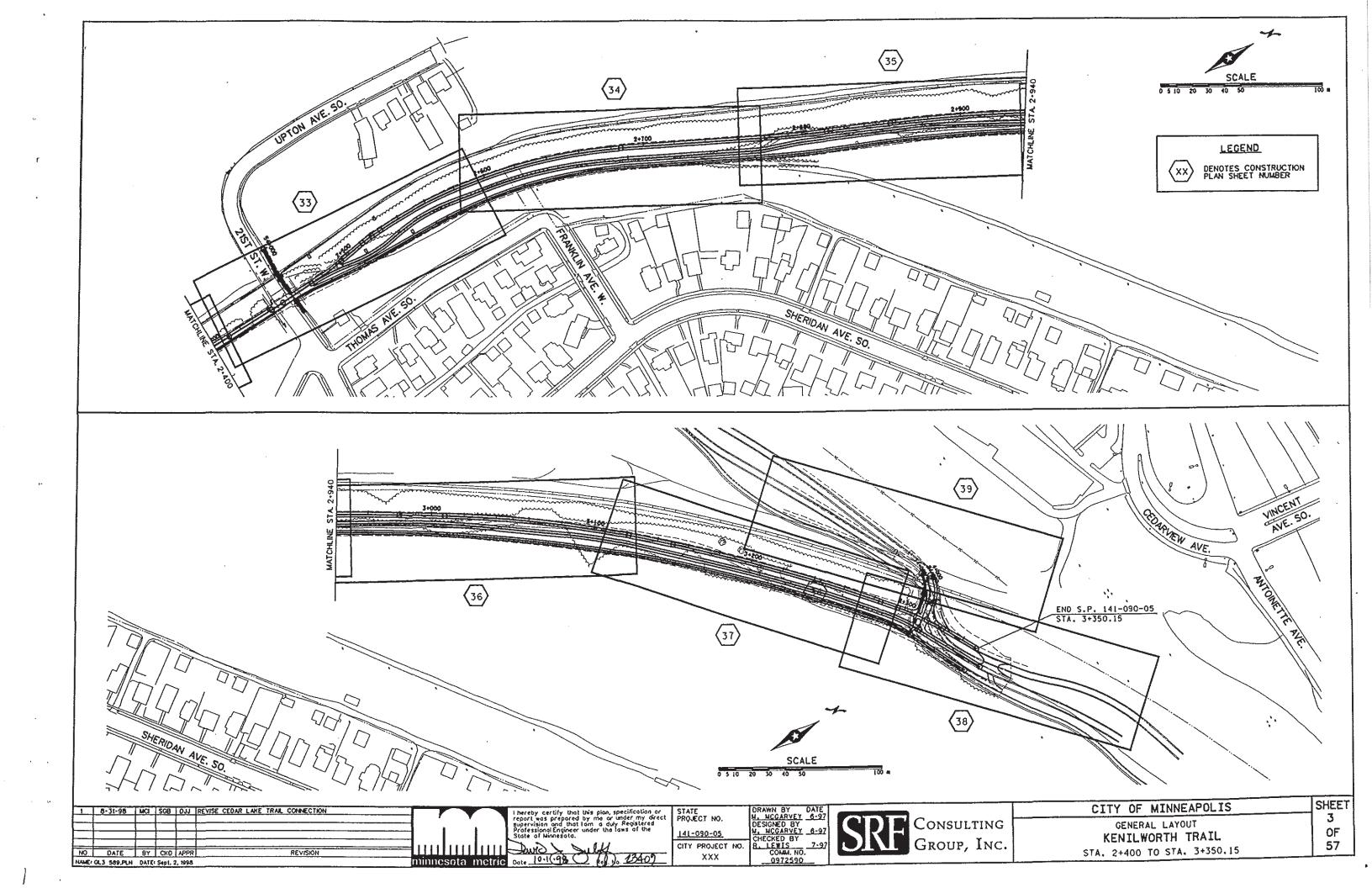
KENILWORTH TRAIL S.P. 141-090-05

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**EXHIBIT** A

is provide a MINN. PROJ. NO. 141-090-05 TEAF 2797(031) GOVERNING SPECIFICATIONS THE 1995 EDITION OF THE NUMESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN INDEX SHEET NO. SHEET DESCRIPTION SHEET DESCRIPTION TITLE SHEET GENERAL LAYOUT STATEMENT OF ESTMATED OUANTITIES CONSTRUCTION/SOLS NOTES, STD. PLATES EARTHWORK SLMMARY SIGN AND RETAINING WALL TABULATION TYPICAL SECTIONS MISCELLANEOUS DETALS BRIDGE MODFICATION DETALS ALIGNMENT PLAN ALIGNMENT TABULATIONS PLAN AND PROFILE EROSION CONTROL DETALS CROSS SECTION SHEETS 1 2-3 4 5 8-10 11-17 18-19 20-23 24-39 40-44 45-57 THIS PLAN CONTAINS 57 SHEETS. \*. INCREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT IAN A DULY RECISTERED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA L. ARCH. ία <u>γ</u>'γ Reg. No .. Dote HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY NE OR UNDER MY DIRECT SUPERVISION AND THAT IAN A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. ENGR. Reg. No..... Date SRF CONSULTING GROUP, INC. Recommended for Approval. MINNEAPOLIS DEPT. OF PUBLIC WORKS. Recommended θY Recommended for Approval. STATE BRIDGE ENGINEER Approved for State Aid Division 19 STATE AD ENGINEER INEREBY CERTIFY THAT THE FINAL REVISIONS, F ANY, OF THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT IAM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WINNESOTA. ninnesota metric DATE .... REG. NO .... SHEET NQ ... 1. OF ... 57 ... SHEETS





|          |            |                                                                              | I OF ESTIN           | ATED QUANT           | TTIES<br>STORM SEWER | TOTAL     | ROJECT                                |  |
|----------|------------|------------------------------------------------------------------------------|----------------------|----------------------|----------------------|-----------|---------------------------------------|--|
| NOTES    | ITEN NO.   | ITEM DESCRIPTION                                                             | UNAT                 | QUANTITIES           | QUANTITIES           | QUAN      | ANTITIES                              |  |
| GRADI    | ING:       |                                                                              |                      | ESTIMATED            | ESTIMATED            | ESTIMATED | FINAL                                 |  |
|          |            | MOBILIZATION                                                                 | LUIN CITL            | 1                    | 1                    | 1         |                                       |  |
| ····     |            | CLEARING                                                                     | LUNGP SUM            | 1.0                  |                      | 0.9       |                                       |  |
|          |            | GRUBBING                                                                     | A                    | 0.9                  |                      |           |                                       |  |
|          |            | REMOVE GUARDRAIL                                                             | ha                   | 0.9                  |                      | 0,5       |                                       |  |
|          |            | REMOVE CONCRETE ORIVEWAY PAVEMENT                                            |                      | 38                   |                      |           |                                       |  |
|          |            | REMOVE CONCRETE DAVENENT                                                     |                      | 27                   |                      | 27        |                                       |  |
|          |            | SAWING BITUMENOUS PAVEMENT                                                   |                      | 22                   |                      | <u>50</u> | · · · · · · · · · · · · · · · · · · · |  |
| 1        |            | REMOVE SITUMINOUS PAVEMENT                                                   | <br>                 | 50                   |                      | 2050      |                                       |  |
|          |            | SALVAGE SIGN PANEL TYPE C                                                    | EACH                 | 2060                 |                      | 8         |                                       |  |
|          |            | SALVAGE AGGREGATE BASE CLASS 5                                               | <br>                 | 70                   |                      | 70        |                                       |  |
|          |            | COMMON EXCAVATION                                                            |                      |                      |                      | 3445      |                                       |  |
|          |            | SUBGRADE EXCAVATION                                                          |                      | (P) 3445<br>(P) 4943 |                      | 4943      |                                       |  |
|          |            | TOPSON BORROW ICM                                                            | <br>                 | 840                  |                      | 840       |                                       |  |
| PAVING   |            |                                                                              | 144                  | 1                    | <b>ا</b>             | 6401      |                                       |  |
| 1        |            | AGGREGATE BASE (GV) CLASS S                                                  | ш <u>,</u>           | 2390                 |                      | 2390      |                                       |  |
| ,        |            | TYPE 11 WEARING COURSE MIXTURE                                               | 1,                   |                      | ŀ                    | 2190      |                                       |  |
|          |            | RUMBLE STRIPS                                                                | -                    | 2155                 |                      |           |                                       |  |
|          |            | 100 mm CONCRETE WALK                                                         | m<br>m               | 350                  |                      | 350       |                                       |  |
|          |            | PEDESTRIAN CURB RAMP                                                         |                      | 80                   |                      |           |                                       |  |
| STORM    | SEWER:     |                                                                              | EACH                 | <u>i 1</u>           | L1                   | <u>+</u>  |                                       |  |
|          |            | 450 mm RC PIPE APRON                                                         | 101011               | 1                    |                      | -         |                                       |  |
|          |            |                                                                              | EACH                 |                      | 2                    | 2         |                                       |  |
|          |            | TRASHGUARD FOR 450 mm PIPE APRON<br>450 mm RC PIPE SEWER DES, 3006 CLASS III | EACH                 | }                    | 2                    | 2         |                                       |  |
| BRIDGE   |            | INDIAN AC PIPE SEVER DES. 3008 CEASS III                                     | m                    | 1                    | 15.                  | 13        |                                       |  |
|          |            | REMOVE METAL PIPE RAILING                                                    | 1_                   |                      |                      |           |                                       |  |
|          |            | REMOVE TIMBER DECK                                                           | <br>ന്               | 29                   |                      | 29        |                                       |  |
|          |            | SALVAGE CHAIN LINK FENCE                                                     | 1                    | ( <u>P)</u> 200      |                      | 200       |                                       |  |
|          |            | CRNAMENTAL RAILING TYPE SPECIAL                                              |                      | 70                   |                      | 70        |                                       |  |
|          |            | TREATED TIMBER                                                               | <br>m <sup>1</sup>   | (P) 41               |                      | 10.2      |                                       |  |
|          |            | HAROWARE                                                                     |                      | (P) 300              |                      | 300       |                                       |  |
|          |            | GLUED LANINATED DECK PANELS                                                  | _ kg<br>             | (P) 300<br>(P) 194   |                      | 194       |                                       |  |
|          |            | WRE FEACE DESIGN SPECIAL VINTL COATED                                        |                      | (P) 29               |                      | 29        |                                       |  |
| IGNIN    |            |                                                                              | [10]                 | 10-1 <b>69</b> 1     | 1                    | 44        |                                       |  |
|          |            | TRAFFIC CONTROL                                                              | LUMP SUM             | 1                    |                      | t         |                                       |  |
|          |            | SIGN PANELS TYPE C                                                           | m²                   | 14                   |                      | 14        |                                       |  |
|          |            | INSTALL SIGN PANEL TYPE C                                                    | EACH                 |                      |                      | 8         |                                       |  |
|          |            | PAVEMENT MESSAGE (THRU ARROW) PAINT                                          | EACH                 | 48                   |                      |           |                                       |  |
| 3        |            | PAVEMENT MESSAGE (TYPE B)                                                    | EACH                 |                      | i                    |           |                                       |  |
| 9        |            | PAVENENT MESSAGE (TYPE C)                                                    | EACH                 | 11<br>11             |                      | 11        |                                       |  |
| <u> </u> |            | 100 mm SQUO LINE WHITE PAINT                                                 | m                    | 300                  |                      | 300       |                                       |  |
|          |            | 100 mm DOUBLE SOLID LINE WHITE-PAINT                                         | m                    | 360                  |                      | 350       |                                       |  |
|          |            | 100 mm BROKEN UNE YELLOW-PAINT                                               | m                    | 490                  |                      | 490       |                                       |  |
|          |            | ZEBRA CROSSWALK WHITE - PAINT                                                | ना र                 | 105                  |                      | 105       |                                       |  |
|          |            | PEDESTRIAN CROSSWALK FLASHER SYSTEM                                          | SYSTEM               | 1                    |                      | 1         |                                       |  |
|          |            | ND TURF ESTABLISHMENT:                                                       |                      | I                    | ¶                    |           |                                       |  |
|          |            | NODULAR BLOCK RETAINING WALL                                                 | mi                   | 28                   |                      | 28        | <u> </u>                              |  |
|          |            | WOODEN FENCE                                                                 | m                    | 800                  |                      | 500       |                                       |  |
|          | r          | BALE CHECK                                                                   | EACH                 | 30                   |                      | 30        |                                       |  |
|          |            | SILT FENCE TYPE HEAVY OUTY                                                   | m                    | 5400                 |                      | 5400      |                                       |  |
|          | 2575 501   |                                                                              | ha                   | (P) 0.8              | }                    | 0.8       |                                       |  |
|          |            | SEED MIXTURE ISA                                                             | 112                  | (*) V.8<br>\$        | 1                    | 8.0<br>R  |                                       |  |
|          |            | SEED MIXTURE JOA                                                             |                      | 50                   |                      | 50        |                                       |  |
|          |            | SEED WIXTURE SPECIAL                                                         | hg                   |                      |                      | 30        |                                       |  |
|          |            | EROSION STAB BLANKET TYPE SYNTHETIC                                          | 14<br>m <sup>2</sup> | 1.0                  |                      | 340       |                                       |  |
|          |            | SOODING TYPE LAWN                                                            | m<br>m <sup>2</sup>  | 340                  |                      | 6760      |                                       |  |
|          | r          | KULCH MATERIAL TYPE 1                                                        |                      | 6760                 |                      |           |                                       |  |
|          |            |                                                                              | <u> </u>             | 3.6                  | }                    | 3.6       |                                       |  |
|          | 4313.319 [ | DISKANCHORING                                                                | Na l                 | 0.8                  |                      | 0.8       |                                       |  |

|  | - |  |
|--|---|--|

| - N | OTES: |  |
|-----|-------|--|
|     |       |  |

1) 60kg/m1/25 mm USED TO DETERMINE TONS OF WATERIAL

ZI BASED ON 50 kg / ha APPLICATION RATE

3) BASED ON 4.5( / ha APPLICATION RATE

5) PROVIDED FOR USE AS DIRECTED BY THE ENGINEER FOR EROSION CONTROL

7) SPUT RAIL FENCE

8) BASED ON 48.3 Kg/ha APPLICATION RATE

9) PAINT

|               | 2-10-98<br>8-31-98 |             | 011<br>011 | REVISE QUANTITES A<br>REVISE CEDAR LAKE | ER MN/DOT COMMENTS<br>TRAL CONNECTION |               | I hereby certify that this plan, specification or<br>report was prepared by me or under my direct<br>supervision and that lam a duy Registered<br>Professional Engineer under the laws of the<br>State of Manesola. |                         | DRAWN BY DATE<br>N. MCGARVEY 6-97<br>DESIGNED BY<br>N. MCGARVEY 6-97<br>CHECKED BY | COL CONSULTING | F |
|---------------|--------------------|-------------|------------|-----------------------------------------|---------------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------------|----------------|---|
| NO<br>NAME: S | DATE<br>E01 589.F  | CKO<br>ATE: |            | 1998 TIME: 10:05:4                      | REVISION<br>2                         | minnesota met | ric Date 10.1.98 Ord Do 13409                                                                                                                                                                                       | CITY PROJECT NO.<br>XXX | R. LEWIS 7-97<br>COMM. NO.<br>0972590                                              | GROUP, INC.    |   |

|         | CITY OF MINNEAPOLIS                                   | SHEET         |
|---------|-------------------------------------------------------|---------------|
| G<br>C. | STATEMENT OF ESTIMATED QUANTITIES<br>KENILWORTH TRAIL | 4<br>OF<br>57 |

THE FOLLOWING STANDARD PLATES APPROVED BY THE DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

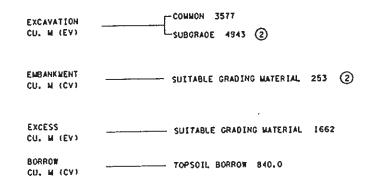
|           | MN/DOT STANDARD PLATES                      |
|-----------|---------------------------------------------|
| PLATE NO. | DESCRIPTION                                 |
| W7036 D   | PEDESTRIAN CURB RAMP                        |
| M7100 G   | CONCRETE CURB AND GUTTER                    |
| ¥8111C    | TRAFFIC SIGNAL BRACKETING                   |
| W8112C    | PEDESTAL FOUNDATION                         |
| N8114A    | PVC HANDHOLE/PULLBOX                        |
| M8122C    | PEDESTAL AND PEDESTAL BASE                  |
| M3000L    | REINFORCED CONCRETE PIPE                    |
| N3100G    | CONCRETE APRON FOR REINFORCED CONCRETE PIPE |
| M80001    | STANDARD BARRICADES                         |

# CONSTRUCTION/SOILS NOTES

- 1. <u>SUITABLE GRADING WATERIAL</u> ON THIS PROJECT SHALL CONSIST OF ALL SOILS ENCOUNTERED WITH THE EXCEPTION OF SLOPE DRESSING, DEBRIS, ORGANIC MATERIAL, MUCK AND OTHER UNSTABLE MATERIAL.
- 2. <u>OTHER GRADING WATERIAL</u> ON THIS PROJECT SHALL CONSIST OF ALL SOILS ENCOUNTERED ON THIS PROJECT EXCEPT OEBRIS.
- CLEARING AND GRUBBING SNALL BE RESTRICTED TO AREAS IDENTIFIED WITHIN THE GRADING LIMITS OF THE PROJECT.
- 4. BITUMINOUS SURFACING REMOVED BY CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE PROJECT, IN ACCORDANCE WITH THE PROVISIONS OF SPEC. 2104.3C3.
- 5. FINAL GRADED SURFACE (TOP OF THE GRADING SUBGRADE) IS DEFINED AS THE BOTTOM OF THE CLASS 5 AGGREGATE BASE AS SHOWN ON THE TYPICAL SECTIONS.
- 6. OTHER GRADING WATERIAL SHALL BE PLACED IN THE BERW AREAS OF THE GRADING LIMITS OF THE PROJECT OR AS DIRECTED BY THE ENGINEER.
- 7. COMPACTION OF THE GRADING PORTION OF THE PROJECT SHALL BE BY THE "QUALITY COMPACTION METHOD".
- 8. COMPACTION OF AGGREGATE BASE SHALL BE BY THE "QUALITY COMPACTION METHOD".
- COMPACTION OF ALL BITUMINOUS MIXTURES SHALL BE BY THE "ORDINARY COMPACTION METHOD".
- IO. STRIP AND REUSE AS SLOPE DRESSING ALL EXISTING SLOPE DRESSING WHERE PRESENT IN AREAS TO BE DISTURBED BY CONSTRUCTION. ALL SUCH STRIPPING IS CONSIDERED TO BE COMMON EXCAVATION.
- 11. PLACE A MINIMUM OF 100 mm OF SLOPE DRESSING ON ALL AREAS DISTURBED BY CONSTRUCTION AND SCHEDULED FOR PERMANENT TURF ESTABLISHMENT.
- 12. TURF ESTABLISHMENT SHALL MEET THE REQUIREMENTS OF SPEC. 2575.
- SEEDING REQUIREMENTS ON THIS PROJECT ARE AS FOLLOWS:
   APPLY SEED MIXTURE 30A TO DISTURBED AREAS DENOTED ON THE PLAN SHEETS.
  - APPLY SEED MIXTURE 25A TO THE AREA DISTURBED BY The Temporary trail conhection.
  - APPLY SEED MIXTURE SPECIAL TO THE SLOPE STABILIZATION AREA.
- 14. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE WINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS DATED APRIL 1995.

| 1<br>2<br>NO | 2-6-93<br>8-31-98 | WTA<br>MCI<br>BY |        |         | REVISE PER FEDERAL REVIEW<br>REVISE CEDAR LAKE TRAL CONNECTION<br>REVISION |       |       |        | repart was prepared by the or under my direct<br>supervision and that lam a duly Registered<br>ProfessionalEngineer under the laws of the<br>State of Minnesola. | 141-090-05 | DRAWN BY DATE<br><u>N. KCGARYEY 6-97</u><br>DESIGNED BY<br><u>N. KCGARYEY 6-97</u><br>CHECKED BY<br><u>R. LEWIS 7-97</u><br><u>COMM. NO.</u> |            |
|--------------|-------------------|------------------|--------|---------|----------------------------------------------------------------------------|-------|-------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------|
| NO           | OATE              | BY               | CKD    | APPR    | REVISION                                                                   |       |       |        | Davic) Se Quiter                                                                                                                                                 | XXX        |                                                                                                                                              | CROOL) HIS |
| NAME         | NP 589.P          | N D              | ATE: S | ept. 2. | 1998 TIME: 13:39:57                                                        | minne | esota | metric | C Date 10.1.96 Red NY. 123409.                                                                                                                                   |            | 0972590                                                                                                                                      |            |

# EARTHWORK SUMMARY (1)



(1) 130% SHRINKAGE FACTOR USED FROM EXCAVATED VOLUME (EV) TO COMPACTED VOLUME (CV). 150% SHRINKAGE FACTOR USED FROM LOOSE VOLUME (LV) TO COMPACTED VOLUME (CV). SHRINKAGE FACTORS ARE ASSUMED VALUES, USED ONLY FOR THE PURPOSES OF ESTIMATING OUANTITIES. IT SHALL BE UNDERSTOOD THAT NO WARRANTY IS MADE OR IMPLIED AS TO THE ACCURACY, SUFFICIENCY, OR RELIABILITY OF THESE SHRINKAGE FACTORS.

(2) ALL EXCESS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH THE PROVISIONS OF 2105.30 AND AS APPROVED BY THE ENGINEER.

| CITY OF MINNEAPOLIS                | SHEET |
|------------------------------------|-------|
| CONSTRUCTION/SOILS NOTES, STANDARD | 5     |
| PLATES AND EARTHWORK SUMMARY       | OF    |
| KENILWORTH TRAIL                   | 57    |

|                                  |                  |                                             |                        |                       |                             |                                                                                              | TYPE " | C" SIGNS           |                                       |         |  |
|----------------------------------|------------------|---------------------------------------------|------------------------|-----------------------|-----------------------------|----------------------------------------------------------------------------------------------|--------|--------------------|---------------------------------------|---------|--|
|                                  |                  |                                             | ତ                      | Θ                     |                             |                                                                                              | ('W D) |                    |                                       |         |  |
|                                  |                  | POSTS PER INSTALLATION<br>(QUANTITY - TYPE) | Ê                      | -                     | SIGN PANEL SIZE (IN. X IN.) |                                                                                              | S) A   |                    |                                       |         |  |
|                                  | SN               | TA .                                        | E.                     | E                     | ×                           |                                                                                              | R      | o i                | 0                                     |         |  |
| _                                | 2                | 17.00                                       | IS                     | Ē                     | E                           | 12                                                                                           |        |                    | Z Z                                   |         |  |
| o ó                              | 1                | L ST                                        | No.                    | <u></u>               | ZE                          | W A                                                                                          | l Z    | a a                | l ö                                   |         |  |
| N F                              | IAL              | ΪŻĘ                                         | а<br>ч                 | Ψ                     | S                           | S A                                                                                          | 6      | Ŭ                  | 1                                     |         |  |
| 할 날                              | S                | 話と                                          | 0                      | 0                     | Ē                           | PER PANEL AREA<br>PER PANEL (SO. M.)<br>TOTAL SIGN PANEL AREA (SQ M.)<br>SIGN PANEL CODE NO. | 펄      |                    |                                       |         |  |
| REFERENCE NO.<br>OF INSTALLATION | OF INSTALLATIONS | OSTS PER INSTA<br>QUANTITY - TYPE)          | Ĕ                      | É                     | A A                         |                                                                                              | 5      | A A                | 4                                     | 6       |  |
| ũ X                              |                  | I'S NY                                      | 5                      | N                     | Z                           | L L L                                                                                        | F I    | L Z                | z                                     | Ш       |  |
| REFERENCE NO<br>OF INSTALLATIO   | ġ                | ğ ğ                                         | LENGTHS OF POSTS (FT.) | MOUNTING HEIGHT (FT.) | SIG                         | SIS HE                                                                                       | 0      | ୍ଷା                | SIGN PANEL LEGEND                     | NOTE(S) |  |
| S-1                              | 12               | 1-U                                         | 8                      | 4                     | 12 x 12                     | 0.09                                                                                         | 1.08   |                    | STOP                                  |         |  |
| S-2                              | 9                | 1-U                                         | 8                      | 4                     | 18" dia                     | 0.16                                                                                         | 1.44   |                    | TRAIL ENTRANCE (KENILWORTH)           |         |  |
| S-3                              | 5                | 1-U                                         | 8                      | 4                     | 12 x 12                     | 0.09                                                                                         | 0.45   |                    | NO MOTOR VEHICLES                     |         |  |
| S-4<br>S-4                       | 2                | 1-U                                         | 8                      | 4                     | 4 x 18                      | 0.05                                                                                         | 0.10   |                    | CEDAR LAKE PARKWAY                    |         |  |
| <u> </u>                         | 2                | 1-U<br>1-U                                  | 8                      | 4                     | 4 x 18                      | 0.05                                                                                         | 0.10   |                    | BURNHAM BLVD                          |         |  |
| S-5                              | 2                | 1-U                                         | 8                      | 4                     | 4 x 18<br>18" dia           | 0.05                                                                                         | 0.10   | ļ                  | 21ST STREET                           | -       |  |
| S-6                              | 6                | 1-U                                         | 8                      | 4                     | 12 x 12                     | 0.16                                                                                         | 0.32   | <u> </u>           | TRAIL ENTRANCE (CEDAR LAKE TRAIL)     |         |  |
| S-7                              | 1                | 1.0                                         | 8                      | 4                     | 18" dia                     | 0.09                                                                                         | 0.34   |                    | TRAIL ENTRANCE (29TH STREET GREENWAY) |         |  |
| S-11                             | 2                | 1-0                                         | 8                      | 4                     | 12" dia                     | 0.10                                                                                         | 0.16   | <u> </u>           | RAIL ENTRANCE (29TH STREET GREENWAT)  |         |  |
| S-12                             | 4                | 1-0                                         | 8                      | 4                     | 30 x 30                     | 0.58                                                                                         | 2.32   | W11-2A             | PEDESTRIAN CROSSING                   | 0       |  |
| S-13                             | 4                | 1-U                                         | 8                      | 4                     | 30 x 30                     | 0.58                                                                                         | 2.32   | W11-2              | PEDESTRIAN CROSSING AHEAD             |         |  |
| S-16                             | 2                | 1-U                                         | 8                      | 4                     | 18" dia                     | 0.16                                                                                         | 0.32   |                    | 28TH STREET EXIT                      |         |  |
| S-21                             | 4                | 1-U                                         | 8                      | 4                     | 12 x 12                     | 0.09                                                                                         | 0.36   |                    | TRAIL NARROWS                         | 1       |  |
| S-22                             | 3                | 1-U                                         | 8                      | 4                     | 12 x 18                     | 0.14                                                                                         | 0.42   |                    | KEEP RIGHT                            |         |  |
| S-30                             | 4                | 1-U                                         | 8                      | 4                     | 8.75" dia                   | 0.04                                                                                         | 0.16   |                    | DIRECTIONAL ARROW (STRAIGHT)          |         |  |
| S-31                             | 3                | 1-U                                         | 8                      | 4                     | 12 x 12                     | 0.09                                                                                         | 0.27   |                    | SEPARATED TRAIL (LEFT)                |         |  |
| S-32                             | 2                | 1-U                                         | 8                      | 4                     | 12 x 12                     | 0.09                                                                                         | 0.18   |                    | SEPARATED TRAIL (RIGHT)               |         |  |
| S-33                             | 3                | <u>1-U</u>                                  | 8                      | 4                     | 12 x 12                     | 0.09                                                                                         | 0.27   |                    | MIXED TRAFFIC (LEFT)                  |         |  |
| S-34                             | 3                | 1-U                                         | 8                      | 4                     | 12 x 12                     | 0.09                                                                                         | 0.27   |                    | MIXED TRAFFIC (RIGHT)                 | _       |  |
| S-35                             | 2                | 1-U                                         | 8                      | 4                     | 12 x 12                     | 0.09                                                                                         | 0.18   |                    | PEDESTRIAN ONLY                       | -       |  |
|                                  | 1                | 1-U                                         | 8                      | 4                     | 18 X18                      | 0.21                                                                                         | *      | W1 - 2L            | CURVE ARROW (LEFT)                    | -       |  |
|                                  | 1                | 1-U<br>1-U                                  | 8                      | 4                     | 18 X 18                     | 0.21                                                                                         | *      | W1 -2R             | CURVE ARROW (RIGHT)                   | _       |  |
|                                  | 2 4              | 1-0<br>1-U                                  | 8                      | 4                     | 18 X18                      | 0.21                                                                                         |        | W1 - 4L            | CURVE AHEAD ARROW (LEFT)              |         |  |
|                                  | 4                | 1-0                                         | 8                      | 4                     | 36 x 36<br>24 X 18          | 0.84                                                                                         |        | W20-2              | DETOUR AHEAD                          |         |  |
|                                  | 3                | 1-U<br>1-U                                  | 8                      | 4                     | 24 X 18<br>30 X 24          | 0.28                                                                                         | *      | M4 - 8a<br>M4 - 9L | END DETOUR<br>DETOUR (LEFT)           |         |  |
|                                  | 3                | 1-U<br>1-U                                  | 8                      | 4                     | 30 X 24                     |                                                                                              | *      |                    | DETOUR (RIGHT)                        |         |  |
|                                  | 2                | 1-0                                         | 8                      | 4                     | 12 x 18                     | 0.46                                                                                         | *      | M4 • 9R<br>R9 - 6  | YIELD TO PEDS                         |         |  |
|                                  | 4                | 1-0                                         | 8                      | 4                     | 24 x 18                     | 0.14                                                                                         | 1.12   | S2-P2              | DOWN ARROW                            |         |  |
|                                  | 2                | 1-0                                         | 8                      | 4                     | 24 x 18                     | 0.28                                                                                         | 0.56   | W20-100P           | 100 FEET                              |         |  |
|                                  | 103              | 1-0                                         | <u> </u>               |                       | OJECT TOTA                  |                                                                                              | 13.18  | 1120-1007          | liveran                               |         |  |

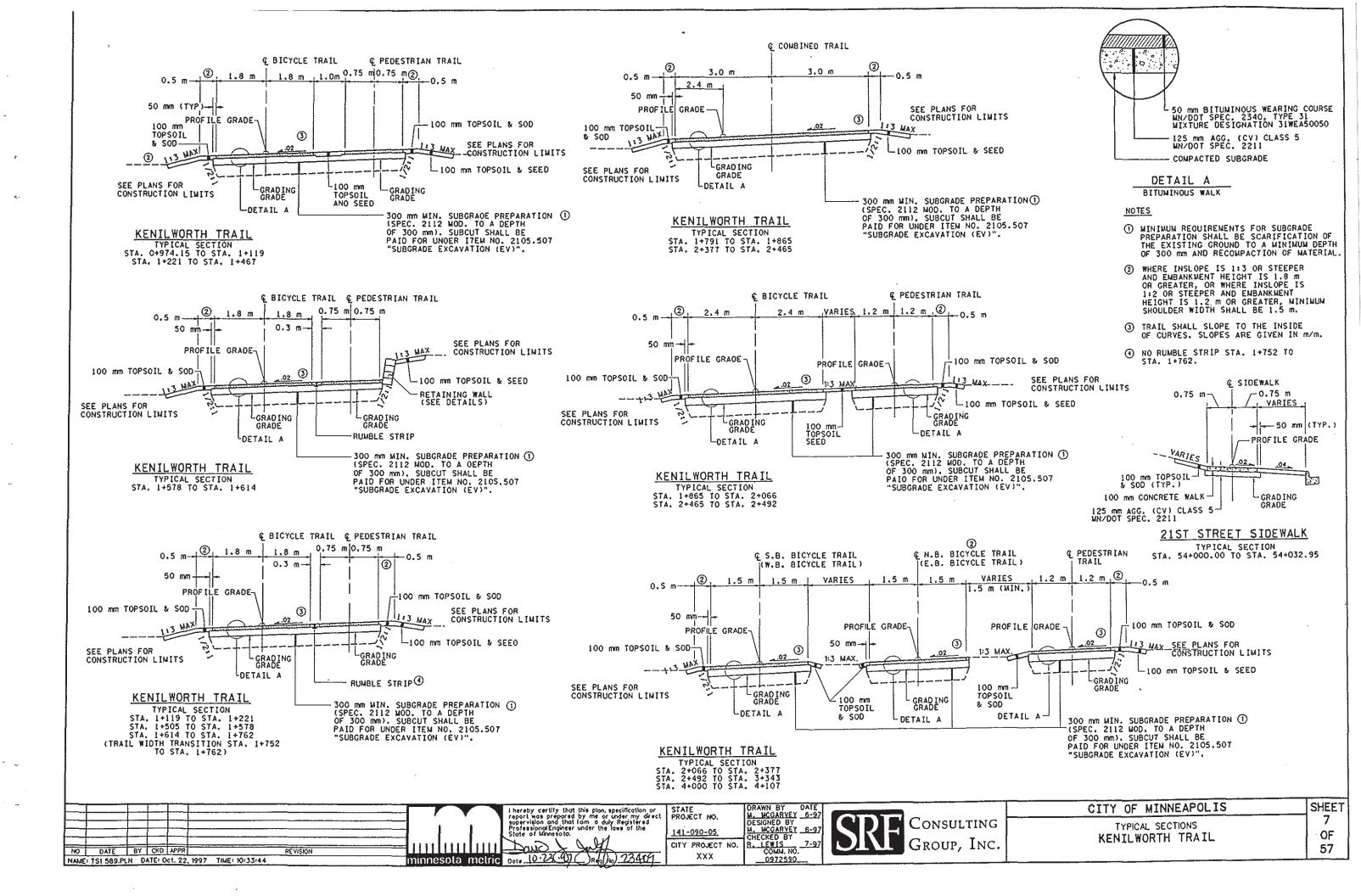
END STA. LOCATION BEGIN STA. WALL LOCATION NORTH OF 1+578 1+614 CEDAR LAKE PARKWAY RT

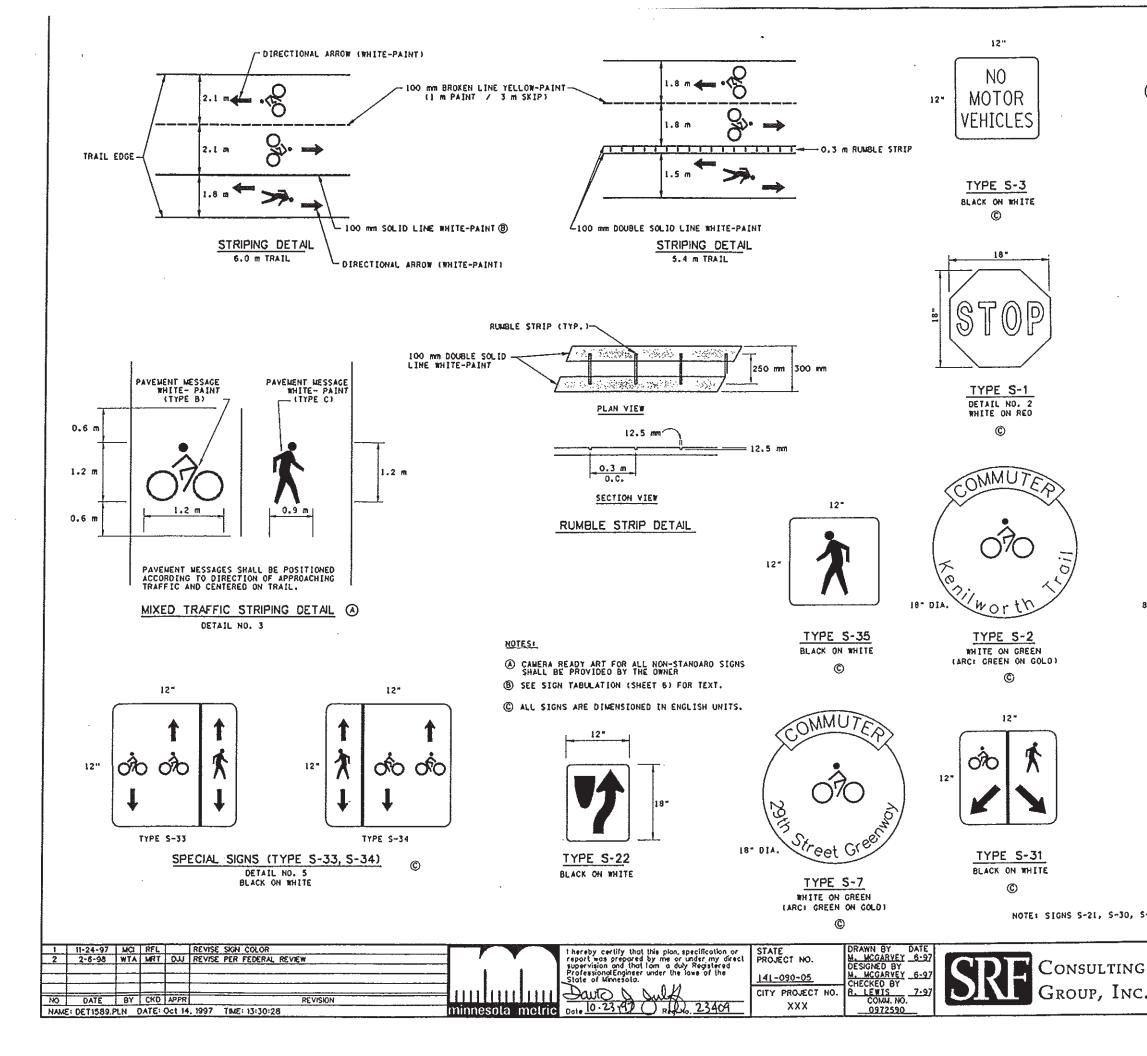
NOTES: MOUNTING HEIGHT IS MINIMUM. SEE DETAIL (SHEET 9) FOR TYPICAL MOUNTING.

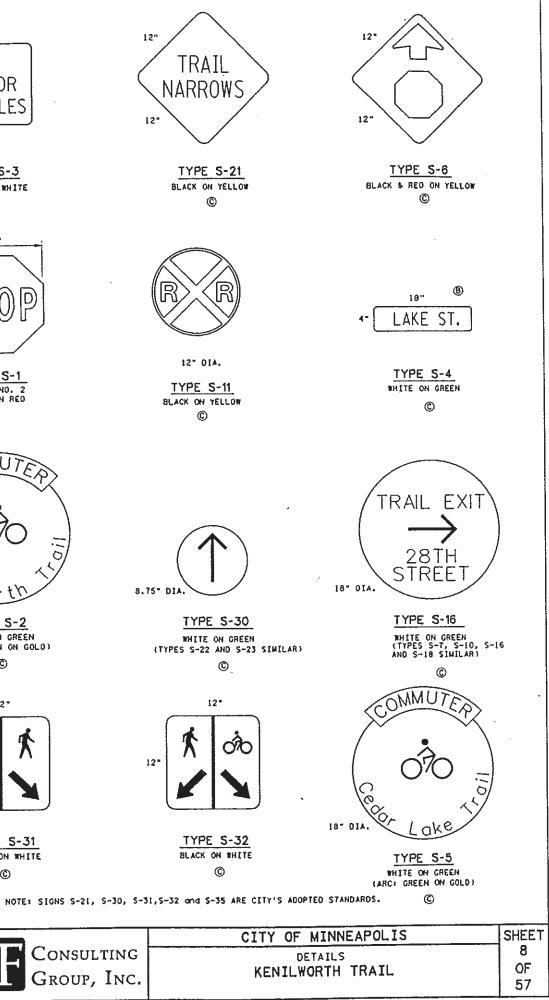
USE S2-P2 IN COMBINATION WITH W11-2A. O POST LENGTH IS MAXIMUM - POST SHALL NOT EXTEND ABOVE TOP OF SIGN. \* USED FOR TEMPORARY TRAFFIC CONTROL. THESE AREAS ARE NOT INCLUDED IN F&I SIGN PANEL TYPE "C"

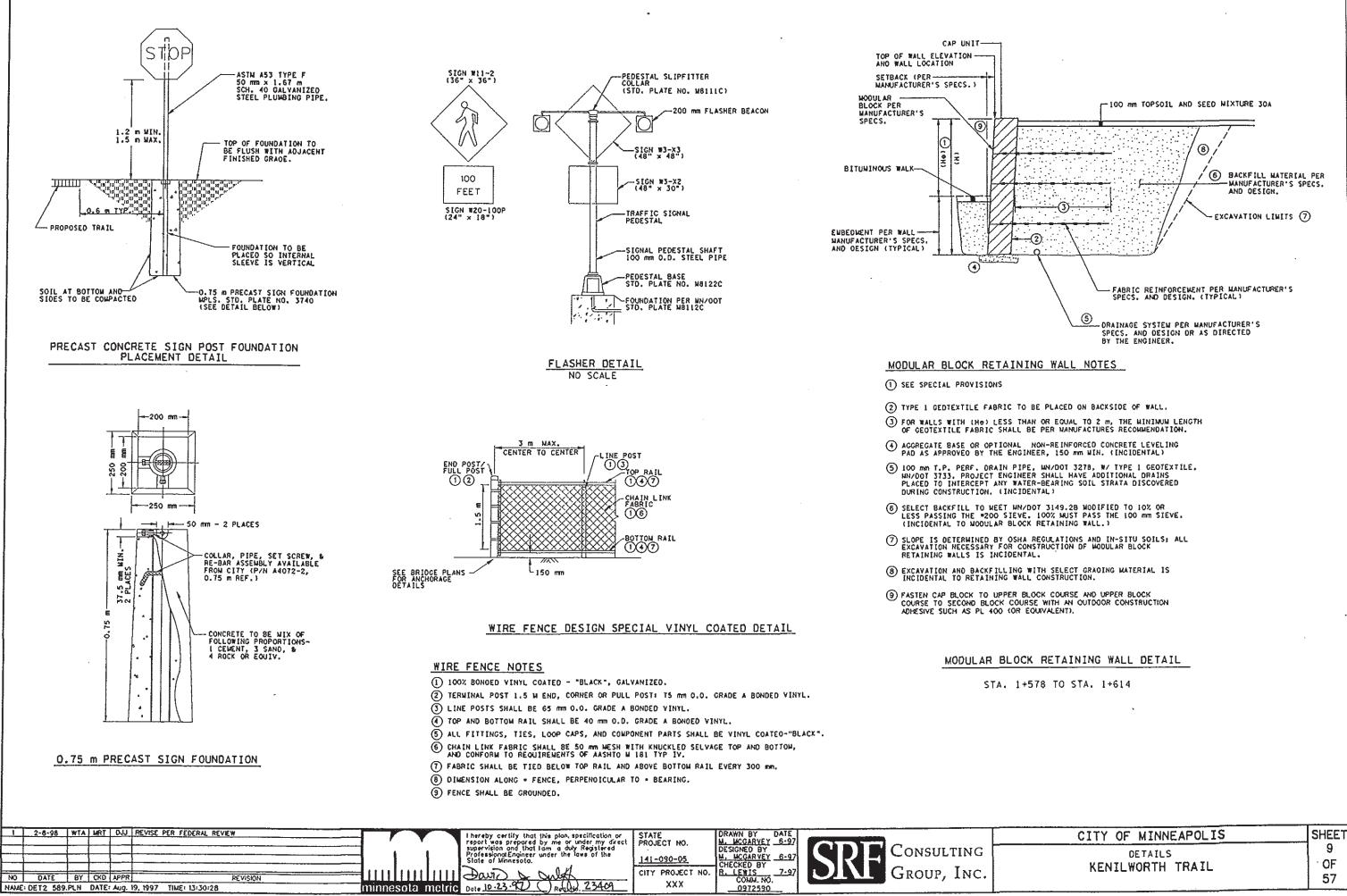
| 1 2-10-98 WTA MET OU REVISE SIGN TAB PER MN/DOT COMMENTS                             | I hereby certify that this plan, specification or STATE DRAWN BY DATE                 | CITY OF MINNEAPOLIS SHEET                        |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------|
|                                                                                      | report was prepared by me or under my direct PROJECT NO. W. INCUARVET 8-97            | CONSULTING SIGN AND RETAINING WALL TABULATIONS 6 |
|                                                                                      | Professional Engineer under the laws of the <u>141-090-05</u> <u>M. MCGARYEY 6-97</u> | CRATE INC. KENILWORTH TRAIL                      |
|                                                                                      | CITY PROJECT HO. B. LEVIS 7-97                                                        | GROUP, INC. 57                                   |
| NO DATE BY CKO APPR REVISION<br>NAME: THA 589.PLN DATE: Oct. 22, 1997 TIME: 10:26:20 | ninnesota metric Dolle 10.28.97 R/g H).23409 XXX 0972590                              | 07                                               |

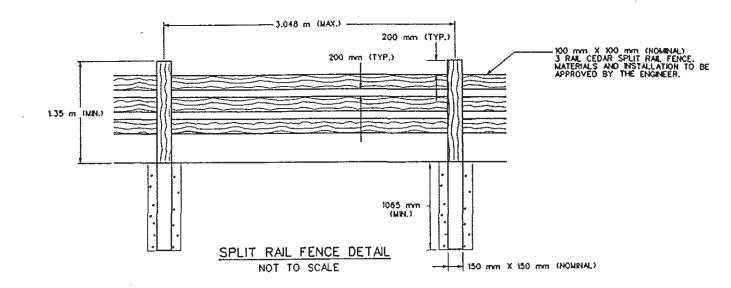
| FROM STA. | TOTAL<br>HEIGHT<br>(METER) | TO STA. | TOTAL<br>HEIGHT<br>(METER) | WALL<br>LENGTH | WALL<br>TYPE |
|-----------|----------------------------|---------|----------------------------|----------------|--------------|
| 1+578     | 0,64                       | 1+580   | 0.64                       | 2              | TYPICAL      |
| 1+580     | 0.64                       | 1+600   | 0.86                       | 20             | TYPICAL      |
| 1+600     | 0.86                       | 1+614   | 0.66                       | 14             | TYPICAL      |

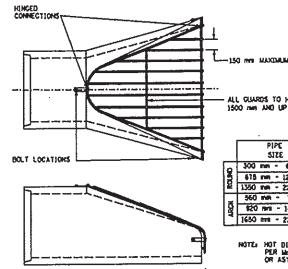












TRASH GUARD DETAIL NOT TO SCALE

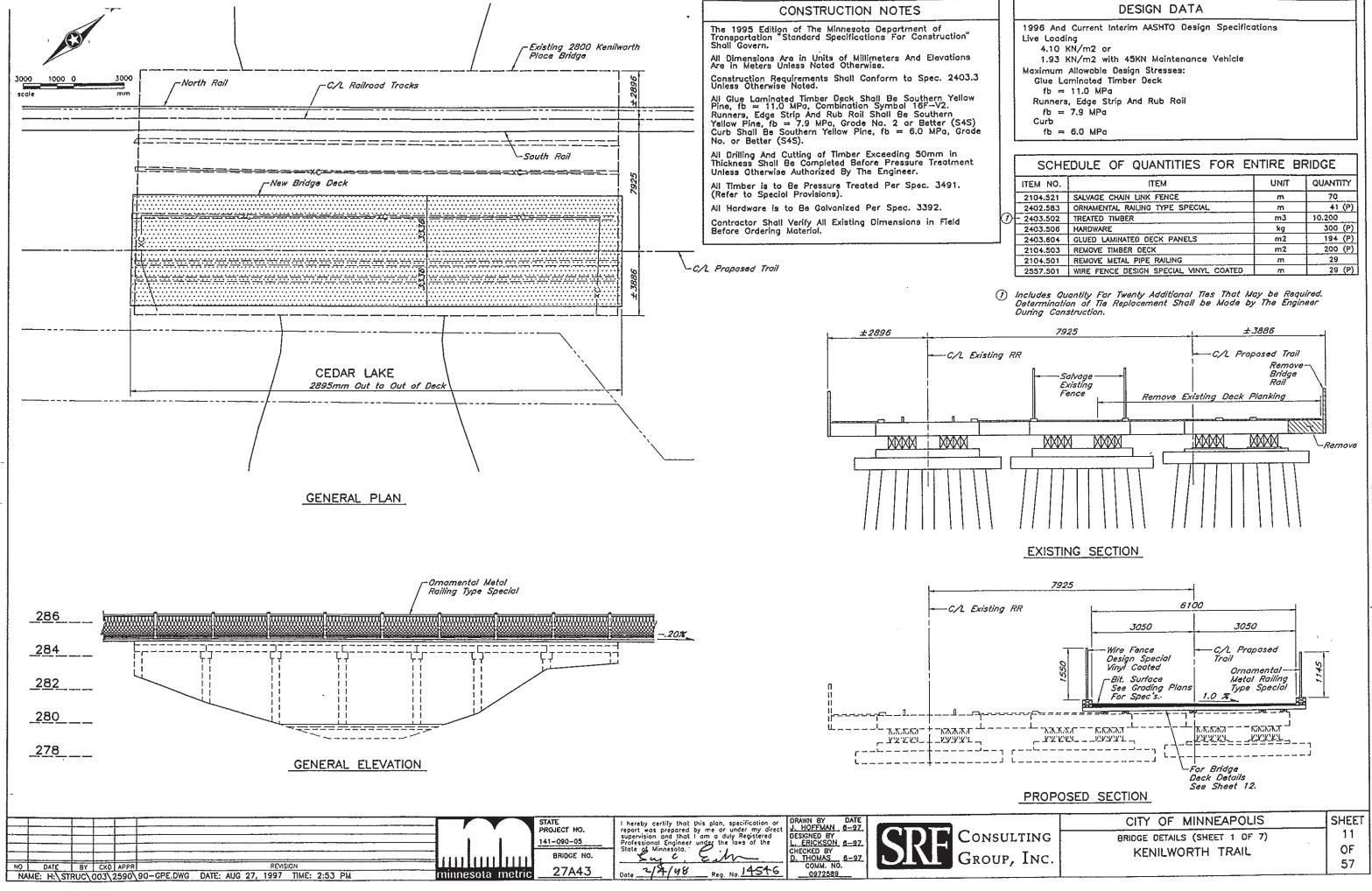
| 1         2-6-98         WTA         MRT         D.J.J.         REVISE PER FEDERAL REVEW           NO         DATE         BY         CK0         APPR         REVISION           NAME: DET3         589-PLN         DATE: 0ct. 21, 1997         Time: 11:13:17 | minnesota metric | supervision and that I am a duly Registered<br>ProfessionalEngineer under the laws of the<br>State of Minnesola. | STATE<br>PROJECT NO.<br>141-090-05<br>CITY PROJECT NO.<br>XXX | DRAWN BY DATE<br>M. MCGARYEY 6-97<br>DESIGNED BY<br>M. MCGARYEY 6-97<br>CHECKED BY<br>R. LEWIS 7-97<br>COMM. NO.<br>-0972590- | CRE CONSULTING |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------|
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------|

- ALL GUARDS TO HAVE ONE CROSS BAR-1500 mm AND UP HAVE THO EQUALLY SPACED.

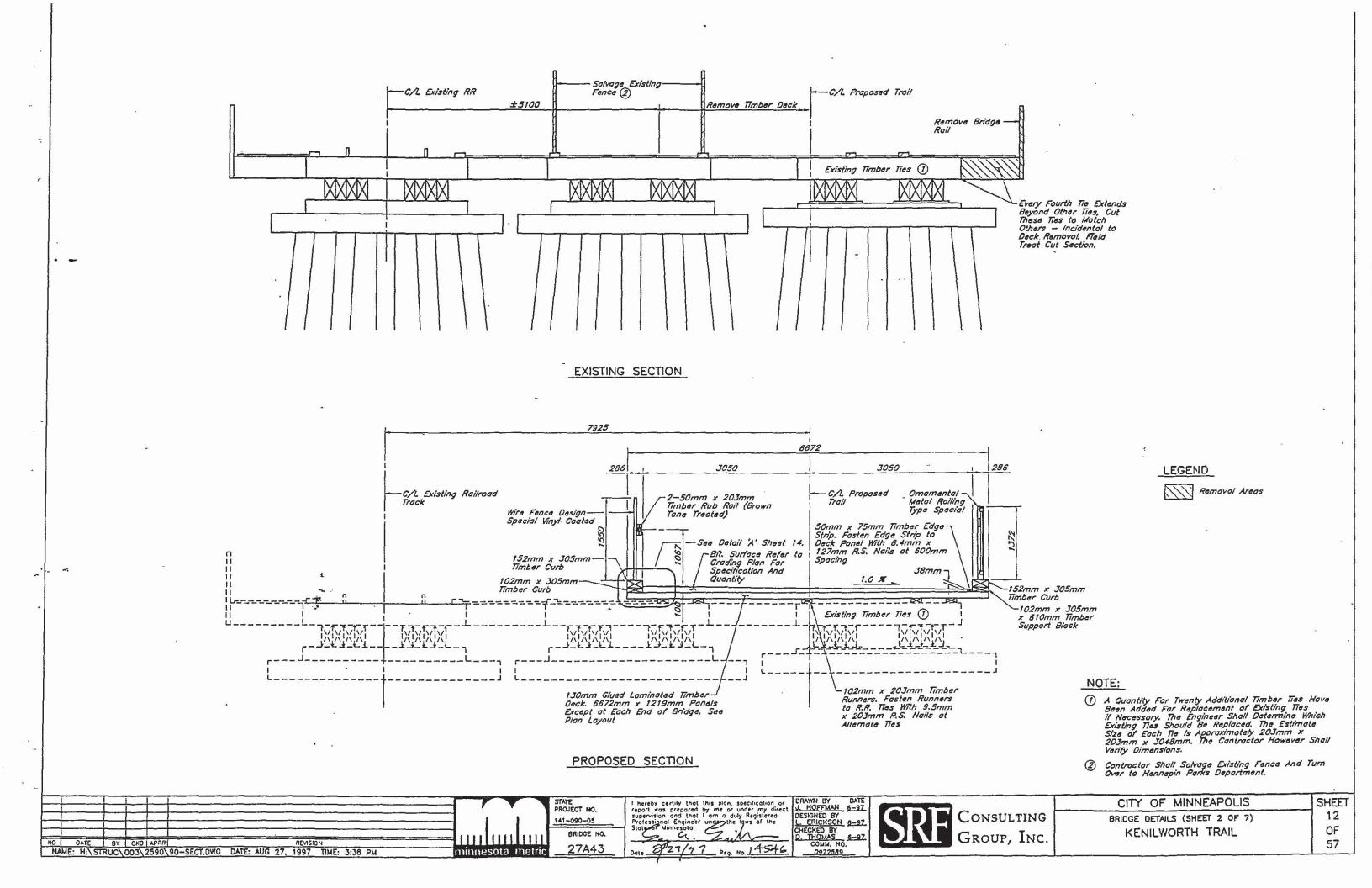
| •               |         |      |
|-----------------|---------|------|
| PIPC            | BOLT    | 6AR  |
| SIZE            | DIA.    | SIZE |
| mm - 600 mm     | M16X2   | 16   |
| nm - 1200 mm    | 120)2.5 | 19   |
| ) ma - 2250 am  | 12473   | 25   |
| ) mini - 725 mm |         | 16   |
| 0 mm - 1465 mm  | H20X2.5 | 19   |
| ) mm - 2235 mm  | H24X3   | 25   |

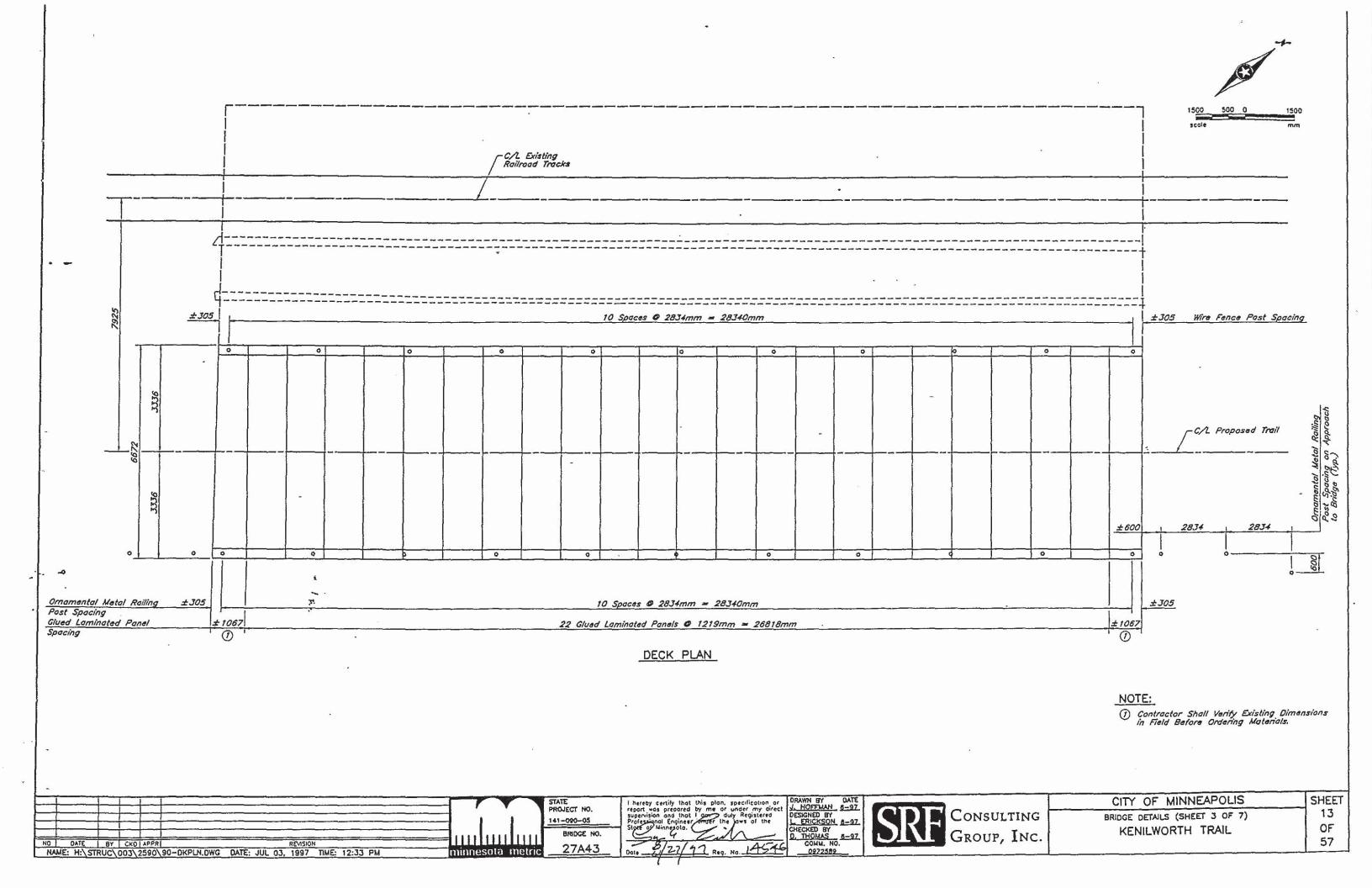
NOTE: HOT OUP GALVANIZED PER IN-2007 3392 OR ASTN-A153

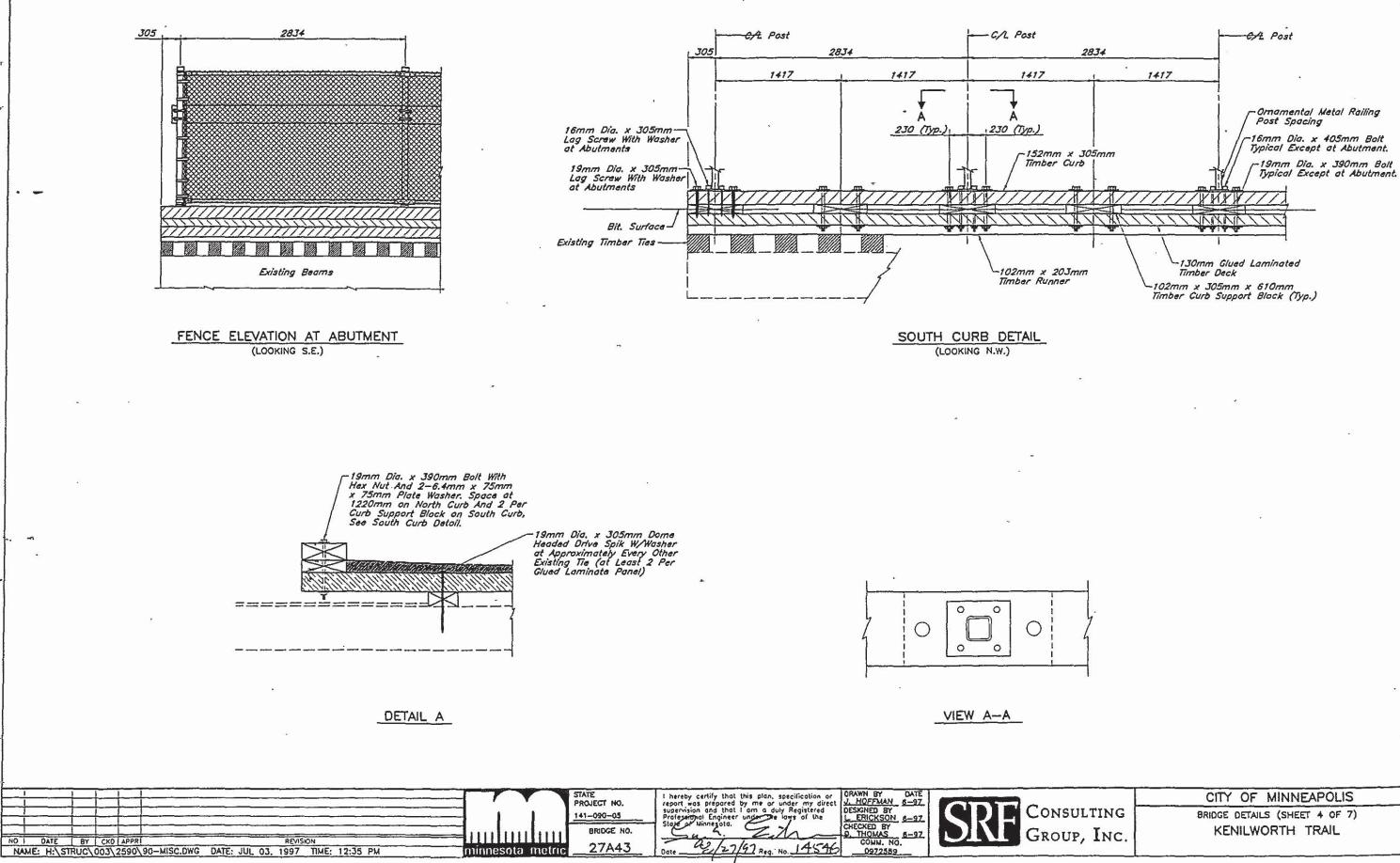
| 1 | CITY OF MINNEAPOLIS         | SHEET |  |
|---|-----------------------------|-------|--|
|   | DETAILS<br>KENILWORTH TRAIL |       |  |
|   |                             |       |  |
|   |                             | 57    |  |



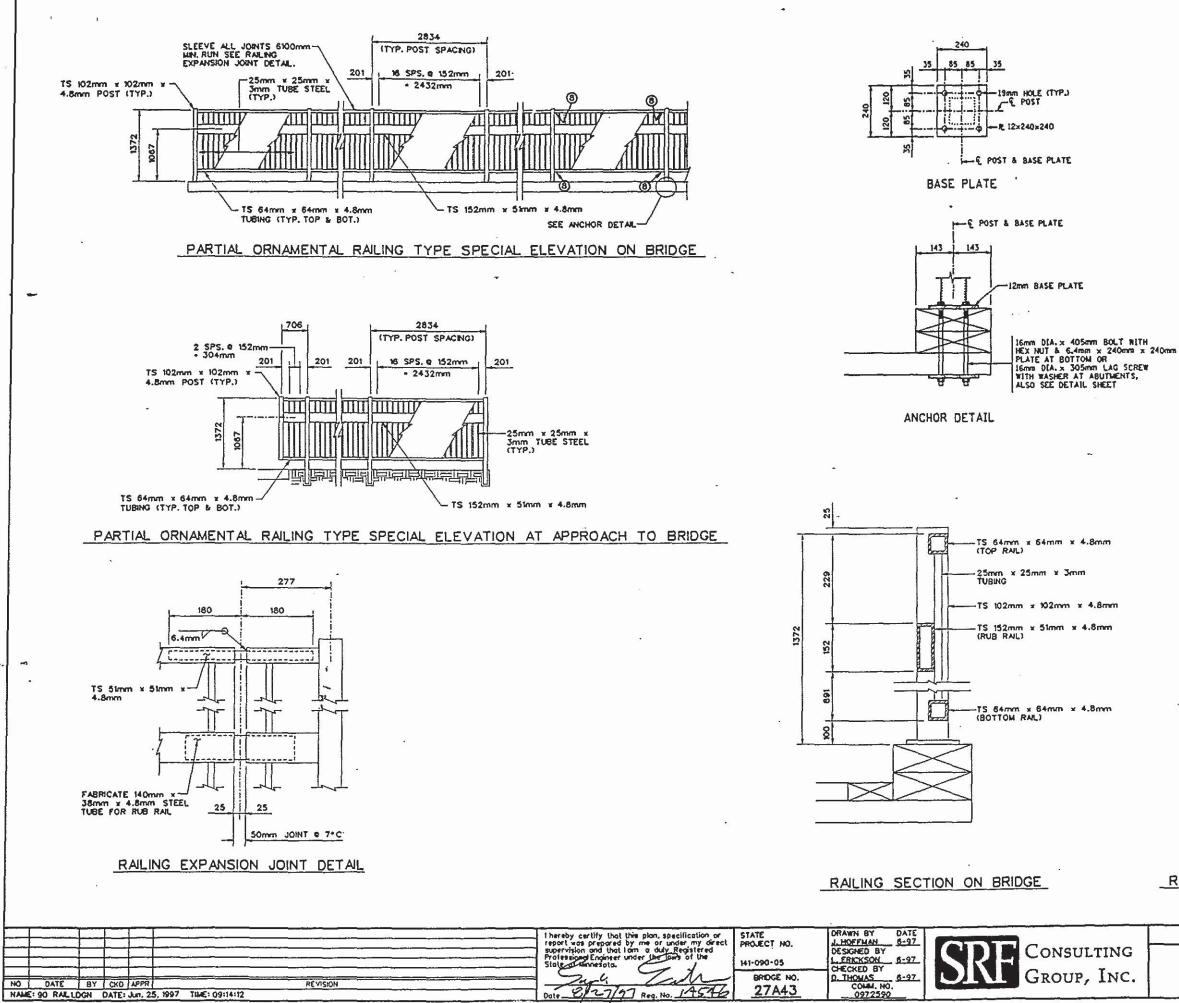
|   | SCHE       | DULE OF QUANTITIES FOR E               | NTIRE B | RIDGE    |
|---|------------|----------------------------------------|---------|----------|
|   | ITEM NO.   | ITEM                                   | UNIT    | QUANTITY |
|   | 2104.521   | SALVAGE CHAIN LINK FENCE               | m       | 70       |
|   | 2402.583   | ORNAMENTAL RAILING TYPE SPECIAL        | m       | 41 (P)   |
| 7 | ~ 2403.502 | TREATED TIMBER                         | m3      | 10.200   |
|   | 2403.506   | HARDWARE                               | kg      | 300 (P)  |
|   | 2403.604   | GLUED LAMINATED DECK PANELS            | m2      | 194 (P)  |
|   | 2104.503   | REMOVE TIMBER DECK                     | m2      | 200 (P)  |
|   | 2104.501   | REMOVE METAL PIPE RAILING              | m       | 29       |
|   | 2557.501   | WIRE FENCE DESIGN SPECIAL VINYL COATED | m       | 29 (P)   |







|         | CITY OF MINNEAPOLIS           | SHEET |
|---------|-------------------------------|-------|
| JLTING  | BRIDGE DETAILS (SHEET 4 OF 7) | 14    |
|         | KENILWORTH TRAIL              | OF    |
| P, INC. |                               | 57    |



\* \*

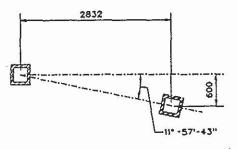
NAME: 90 RALLOGN DATE: Jun. 25, 1997 TIME: 09:14:12

8/27/97 Rog. No. 14546

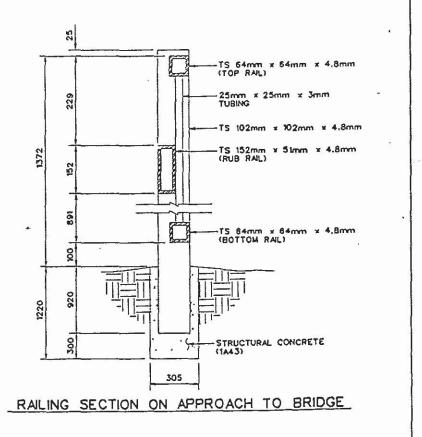
27A43

#### GENERAL NOTES:

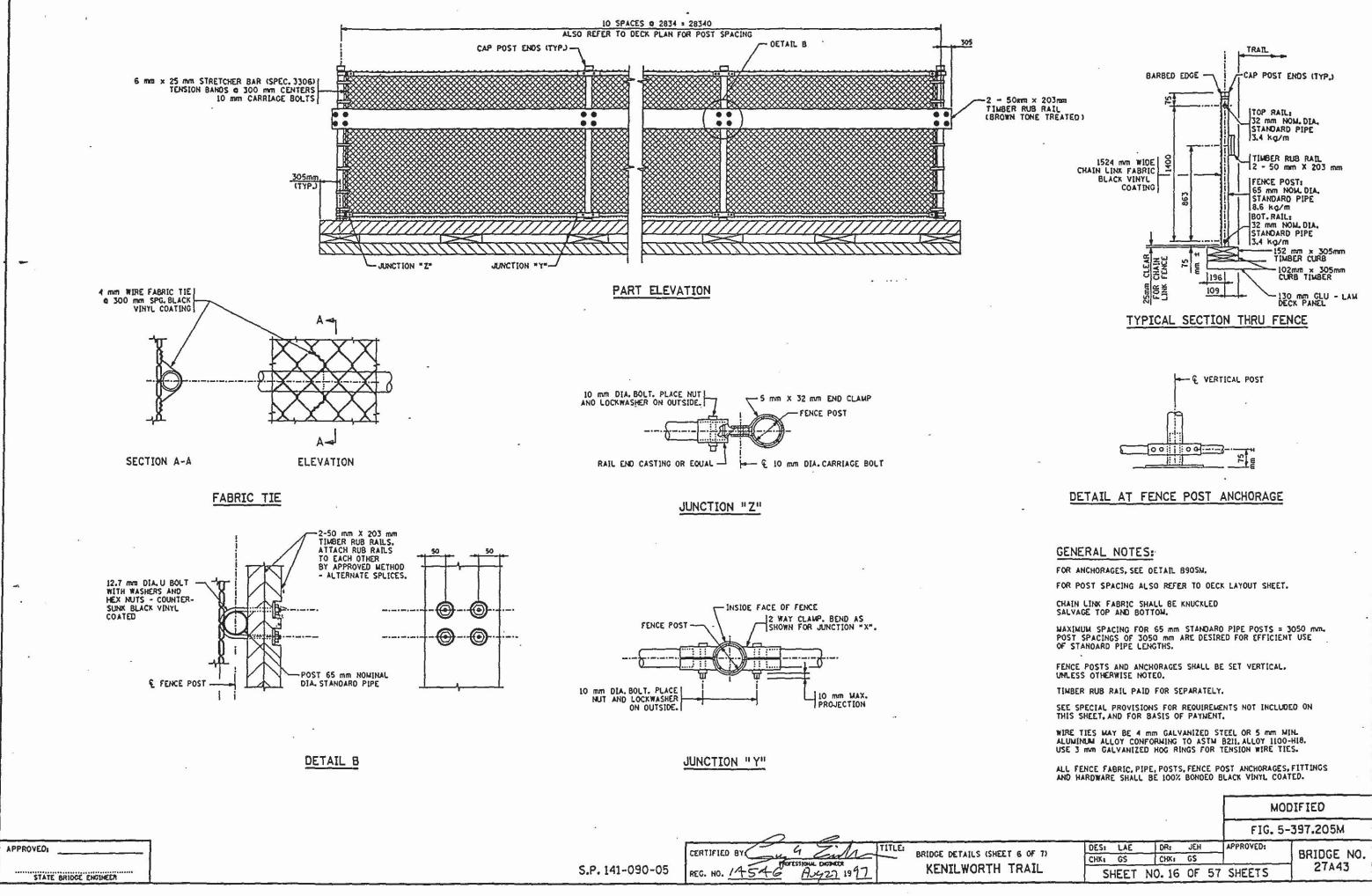
- 1. ALL STRUCTURAL STEEL TUBING IN THE RATL SHALL BE A500, GRADE B AND A513, GRADE 2.
- 2. WATERIAL FOR CLOSURE PLATES AND BASE PLATES SHALL CONFORM TO SPEC. 3306.
- 3. RATL POSTS AND PICKETS SHALL BE PERPENDICULAR TO GRADE.
- 4. FOR RAIL COATING SEE THE SPECIAL PROVISIONS.
- 5. THE RAILING BASE PLATES, AND PROTRUDING PORTIONS OF BOLTS, MUTS AND WASHERS SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
- 6. EXPANSION JOINT'S SHALL BE PLACED IN HORIZONTAL RAILS AT EVERY OTHER PANEL.
- 7. THE LENGTH OF METAL RAILING FOR PAYMENT SHALL BE MEASURED BETWEEN THE CENTER OF THE RAIL END POSTS.
- (a) PROVIDE GREE WEEPHOLES IN ALL HORIZONTAL RAILS HEAR EACH VERTICAL POST.
- 9. HAROWARE QUANTITIES INCLUDED IN PAYMENT FOR ORNAMENTAL METAL RAILING TYPE SPECIAL.





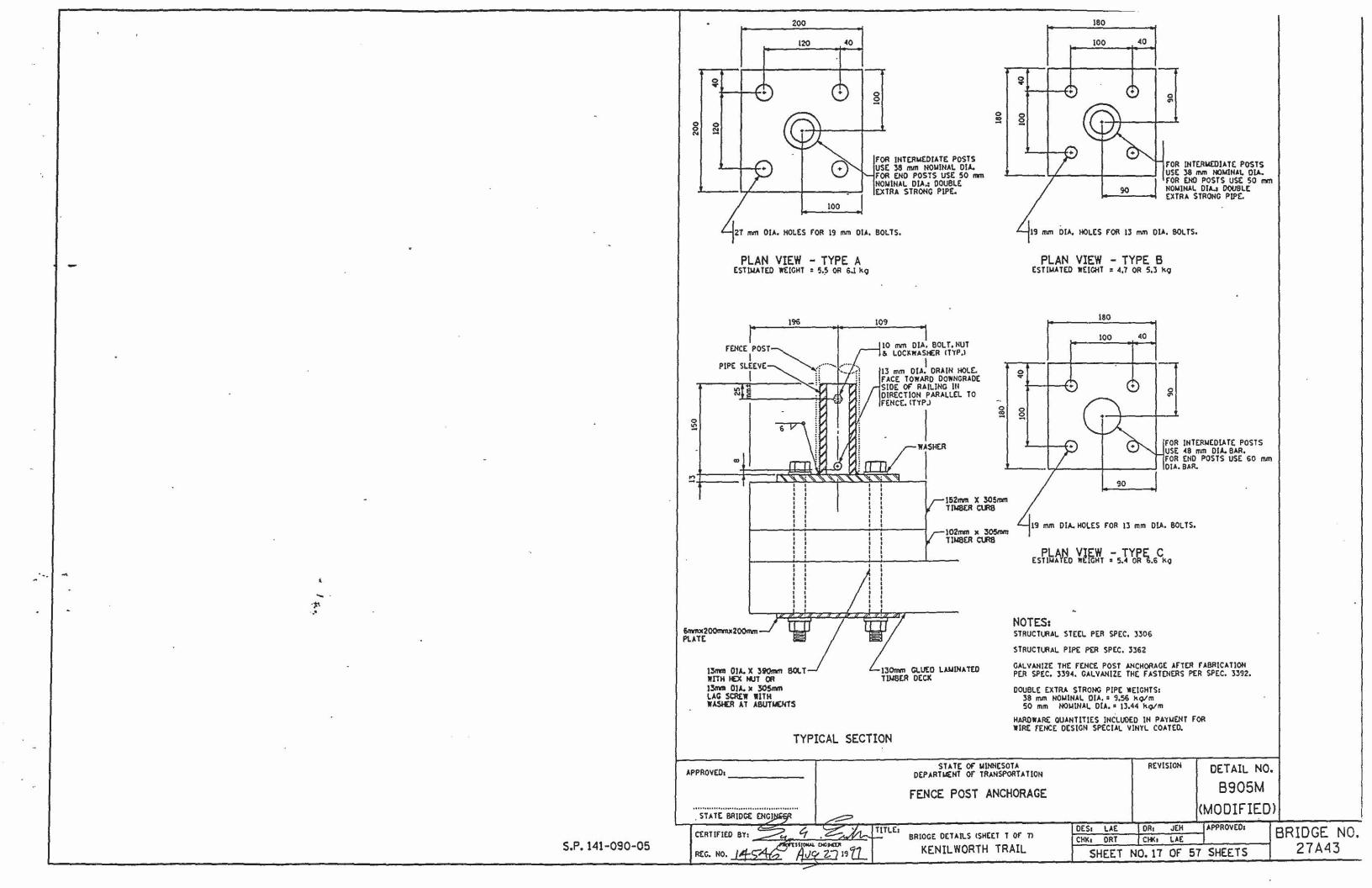


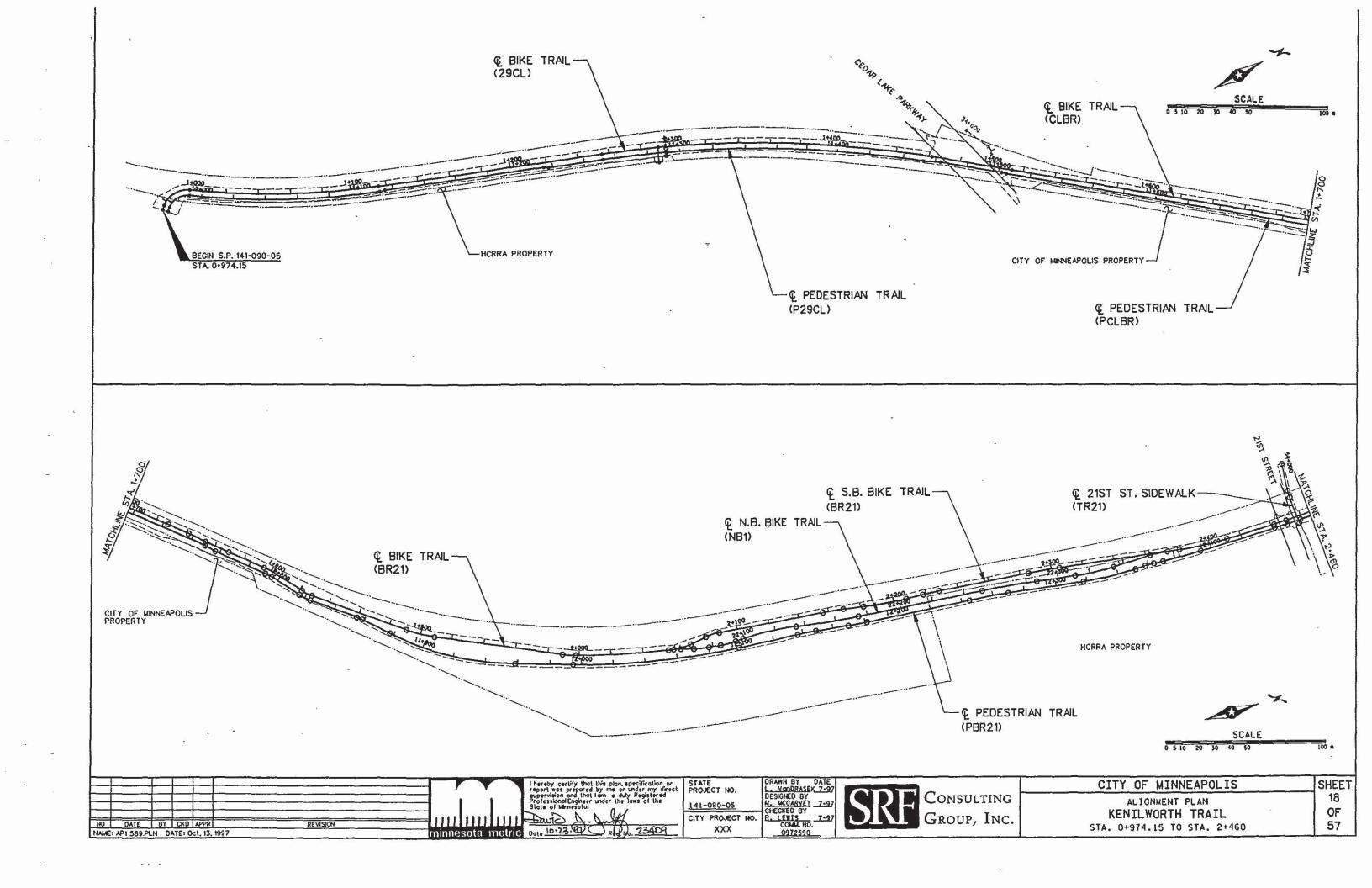
| CITY OF MINNEAPOLIS                                | SHEET          |
|----------------------------------------------------|----------------|
| RAILING DETAILS (SHEET 5 OF 7)<br>KENILWORTH TRAIL | 15<br>OF<br>57 |

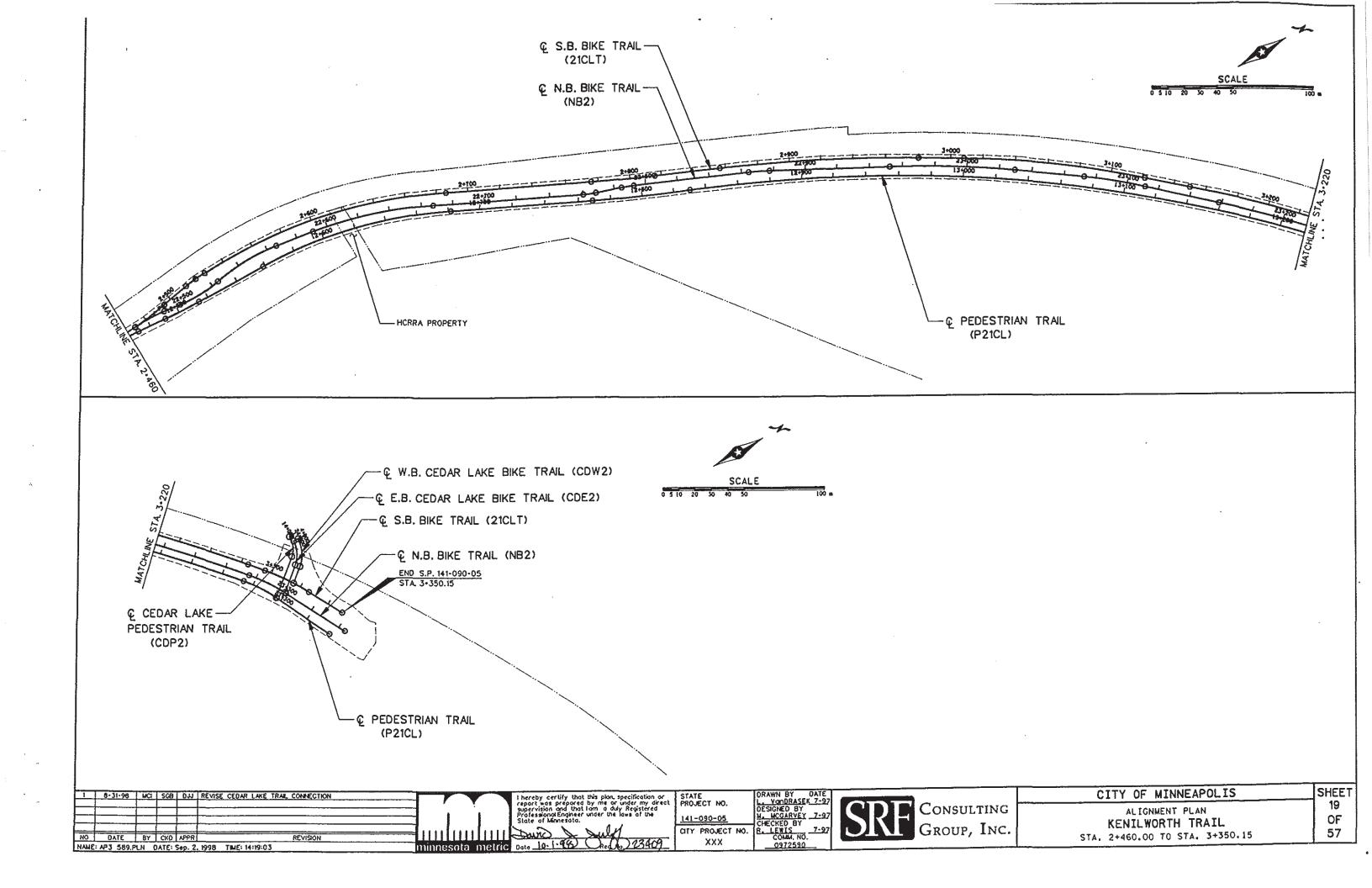


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|                     |          |             | FIG. 5   | -397.205M  |
|---------------------|----------|-------------|----------|------------|
| ET 6 OF 7)<br>TRAIL | DES: LAE | DR1 JEH     | APPROVED | LOOTDOE NO |
|                     | CHK: GS  | CHK: GS     |          | BRIDGE NO. |
|                     | SHEET    | NO. 16 OF 5 | 7 SHEETS | 27443      |







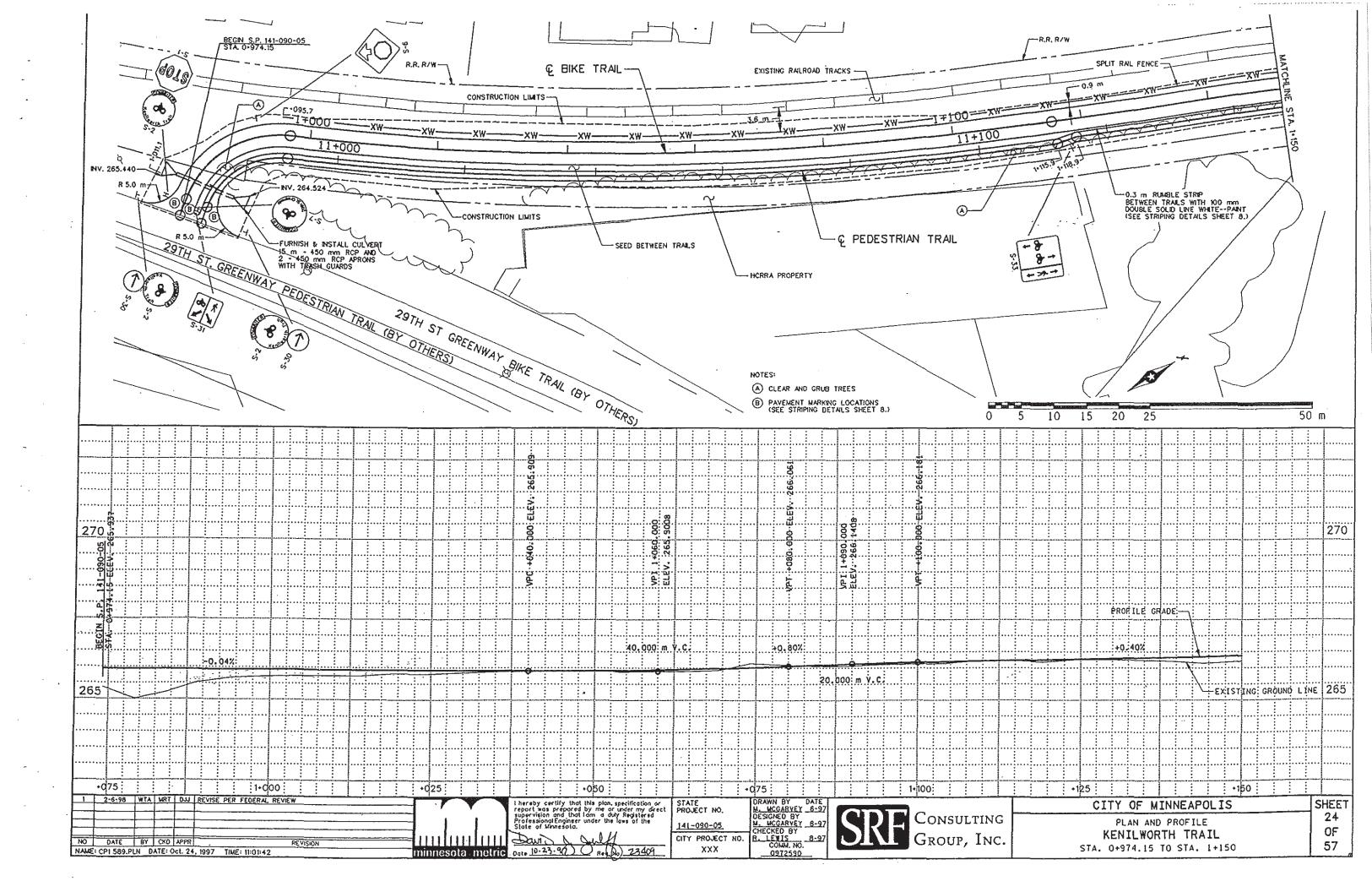
| POINT     | T                                      | [                                     | CURVE D        | DATA            |                                                                                                                 | COORDIN                                                                                                                    | INATES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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           | 1                                     | CURVF                                 | E DATA   |           | COORDI          | NATES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>—</b> |
|-----------|----------------------------------------|---------------------------------------|----------------|-----------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|-----------------------------------------------------------|---------------------------------------|---------------------------------------|----------|-----------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------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| NO. POINT | STATION                                | DELTA                                 | RADIUS T       | TANGENT         | LENGTH                                                                                                          | X                                                                                                                          | Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | - AZIMUTH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | NO.          | POINT    | T STATION                                                 | DELTA                                 | RADIUS                                | TANGENT  | LENGTH    | x               | Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | _        |
|           | /                                      | +′                                    |                | ·/              | Į                                                                                                               |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           |                                       |                                       |          |           |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1        |
| 1000 POT  | 0+974,146                              | +                                     | 1              |                 | t                                                                                                               | 157,249.3610                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 80 N40º 42' 52.6"W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |          |                                                           | 2 20º 45' 53.3" LT                    | .T 30.004                             | 04 5.497 | 17 10.87/ | 14 157,792.3012 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |
| PC        | 0+976.831                              |                                       | 1              |                 | <b></b>                                                                                                         | 157,247.6100                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           |                                       |                                       |          |           | 157,761.8023    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |
| PI        | 0+988.664                              | 4 76° 32' 26.4" RT                    | τ 15.000       | 11.834          | 20.038                                                                                                          | 38 157,239.8909                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           |                                       | 4                                     |          |           | 157,791.2158    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |
| CC        | /                                      | <b></b> '                             |                | l               | 1                                                                                                               | 157,258.9795                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           |                                       |                                       |          |           | 157,789.2209    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |
| PRC       | 0+996.869                              |                                       |                | ·!              | 1                                                                                                               |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 70 N35º49'33.8"E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |          |                                                           | 17 16º 33' 23.7" RT                   | 30.000                                | 00 4.365 | 35 8.66   | 59 157,788.3590 | the second se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |
| PRC       | 0+996.869                              |                                       |                |                 |                                                                                                                 | 157,246.8175                                                                                                               | and the second s | the second s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              | CC       |                                                           |                                       |                                       |          |           | 157,818.6303    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -        |
| 29CL-2 PI | 1+056.471                              | 1 14º 09' 24.5" LT                    | T 479,988      | 59.602          |                                                                                                                 | 97 157,281.7041                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           | .1                                    |                                       |          |           | 157,788.7523    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -        |
| CC        | ·                                      | · · · · · · · · · · · · · · · · · · · |                |                 |                                                                                                                 |                                                                                                                            | 2 48, 380, 9969                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           | 1                                     |                                       |          |           |                 | 49,094.385                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |
| PT        | 1+115.466                              |                                       |                | 1               | (                                                                                                               |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 21 N21º40'09.3"E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | - 8R21-7     | I PI     | 2+163.089                                                 | 19 3º 48' 15.5" RT                    | 200.000                               | 6.642    | 42 13.280 | 30 157,795.4359 | 49,101.000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | .03      |
| PC        | 1+255,698                              | · '                                   |                | ,)              | 1                                                                                                               |                                                                                                                            | 5 48,334.0840                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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           |                                       |                                       |          |           |                 | 49,076.3670                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
| 29CL-3 PI | 1+359.601                              | 1 17º 37' 49.0" RT                    | T 670.000      | 103.903         | 206.167                                                                                                         | 3 157, 393.8584                                                                                                            | 4 48,430.644                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 40 PI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              | PT       |                                                           | ó                                     |                                       |          |           | 157,796.4719    | and the second s |          |
| CC        |                                        |                                       |                | ·               | 1                                                                                                               |                                                                                                                            | 11 48,086.6876                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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           |                                       |                                       |          | 1         |                 | 49,119.674                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| PT        | 1+461.861                              | .()                                   |                | ·               | 1                                                                                                               |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           | 2 7º 20' 32.5" LT                     | T 200.000                             | 12.832   | 32 25.630 |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| 1001 P07  | 1+504.689                              |                                       |                | ·               |                                                                                                                 |                                                                                                                            | 0 48,544.1910                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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    |           | 157,600.8323    | the second se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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           | at                                    | 1                                     | 1        |           | 157,800.7513    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| PC        | 1+504.690                              | J                                     | <b></b>        | ·+              |                                                                                                                 | 157.486.778                                                                                                                | 6 48,544.1725                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| CLOR-1 PI | 1+508.670                              |                                       | 7 1,200.000    | 3.980           | 1 7.95                                                                                                          | 59 157, 489.2991                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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5.111 | 11 10.219 |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| CC        |                                        | <u> </u>                              | 1,2001000      |                 |                                                                                                                 | - for the second second                                                                                                    | 4 47,784.1711                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| PT        | 1+512.649                              | .t'                                   | ++             | ·+              | r                                                                                                               |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| PC        | 1+727.901                              |                                       | t              | ·+              |                                                                                                                 |                                                                                                                            | 48,715.9860                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| CLBR-2 PI | 1+734.749                              |                                       | T 500.000      | 6.848           |                                                                                                                 | 157,633.6405                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Statement and statement an | BR21-10      |          |                                                           |                                       | T 400.000                             | 9.770    | 19 53     | 157,806,1535    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |
|           | 11347.114                              | 1- 34 0313 Ki                         | 1 200.0001     | 0.010           | 13.030                                                                                                          | the second se            | 3 48,396.7592                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| PT        | 1+741.597                              |                                       | ++             | ·               | the second se | the second se            | the second se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| PC        | 1+753,424                              |                                       | 1              |                 |                                                                                                                 |                                                                                                                            | 2 48,735.2988                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| CLBR-3 PI | 1+761.494                              | 4 1º 50' 57.2" LT                     | T 500.000      | 8.069           |                                                                                                                 | 37 157,651.2733                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           | 7 8º 38' 56.5" LT                     | T 200.000                             | X 15,124 | 4 30.191  | 157,819.8751    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| 20        |                                        | +'                                    | +              | J               |                                                                                                                 |                                                                                                                            | 4 49,064.9456                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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           | +'                                    |                                       |          |           | 157,619.5849    | A Designed and the second s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| PT        | 1+769.562                              |                                       | +              | اا              |                                                                                                                 |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| PC        | 1+793.721                              |                                       | <u> </u>       | ]               |                                                                                                                 |                                                                                                                            | 6 48,766.2716                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| CLBR-4 PI | 1+797.439                              | 9 9º 26' 50.1" RT                     | T 45.000       | 3.718           |                                                                                                                 | 0 157,674.0886                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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4.072  | 2 8.144   | 4 157,818.7470  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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    |           | 157,518.9152    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| PT        | 1+801.141                              | <u>ا</u> '                            |                |                 | 1                                                                                                               | 157,676.8882                                                                                                               | . 48,771.592                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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| 1200 POT  | 1+801.141                              | 4′                                    |                |                 | <b></b>                                                                                                         |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| PC        | 1+821.471                              |                                       |                | ·               | 1                                                                                                               |                                                                                                                            | 4 48,784.9704                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| 8R21-1 PI | 1+824.945                              | 5 13º 12' 42.4" LT                    | 7 30.000       | 3.474           | 6.918                                                                                                           | 8 157,694.8081                                                                                                             | 48,787.2560                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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           | <u>، [</u> '                          |                                       |          |           | 157,817.4892    | 49,408.1939                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| PT        | 1+828.389                              | //                                    |                | , <u> </u>      | 1                                                                                                               | 157,696.8320                                                                                                               | 48,790.0809                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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           | 5 6° 39' 29.9" LT                     | T 200.000                             | 0 11.634 | 4 23.242  | 2 157,816.9106  | 49,419.8136                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| PC        | 1+890.732                              | .1                                    |                |                 |                                                                                                                 | 157,733.1493                                                                                                               | 3 48,840,7534                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| BR21-2 P1 | 1+899.792                              | 2 11º 29' 51.0" LT                    | 7 90.000       | 9.061           | 1 18.060                                                                                                        | 0 157, 738, 4274                                                                                                           | 48,848.1175                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| CC        |                                        | 1                                     |                | , T             | 1                                                                                                               | 157,659.9970                                                                                                               | 0 48,893.1819                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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           | / '                                   | /                                     |          |           | 157,812.0730    | the second se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| PT        | 1+908.792                              | .(                                    |                | , <del></del>   | 1                                                                                                               | 157, 742. 1317                                                                                                             | 48,856.386                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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           | 3 7º 05' 43.6" RT                     | T 60.000                              | 0 3.720  | .0 7.430  | 0 157,811.4584  | 49,452.363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| PC        | 1+989.111                              |                                       |                | , <del></del> r | 1                                                                                                               |                                                                                                                            | 3 48,929.6866                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| 8R21-3 PI | 1+993,390                              | 8º 09' 27.4" LT                       | T 60.000       | 4.279           | 8.547                                                                                                           | 3 157, 776. 7185                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| PCC       | 1+997.654                              | 4                                     |                | , <del> </del>  | 1                                                                                                               |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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           | 2 29° 57' 11.3" RT                    | T 305.000                             | 0 81.591 | 1 159.448 | 8 157,807.5909  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| PCC       | 1+997.654                              |                                       |                | ·               | (                                                                                                               | 157, 777.8960                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| BR21-4 PI |                                        | 6° 35' 49.9" LT                       | T 534.991      | 30.834          | 1 61.60                                                                                                         | 0 157, 786. 3817                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| PCC       | 2+059.254                              | ،[)                                   |                | ·+              |                                                                                                                 |                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| PCC       | 2+059.254                              |                                       | <b></b>        | ·+              |                                                                                                                 |                                                                                                                            | 5 48,997.7703                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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|           |                                        |                                       |                |                 | 1.hr                                                                                                            | hereby certify that th<br>sport was prepared by<br>upervision and that I a<br>rofessionalEngineer un<br>tate of Minnesota. | his plan, specificati<br>by me or under m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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I     | CARD BY 7-97<br>CARD BY 7-97<br>WARNER 7-97<br>COMMAN NO. | Consulting                            |                                       |          |           | TABULATION      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |
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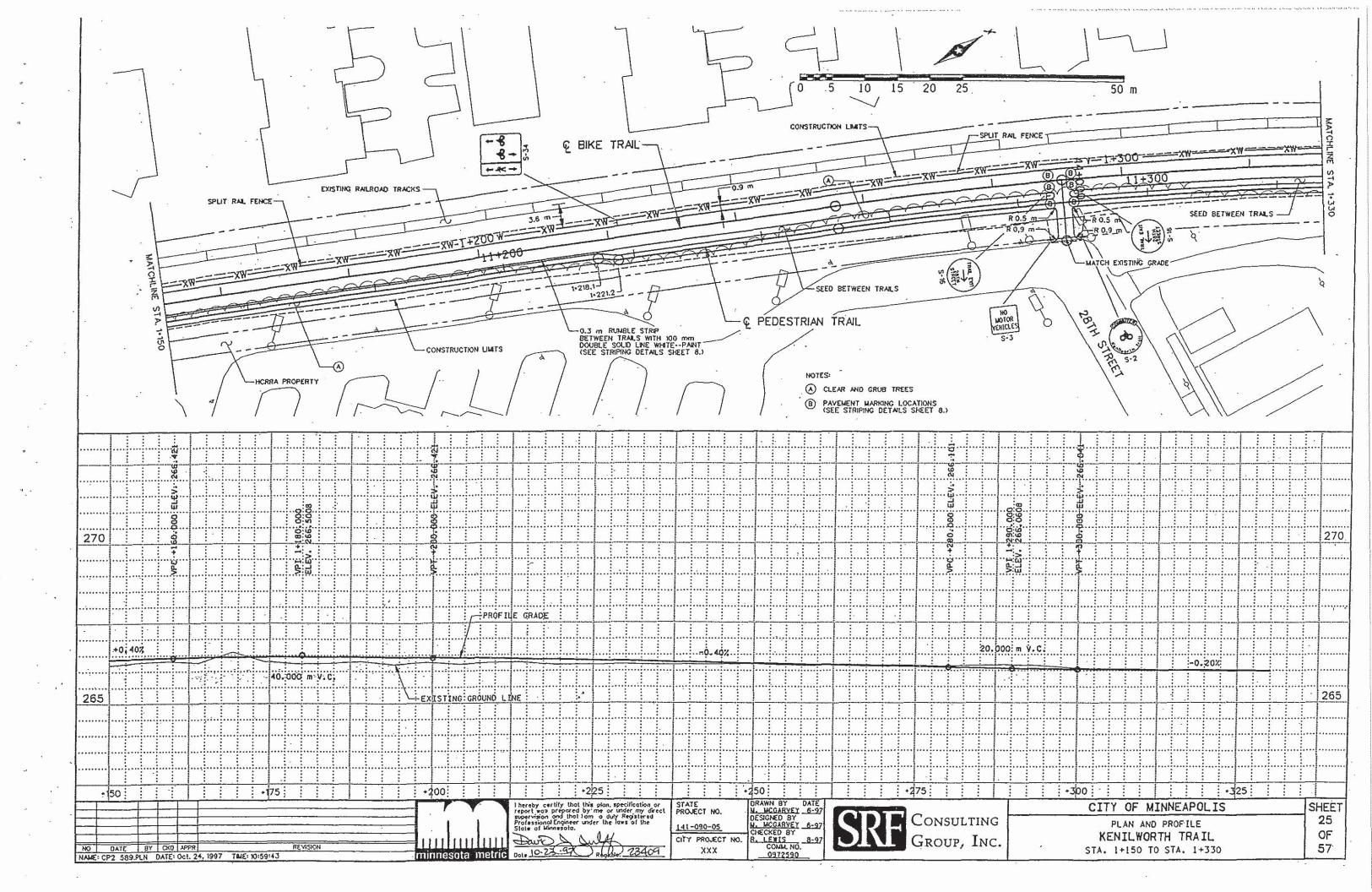
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| Tul          | DT   | 2,705 700                                           | 28 711 17 04 17                |          |            | 10.010        | 157 000 070                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               | <u> </u> |
| T-4 F        | CC   | 2+795.766                                           | 2° 31' 13.0" LT                | 915.000  | 20.127     | 40.248        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4 49,713.8149<br>0 50,119.0319                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | and the second se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                | PT                                                                                                             | 12+269.919                      |                  | <u> </u> | <u> </u> | <u> </u> | a state state and state an | 49,207.3426   | 1        |
|              |      | 2+815.887                                           |                                |          |            |               | and the second design of the s |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | N25º01'10.3"E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 00001                                                                                                          | PC                                                                                                             | 12+317.917                      | 9° 37' 48.0" LT  | 200.000  | 16.847   | 33.615   | 157,820,7969                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |          |
|              | PC 0 | 2+856.632                                           |                                |          |            |               | 157,921.8170                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                           | 1-0021-                                                                                                        | CC                                                                                                             | 127334.104                      | 3- 31 40.0 LI    | 200.000  | 10.041   | 33.613   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 49,280.3070   |          |
| T-5 P        |      | 2+918.330                                           | 7º 42' 54.8" RT                | 915.000  | 61.698     | 123,210       | 157, 947. 9109                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                           | 49,288.4978   |          |
| c            |      |                                                     |                                |          | 011000     | 1.01111       | 158,750.9568                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                           | 49,295.0207   |          |
| P            | T    | 2+979.842                                           |                                |          |            |               | 57,981.2743                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PBR21-                                                                                                         | the second s | 12+360.775                      | 4º 26' 33.1* RT  | 70.000   | 2.715    | 5.428    | 157,821.8641                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| P            | C    | 3+008.177                                           |                                |          |            |               | 157,996.5963                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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157,891.9165                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 49,297.8875   |          |
| T-6 P        |      | 3+065.028                                           | 10º 38' 56.8" RT               | 610.000  | 56.852     | 113.376       | 158,027.3389                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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157,821.9633                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               | N2º05'   |
| C C          |      |                                                     |                                | ļ        |            |               | 58,509.7180                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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| P            |      | 3+121,553                                           |                                |          | <u> </u> - | [             | 158,066.3894                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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       |                                                                                                                | 12+381.315                      | 3º 26' 01.1" LT  | 400.000  | 11.989   | 23.971   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| P            |      | 3+149.891                                           |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 49,320.9060   |          |
| T-7 P        |      | 3+217,280                                           | 8° 25' 27.8" RT                | 915.000  | 67.389     | 134,536       | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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                                           | 49,330.2480   |          |
| P<br>P       |      | 3+284.426                                           |                                | <u> </u> |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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157,822,3350                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 49,330.2480   |          |
| P            |      | 3+295.615                                           |                                | <u> </u> |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 49,330.2320   |          |
| r-8 P        |      |                                                     | 11º 41' 11.9" RT               | 150.000  | 15.351     |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 49,330.2561   |          |
| C            |      |                                                     |                                | 1001000  | 101301     |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 49,378.8968   |          |
| P            | T    | 3+326.210                                           |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | BR21-                                                                                                          | ISPI                                                                                                           | 12+446.068                      | 1º 33' 25.9" LT  | 302.400  | 4.110    | 8.219    | 157,821.1449                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| 0 0          | T    | 3+350.155                                           | na N                           |          |            |               | 158,241.1310                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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157,518.9145                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 49, 372.0762  |          |
| P            |      | 11+791.240                                          |                                |          |            |               | 157,675.5332                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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157,820.9406                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 49, 387. 1099 | N2º50'   |
| 1-1 P        |      | 11+793.402                                          | 9º 09' 26.1" RT                | 27.000   | 2.162      | 4.315         | 157,676.9139                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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157,820.5001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 49,395.9586   | L        |
| C            | _    |                                                     |                                | <u> </u> | <u> </u>   |               | 157,696.3116                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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157,820.1807                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               | F        |
| P            |      | 11+795.555                                          |                                |          | ļ          |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 49,399,9358   |          |
| P            | -    | 11+816.308                                          | n a tree<br>Tara an Marina dha | <u> </u> |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 49,408,7628   | 1        |
| <u>1-2 P</u> |      | 11+820.129                                          | 13º 12' 43.8" LT               | 33.000   | 3.822      | 7.610         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 49,408,7640   |          |
| ()<br>P      |      |                                                     |                                | <u> </u> | ļ          |               | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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                                           | 49,427.3173   | 1        |
| P            |      | 11+823.917                                          |                                |          |            |               | 157,699.2700                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                           | 49,438.8714   | F        |
| 1-3 P        |      | 11+856.885                                          | 7º 04' 48.7" RT                | 30.000   | 1.856      | 7 707         | 157,718.4753                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                           | 49,450.4900   |          |
| c            |      |                                                     | 1 04 40.1 M                    | 30.000   | 1:030      |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 49,495.2943   |          |
| P            |      | 11+858.736                                          |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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157,828,1575                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| P            | -    | 11+877.625                                          |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 49,486.2207   | 7        |
| 1-4 P        |      | 11+918.767                                          | 25° 44' 58.7" LT               | 180.000  | 41.142     |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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157,857,1021                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 49,613.3701   | N27º32   |
| C            | c    |                                                     |                                |          |            |               | 157,600.2826                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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157,897.3301                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 49,690.5172   |          |
| P            |      | 11+958,520                                          |                                |          |            |               | 157,772.4539                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| PI           |      | l1+994.467                                          |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 48,934.3397                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                | CC                                                                                                             |                                 |                  | - 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| 1-5 P        |      | 12+046.561                                          | 13º 30' 15.2" LT               | 440,000  | 52.094     | 103.705       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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157,924.0971                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| C(           |      |                                                     |                                | <u> </u> |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| P.           |      | 12+098.172                                          | <u></u>                        |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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158,014.9853                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| P            |      | 12+136.684                                          | 30 101 60 35 55                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 49,382.4920   | T.       |
| -6 P         |      | 12+142.881                                          | 3º 32' 58,3" RT                | 200.000  | 6.197      | 12.390        | 157,803.9717<br>158,003.2344                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                           | 50,093.2741   |          |
| P1           |      | 12+149.074                                          |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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158,201.7747                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| P(           |      | 12+170.151                                          |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 50,018.6810   |          |
| -7 P         |      | 12+175,729                                          | 3º 11' 43.4" LT                | 200.000  | 5.578      | 11,154        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                           | 50,105.3571   | N65°52   |
| c            |      |                                                     | <u>y 14 1717 61</u>            | 200.000  |            | 111104        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| P            |      | 12+181.305                                          |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| PC           |      | 12+245.045                                          |                                |          |            |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| -8 P         |      | 12+257.489                                          | 4º 45' 02.1" RT                | 300.000  | 12.444     |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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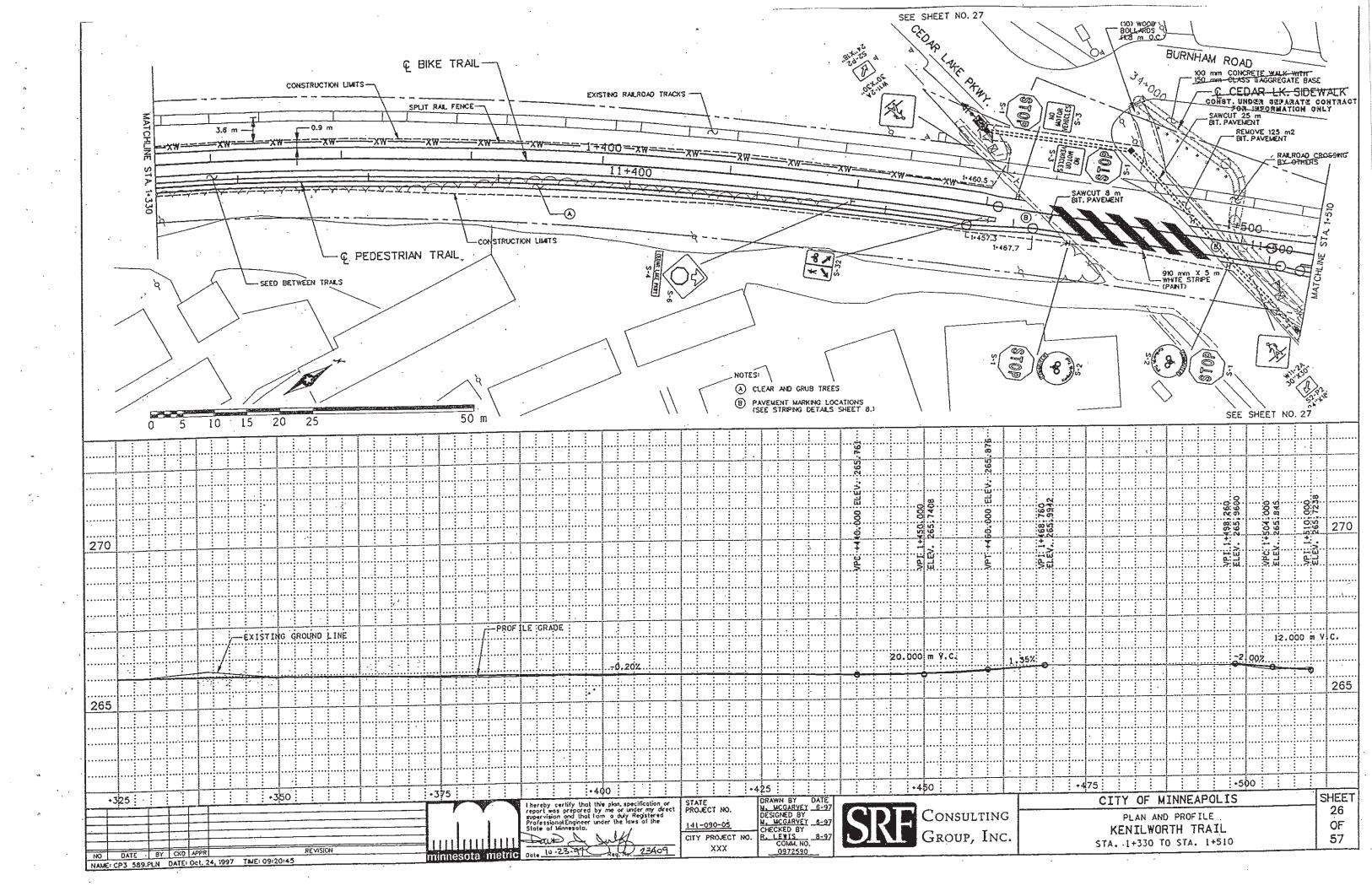
|              |           |                                      | METRIC AL                             | IGNMENT        | TABULA       | TION            |                                                                                                      |                                         | •                              |          |                  |                                       | METRIC AL        | IGNMENT | TABULA  | TION                |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| POINT<br>HO. | POINT     | STATION                              |                                       | CURVE          | DATA         |                 | COORD                                                                                                | INATES                                  | AZ1MUTH                        | POINT    | POINT            | STATION                               |                  | CURVE   | DATA    |                     | COORDIN      | NATES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| PIQ.         |           |                                      | DELTA                                 | RADIUS         | TANGENT      | LENGTH          | ×                                                                                                    | Y                                       |                                | NO.      | - VINI           |                                       | DELTA            | RADIUS  | TANGENT | LENGTH              | X            | Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | AZIMUTH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| NB1-L        | <b>PI</b> | 22+056.860                           | 4º 23' 40.0" RT                       | 100.000        | 3.837        | 7 670           | 157,791.500                                                                                          | 48,998.259                              | 8 P1                           | ╢───     | cc               |                                       |                  |         |         |                     | 157 977 0199 | 49,715.3897                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <u></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              | CC        |                                      | 4 60 1010 115                         | 100.000        | 3.031        | 1.010           |                                                                                                      | 48,977.570                              |                                | -        | PT               | 22+768.155                            | 1997 (           |         |         |                     |              | 49,694.8009                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | PT        | 22+060.693                           |                                       |                |              |                 | 157, 792. 4366                                                                                       |                                         | 5 N14º07'44.0"8                |          | PC               | 22+784.564                            |                  |         |         |                     |              | 49,710.2132                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| _            | PC        | 22+068.791                           |                                       |                |              |                 | 157,794.4134                                                                                         | 49,009.833                              | 5                              | N82-6    | _                | 22+788.455                            | 4º 57' 06.2" RT  | 90.000  | 3.891   | 7.778               | 157,901.1416 | The second s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| VB1-2        |           | 22+073.290                           | 8º 34' 34.9" LT                       | 60.000         | 4.499        | 8.981           | 157, 795. 5116                                                                                       |                                         |                                |          | CC               |                                       |                  |         |         |                     | 157,984.3416 | the second se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | and the state of t |
|              | CC        |                                      |                                       | ļ              |              | L               |                                                                                                      | 49,024.479                              |                                |          | PT               | 22+792.342                            |                  |         |         |                     | 157,902.7875 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | PT<br>PC  |                                      | <u> </u>                              |                |              | ļ               | 157, 795. 9469                                                                                       |                                         | 2 N5*33'09.1"E                 |          | PC               | 22+864.358                            |                  |         |         |                     | 157,933.2460 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 181-3        |           | 22+084.901<br>22+089.667             | 9º 04' 55.1" LT                       |                |              |                 | 157, 796. 6367                                                                                       |                                         |                                | NB2-7    | _                | 22+870.895                            | 4º 59' 27.0" RT  | 150.000 | 6.537   | 13.066              | 157,936.0109 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 01-5         | cc        | 227003.001                           | <u> </u>                              | 60.000         | 4.765        | 9.511           | 157,797.0978                                                                                         | 49,030.5132                             |                                | ╢────    | CC<br>PT         | 22+877.424                            |                  |         |         |                     | 158,069,1696 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | PT        | 22+094.412                           |                                       |                |              |                 |                                                                                                      |                                         | N3º31'46.0"W                   | /├──     | PC               | 22+952.303                            |                  |         |         | and a second second | 157,976.7326 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | PC        | 22+099.213                           |                                       |                |              | <u> </u>        | 157,796.5089                                                                                         |                                         |                                | NB2-8    |                  |                                       | 7º 15' 15.3" RT  | 610.000 | 38.668  | 77.232              | 157,996.0731 | and the second s |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 81-4         | PI        | 22+116.878                           | 13º 25' 58.9" RT                      | 150.000        | 17.665       | 35.168          | 157, 795. 4214                                                                                       |                                         | PI                             |          | CC               |                                       |                  |         |         |                     | 158,504.9482 | the second s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| _            | CC        |                                      |                                       |                |              |                 | 157,946.2244                                                                                         | 49,049.2961                             |                                |          | PT               | 23+029.535                            |                  |         |         |                     | 158,019.4868 | 49,923.3333                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N37º15'5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              | PRC       | 22+134, 381                          |                                       |                |              |                 |                                                                                                      |                                         | N9º54'12.9"E                   |          | PC               | 23+072.459                            |                  |         |         |                     | 158,045.4779 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 81-5         | PRC       | 22+134.381                           | FA 461 60 85 4 8                      |                |              |                 |                                                                                                      | 49,075.0947                             |                                | NB2-9    |                  | 23+092.067                            | 7º 21' 23.9" R7  | 305.000 | 19.608  | 39,161              | 158,057.3504 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 1            | CC        | 22+154.527                           | 5º 46' 00.5" LT                       | <u>399.983</u> | 20.146       | 1               | 157,801.9245                                                                                         |                                         |                                |          | CC<br>PT         | 23+111.621                            |                  |         |         |                     | 158,288.2086 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | N4407711                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              | PT        | 22+174.639                           |                                       |                |              |                 |                                                                                                      | 49,143.8880                             | N4º08'12.4"E                   |          | PC               | 23+158.260                            |                  |         |         |                     | 158,103.8838 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 UHH-21.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|              | PC        | 22+251.814                           |                                       |                |              |                 |                                                                                                      | 49,192.0084                             | 14 00 12.4 2                   | NB2-10   |                  | 23+215,499                            | 7º 11' 54.1" RT  | 910.000 | 57.239  | 114 328             | 158,144,0903 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| B1-6         | PI        |                                      | 3º 36' 43.1" RT                       | 550.000        | 17.342       | 34.672          | 157,810.1960                                                                                         |                                         | PI                             |          | CC               |                                       | <u></u>          | 710.000 |         | 114,320             | 158,751,5808 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | a di constante da constante                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|              | cc        |                                      |                                       |                |              |                 | 158,357.5121                                                                                         |                                         |                                |          | PT               | 23+272.588                            |                  |         |         |                     | 158,189.0849 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 · · · · · · · · · · · · · · · · · · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|              | 7         | 22+286.487                           |                                       |                |              |                 | 157,812,5342                                                                                         | 49,226.4888                             | N7º44'55.5"E                   |          | PC               | 7-97 23+275.333                       |                  |         |         |                     | 158,191,2431 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ł                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              | 20        | 22+311.121                           | • • • • • • • • • • • • • • • • • • • |                |              |                 | 157,815.8556                                                                                         |                                         | 1                              | N82-11   | PI               | 7-97 23+288.228                       | 12º 15' 59.0" RT | 120.000 | 12.895  | 25.691              | 158.201.3793 | 50,106.0391                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PI PI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 31-7 1       |           | 22+323.535                           | 9° 27' 43,9" LT                       | 150.000        | 12.414       |                 | 157,817.5294                                                                                         |                                         |                                | ļ        | CC               |                                       |                  |         |         |                     | 158,265,4184 | Million Conference and Conference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | CTITUS CONTRACTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              |           | 22+335.893                           |                                       |                |              |                 | 157,667.2252                                                                                         |                                         |                                |          | PT               | 23+301.024                            |                  |         |         |                     | 158,212,9774 | ALL OF COMPANY OF COMPANY OF COMPANY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | N64º05'1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|              | PC        | 22+359.781                           |                                       |                |              |                 | 157,817.1582                                                                                         |                                         | N1º42'48.5"W                   | 3500     | POT              | 23+344, 373                           |                  |         |         |                     | 158,251,9680 | 50,130,6180                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 1-8 F        |           |                                      | 9° 04' 07.1" RT                       | 70,000         | 5.551        |                 | 157,816.2779                                                                                         |                                         | PI                             | 4600     | DOT              |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | ic        |                                      |                                       |                | <u>0,001</u> |                 | 157,886.4126                                                                                         |                                         | <u> </u>                       | 1000     | PC               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| P            | T         | 22+370,860                           |                                       |                |              |                 |                                                                                                      |                                         | N7º21'18.6"E                   | TEMP-1   | PI               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |           |                                      |                                       |                |              |                 |                                                                                                      |                                         |                                |          | cc               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |           | 22+465.438                           |                                       |                |              |                 | 157,817.4686                                                                                         |                                         |                                |          | PT               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 12-1 P       |           | 22+475.669                           | 11º 41' 00.9" RT                      | 100.000        | 10.231       |                 | 157,816.9390                                                                                         |                                         | <u> </u>                       |          | PC               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | c         |                                      |                                       |                | <u> </u>     |                 | 157,917.3346                                                                                         |                                         |                                | TEMP-2   | 1 1              |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| P            |           | 22+485.830                           |                                       |                |              |                 |                                                                                                      |                                         | N8º42'58.4"E                   |          | CC               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2-2 P        |           |                                      | 19º 42' 52.6" LT                      | 80,000         | 13.901       |                 | 157,820.1237<br>157,822.2302                                                                         |                                         | PI                             |          | PT               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | c         |                                      |                                       |                | 13,301       |                 | 157,741.0476                                                                                         |                                         | <u>_</u>                       | TEMP-3   | <del>  ×</del> + |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| PF           |           | 22+524.141                           |                                       |                |              |                 |                                                                                                      |                                         | N10*59'54.2"W                  | I CINE J | cc               | · · · · · · · · · · · · · · · · · · · |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| PF           | _         | 22+524.141                           |                                       |                |              |                 | 157,819.5782                                                                                         |                                         |                                |          | PT               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <u>2-3 P</u> |           | 22+545.431                           | 20° 58' 45.2" RT                      | 114.990        | 21.290       | 42.104          | 157,815.5164                                                                                         | 49,487.8737                             | <u> </u>                       |          | PC               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| C            |           |                                      |                                       |                |              |                 | 157,932.4558                                                                                         |                                         |                                | TENP-4   | PI               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| P            | -         | 22+566.245                           |                                       |                |              |                 |                                                                                                      |                                         | N9º58'50.9"E                   |          | CC               | •                                     |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u>/</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 2-4 P        | _         | 22+590.789                           | 170 151 30 35 55                      |                |              |                 | 157,823.4604                                                                                         |                                         |                                |          | PT               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              | _         | 22+623.476                           | 17º 35' 36.7" RT                      | 250.000        | 38.688       |                 | 57,830.1656                                                                                          | 1                                       | PI                             | 10.0.0   | PC               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| P            |           | 22+667.555                           |                                       |                |              |                 |                                                                                                      | 49,489,6851                             | N27º34'27.6*E                  | TEMP-5   |                  |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| P            |           | 22+760.295                           |                                       |                |              |                 | 157,891.0035                                                                                         |                                         | 1121 J4 21.0 E                 | -        | PT               |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2-5 P        | 1         |                                      | 7º 30' 20.4" LT                       | 60.000         | 3.936        |                 | 57,892.8252                                                                                          | 49,691,1043                             | Pt                             |          | POT              |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |           |                                      |                                       |                |              |                 |                                                                                                      |                                         |                                |          |                  |                                       |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|              |           |                                      |                                       |                |              |                 |                                                                                                      |                                         |                                |          |                  | <u></u>                               |                  |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 8-31-        | 98        | NCI SGB DU REVISE CEDAR LAKE TRAL CO | NNECTION                              |                |              | i here<br>repor | by certify that this was prepared by                                                                 | s plan, specificatio<br>me or under my  | a or STATE<br>direct PROJECT I | ю.       | ORAW             | N BY DATE<br>ONDRASEK 7-97            |                  |         | CIT     | Y OF MI             | NNEAPOLI     | S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | SH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|              |           |                                      |                                       |                | 1 1          | super<br>Profe  | by certify that thi<br>t was prepared by<br>vision and that ta<br>ssionalEngneer un<br>of Minnesola. | n a duly Register<br>der Une laws of Un | ed 141-090-                    |          | R. LI            |                                       | NSULTING         |         | AL      | IGNMENT             | TABULATION   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|              | _         |                                      |                                       |                | mant         |                 |                                                                                                      |                                         |                                |          | CHECH            | ARNER 7-9T                            | OUP. INC         |         |         |                     | TH TRAIL     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | . ] 🤉                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|              |           | BY CKD APPR RE                       | EVISION                               |                |              |                 | 10.1.94                                                                                              | SRE9 (NO) 234                           | 09 XX                          |          | 0                | COMM. NO.<br>0972590                  | COLL THC:        |         |         |                     |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

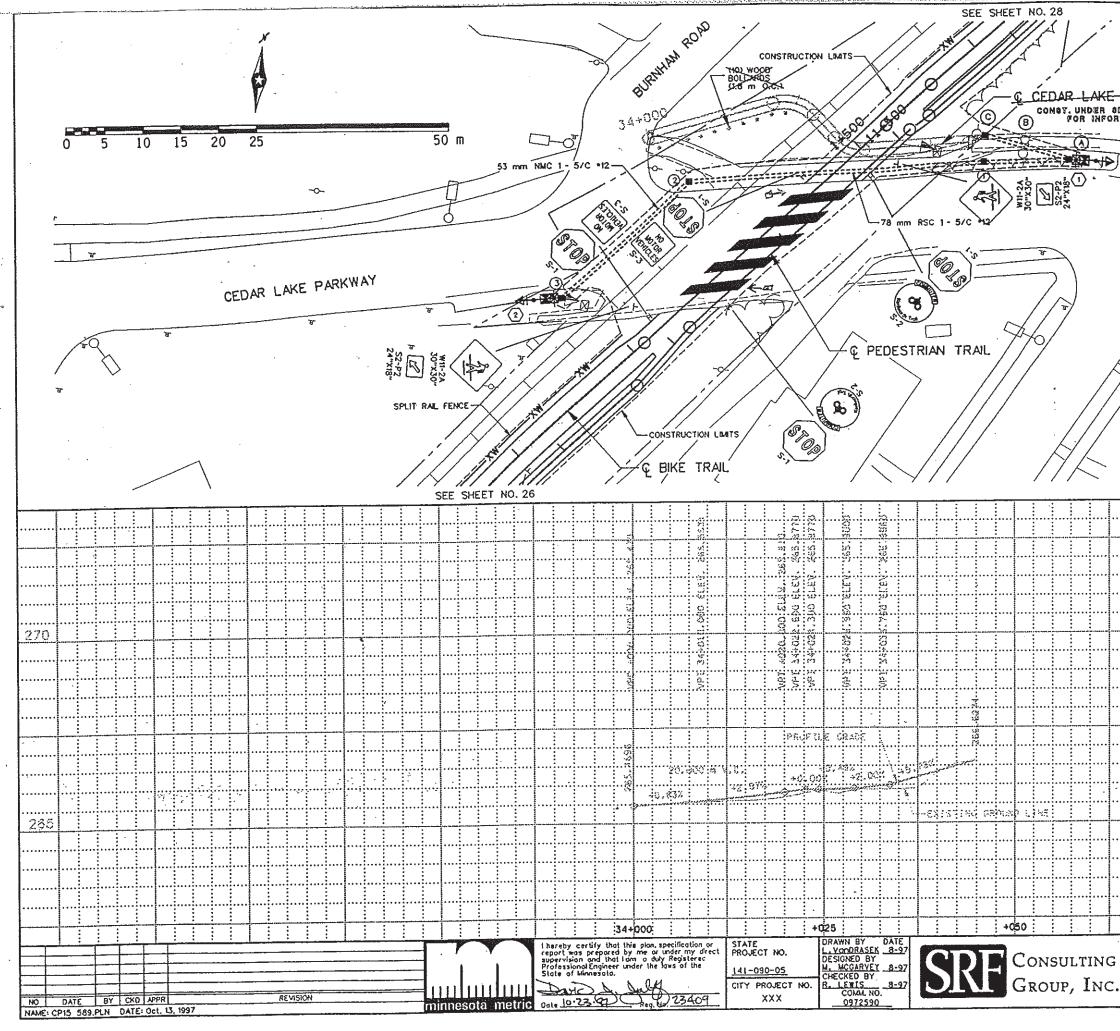
|            |     |                                                 | METRIC AL        | IGNMENT | TABULA    | TION                                                                                                            |                                                               |                                                                                                                 |                |              | Τ         |                                                                                   | METRIC AL   | IGNMENT               | TABULA                                                                                                           | TION          |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|-----|-------------------------------------------------|------------------|---------|-----------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------|--------------|-----------|-----------------------------------------------------------------------------------|-------------|-----------------------|------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| POINT POIN | INT | STATION                                         | <u>.</u>         | CURVE   |           |                                                                                                                 | COORDI                                                        | NATES                                                                                                           | AZIMUTH        | POINT<br>NO, | POINT     | STATION                                                                           |             | CURVE                 |                                                                                                                  |               | COORDIN                               | ATES     | 4.711.4.711                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| NU. OIN    |     |                                                 | DELTA            | RAOIUS  | TANGENT   | LENGTH                                                                                                          | X                                                             | Y                                                                                                               | AZIMOTA        | HQ.          |           |                                                                                   | OELTA       | RAOIUS                | TANGENT                                                                                                          | LENGTH        | Х                                     | Y        | AZIMU7H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                | ļ            |           | ·                                                                                 |             | <u> </u>              |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PC         | _   | 4+000.000                                       |                  |         |           |                                                                                                                 |                                                               | 50,135.6358                                                                                                     |                |              | -         |                                                                                   |             | <u> </u>              |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| DW2-1 PI   |     | 4+009.375                                       | 45° 14' 28.2" RT | 22.500  | 9.375     |                                                                                                                 |                                                               | 50,134.8873                                                                                                     |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 22         |     | 4.017 14                                        |                  |         |           |                                                                                                                 |                                                               | 50,113,2076                                                                                                     |                | <b> </b>     |           |                                                                                   |             | <u> </u>              | <u> </u>                                                                                                         |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PT         |     | 4+017.766                                       |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 | 139° 49' 13.1" |              | +         |                                                                                   |             | <u> </u>              | L                                                                                                                |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4050 POT   | 4   | 4+028.959                                       | ······           |         |           |                                                                                                                 | 158,209.9640                                                  | 50,118,9420                                                                                                     |                | <u> </u>     | +         |                                                                                   |             | <u> </u>              |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           | ·                                                                                                               |                                                               |                                                                                                                 |                |              |           |                                                                                   | <del></del> |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     | 24+000.000                                      |                  |         |           |                                                                                                                 | 158,187.3917                                                  | 50 170 6454                                                                                                     |                | <u> </u>     |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| DE2-I PI   |     |                                                 | 45° 05' 22.8" RT | 19.500  | 0.005     | a second a second                                                                                               | 58,195.4609                                                   |                                                                                                                 | PI             |              |           |                                                                                   |             | <u> </u>              |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CC         |     | 24.000.055                                      | 13 03 22,0 RT    | 13.500  | 8.095     |                                                                                                                 | 58,185.8349                                                   |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PT         |     | 24+015.346                                      |                  | <u></u> |           |                                                                                                                 |                                                               |                                                                                                                 | 139° 40' 07.7" |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1150 POT   |     | 24+033.877                                      |                  |         |           |                                                                                                                 |                                                               | 50,111.2870                                                                                                     |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       | <u> </u> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     | 21.0551011                                      |                  |         |           |                                                                                                                 | 30,212.1000                                                   | 30,111.2010                                                                                                     |                | <u> </u>     |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            | +   |                                                 |                  |         |           |                                                                                                                 | <u> </u>                                                      |                                                                                                                 | [              |              |           | <u>  </u>                                                                         |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PC         |     | 14+000.000                                      |                  |         |           |                                                                                                                 | 58,183,6118                                                   | 50,131.7609                                                                                                     |                |              |           |                                                                                   |             |                       |                                                                                                                  |               | · · · · · · · · · · · · · · · · · · · |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| P2-1 P1    |     |                                                 | 49° 56' 08.5" RT | 14.900  | 6,938     |                                                                                                                 | 158,190.5487                                                  |                                                                                                                 | 19             |              | 1         | <u> </u>                                                                          | ·           |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| cc         |     |                                                 |                  | 111100  | 01000     |                                                                                                                 | 58,183.8468                                                   | the second se |                |              |           | · · · · · · · · · · · · · · · · · · ·                                             |             |                       |                                                                                                                  |               |                                       | . [      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PT         |     | 14+012.986                                      |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 | 139° 01' 54.5" |              | 1         |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 250 POT    |     | 14+040+351                                      |                  |         |           |                                                                                                                 | 58,212.0570                                                   | the second se |                |              | 1         |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            | 1   |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              | 1-        |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1500 POT   | 1   | 54+000.000                                      |                  |         |           |                                                                                                                 | 157.783.5190                                                  | 49,394,0480                                                                                                     | 93° 25' 28.7"  |              | 1         | -                                                                                 |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PC         |     | 54+017.299                                      |                  |         |           | the second se | 157,800.7873                                                  |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 21-1 PI    |     |                                                 | 8º 27' 31.5" LT  | 30.000  | 2.219     |                                                                                                                 |                                                               | 49, 392.8821                                                                                                    | PI             |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CC         |     |                                                 |                  |         |           |                                                                                                                 |                                                               | 49, 422.9611                                                                                                    |                |              | <b>†</b>  |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PT         |     | 54+021.728                                      |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 | 84° 57' 57.1"  |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 501 POT    |     | 54+039,064                                      |                  |         |           |                                                                                                                 | 157,822.4810                                                  |                                                                                                                 |                | - ** <u></u> |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               | 143 K. 1970                           |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         | f         |                                                                                                                 |                                                               |                                                                                                                 |                | 0            | 1         |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       | ·····                                                                                                            |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                | _            |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 | <u> </u>         |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          | <u></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| $-\square$ |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             | a <u>11 100000000</u> |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            | L   |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                | -            |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              | $\square$ |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              | $\square$ |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| -+         |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              | ┣         |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            | L   |                                                 |                  |         |           |                                                                                                                 | (                                                             |                                                                                                                 | I              |              |           |                                                                                   |             | ]                     |                                                                                                                  |               |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|            |     |                                                 |                  |         |           |                                                                                                                 |                                                               |                                                                                                                 |                |              |           |                                                                                   |             |                       |                                                                                                                  | the second we |                                       |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 8-31-98    | MCI | SGB DU REVISE CEDAR LAKE TRAL CO                | SHECTION         |         |           | l hero                                                                                                          | by certify that th                                            | is plan, specification                                                                                          | n or STATE     |              | DRA       | WN BY DATE                                                                        | -           |                       | CIT                                                                                                              | Y OF MI       | NNEAPOLI                              | S        | SHEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|            |     |                                                 |                  |         |           | repor<br>super<br>Prote                                                                                         | t was prepared by<br>vision and that la<br>ssional Fnameer up | is plan, specification<br>me or under my<br>n a duly Registere<br>der the laws of ibu                           | ed PROJECT N   | 0.           | QE SI     | WN BY DATE,<br>VGRASEK 7-97<br>LENIS 7-97<br>CKED BY<br>WARNER 1-97<br>COMMA, NO. | ONSULTING   |                       | and the second |               | TABULATION                            |          | 23                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|            |     |                                                 |                  |         |           | Stote                                                                                                           | of Monesola.                                                  |                                                                                                                 | 141-090-0      | 5            | CHE       |                                                                                   |             |                       |                                                                                                                  |               | TH TRAIL                              |          | OF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| DATE       |     | CKD APPR R<br>DATE: Sept. 2, 1998 TAE: 11:40:40 | EVISION          |         |           | ШÐ                                                                                                              | IND ALL                                                       | SH 1340                                                                                                         |                | UT NO.       | 1 Br.     | COMMA, NO.                                                                        | KOUP, INC.  |                       |                                                                                                                  |               |                                       |          | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|            |     | DATE C                                          |                  | 1731    | nnecota n | T-Life Oata                                                                                                     | NON.                                                          | RED NO COAL                                                                                                     | <u> </u>       | 54 C         | 1         | 0972590                                                                           |             | 1                     |                                                                                                                  |               |                                       |          | and the second se |

| CITY OF MINNEAPOLIS      | SHEE |
|--------------------------|------|
| <br>ALIGNMENT TABULATION | 23   |
| KENILWORTH TRAIL         | OF   |
|                          | 56   |

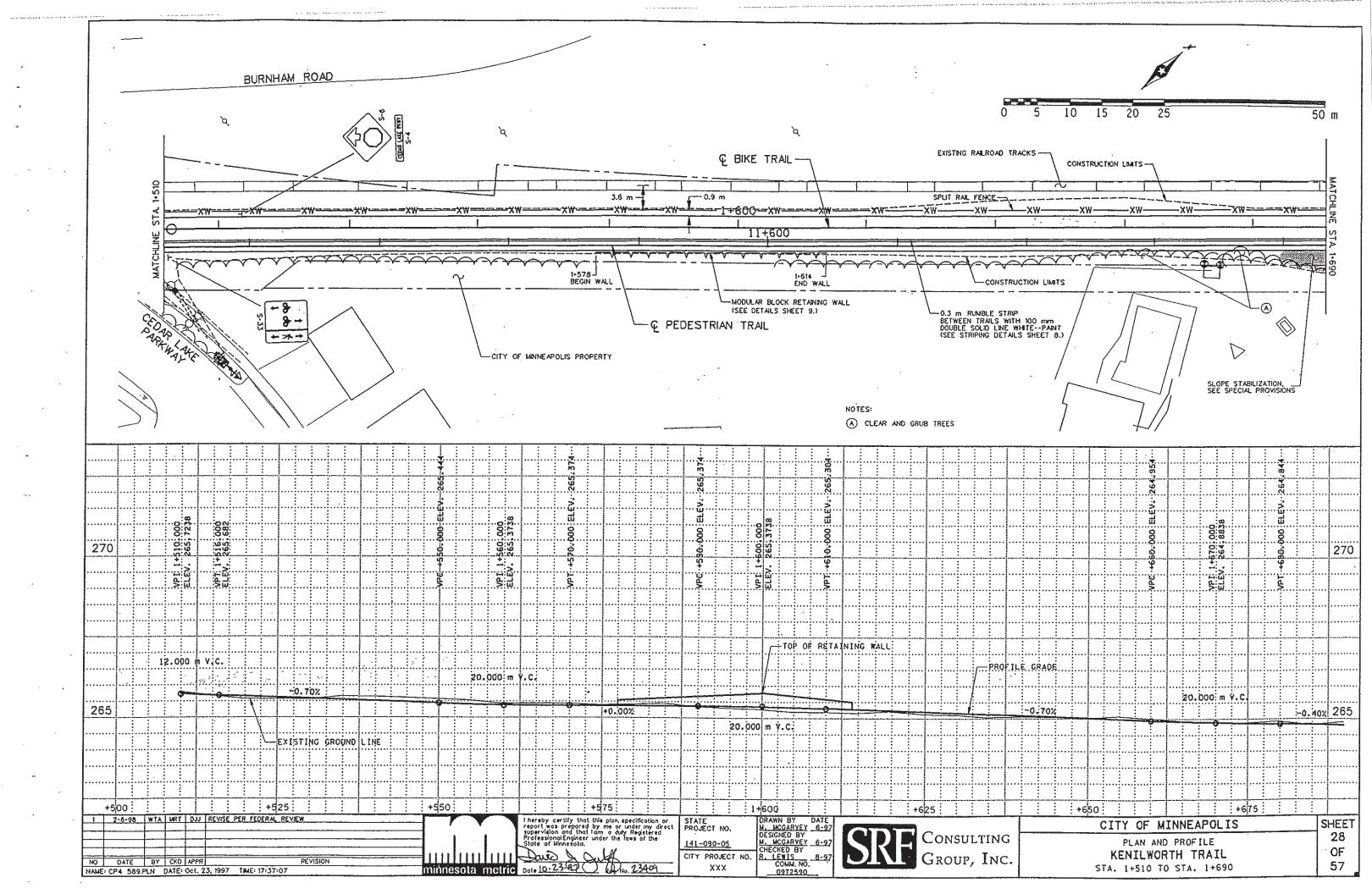


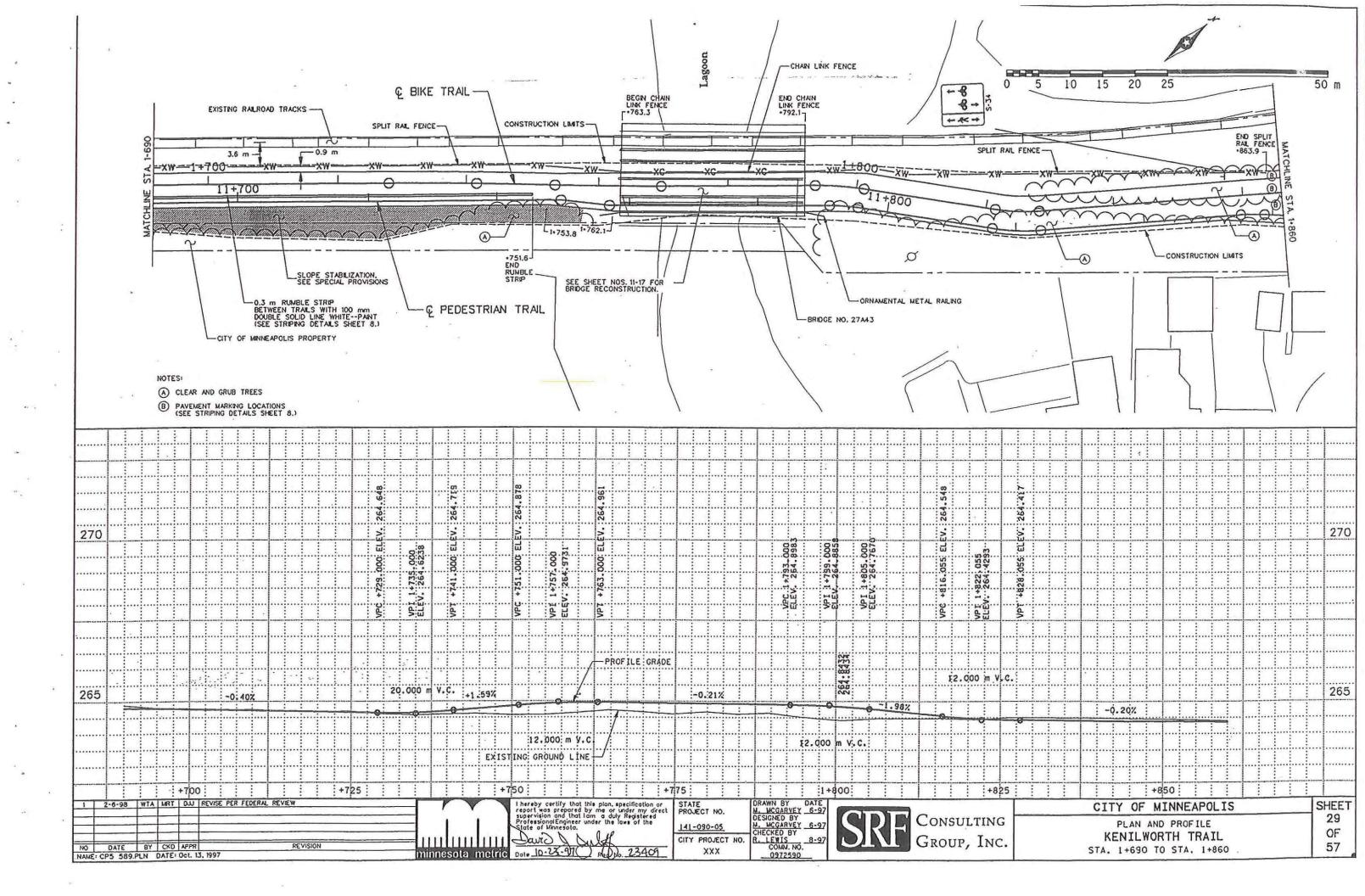


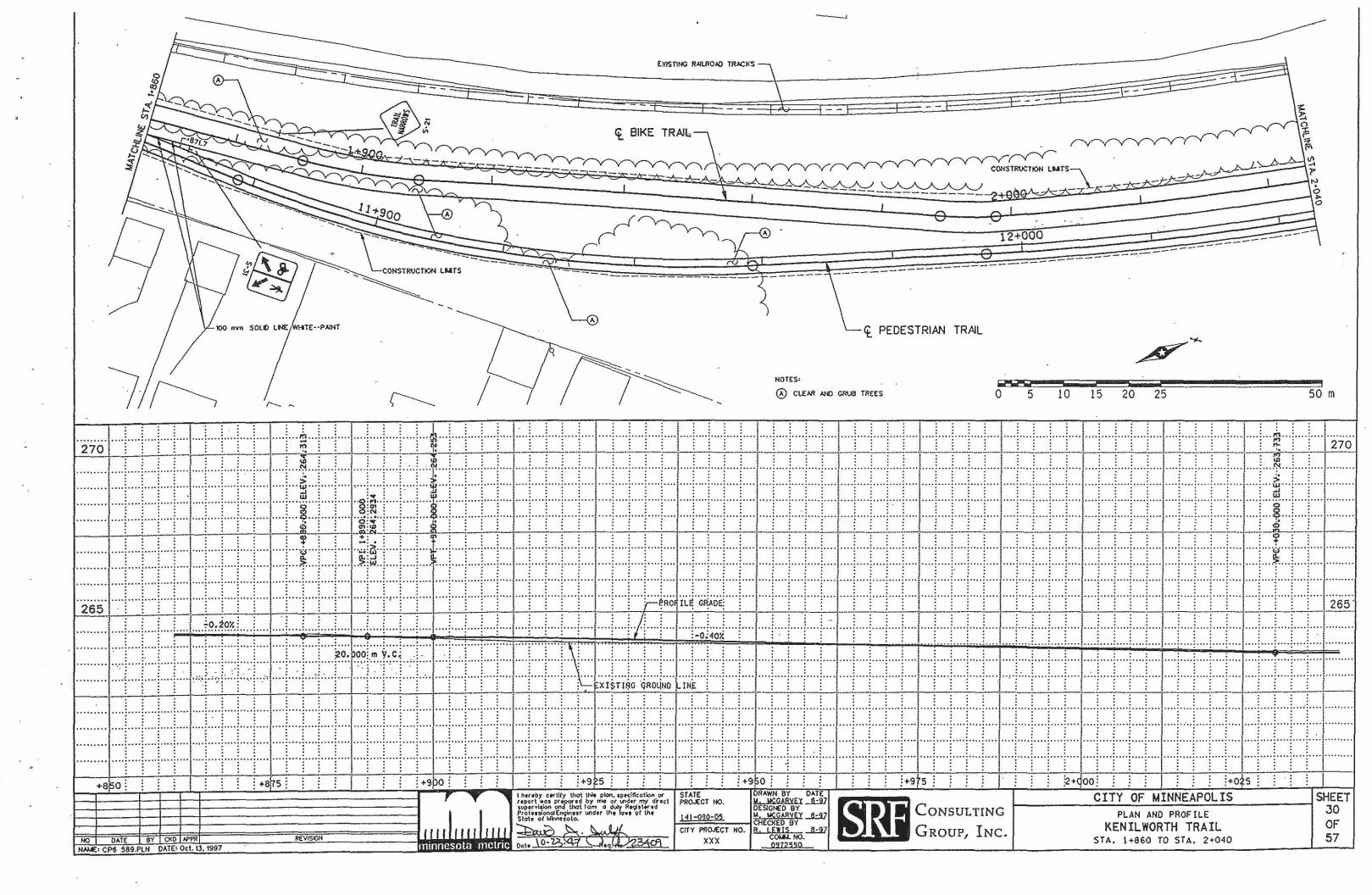


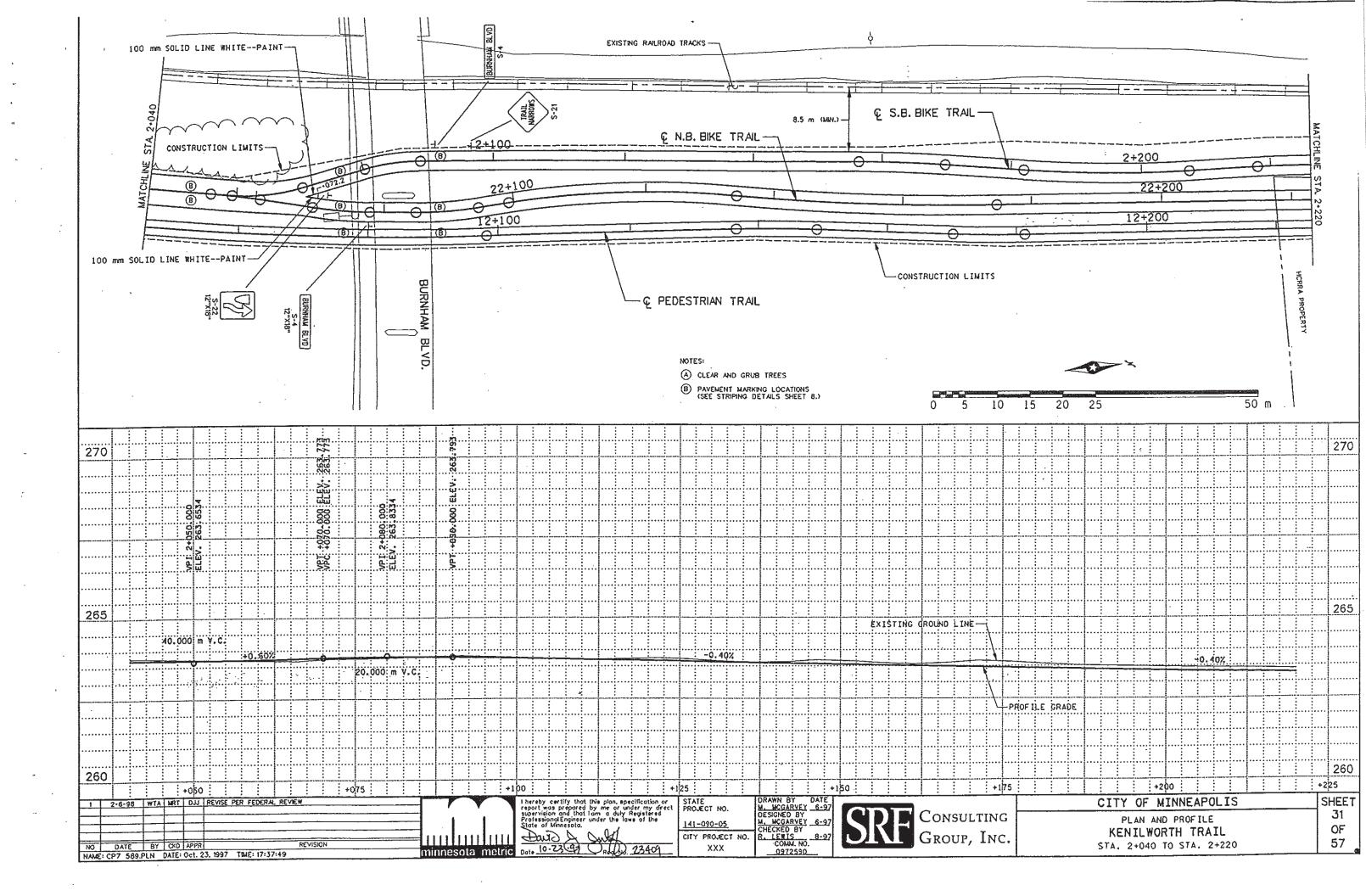


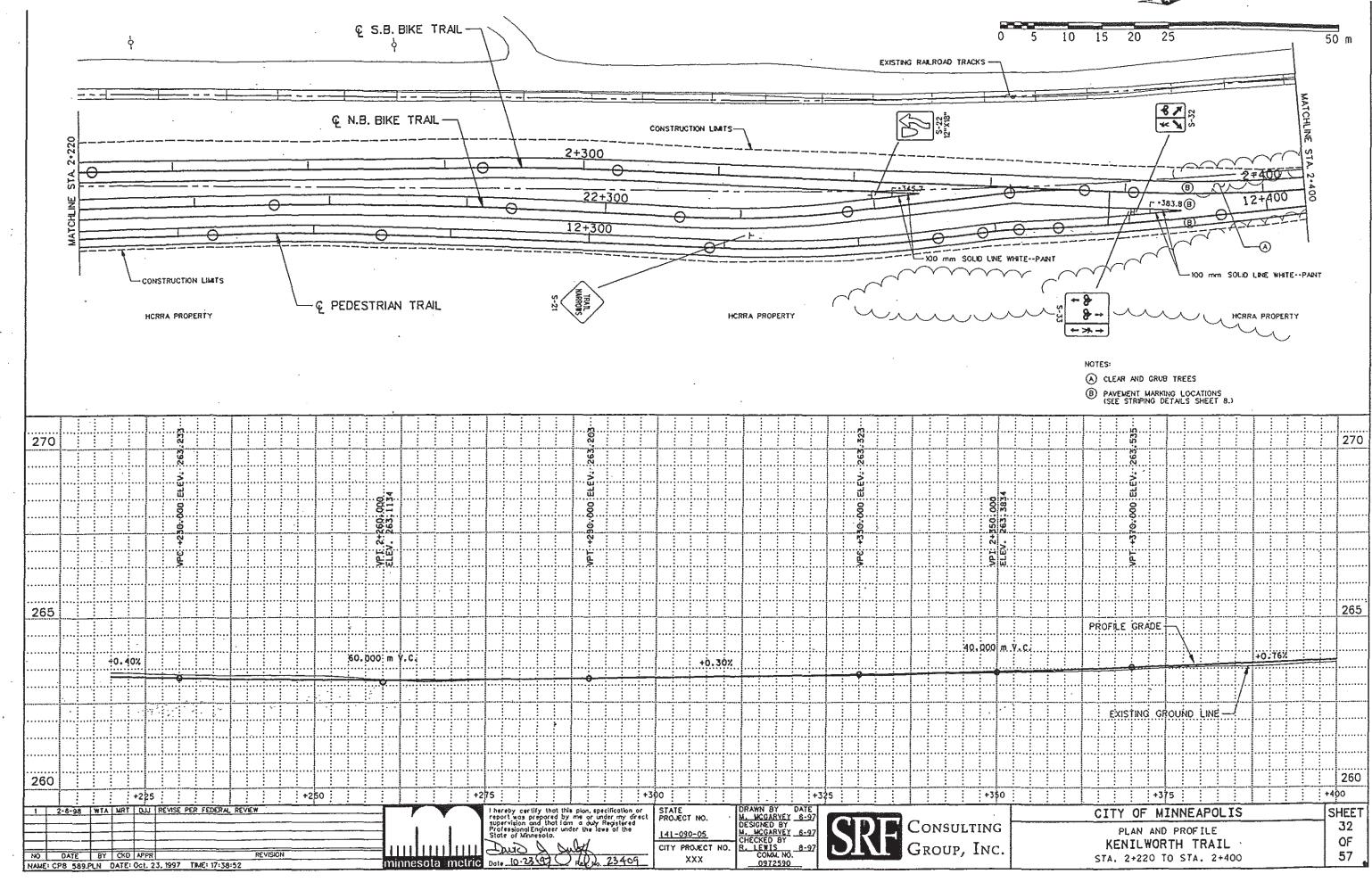
| 5-25-27 | TRUMSTOCKNER DEPENDENCE OF |                                                                                                                                                                      |
|---------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | 1                          |                                                                                                                                                                      |
|         | [                          |                                                                                                                                                                      |
|         | SIDEWALK                   |                                                                                                                                                                      |
|         | ARATE CONTRACT             |                                                                                                                                                                      |
|         |                            |                                                                                                                                                                      |
|         |                            | NOTES:<br>A PEDESTAL NOUNTED CONTROLLER CABINET<br>EXTEND INTO PEDESTAL *1 WITH:<br>1 - 5/C *12<br>EXTEND 53 mm NMC INTO HH-1 WITH:<br>1 - 5/C *12                   |
|         |                            | SERVICE CABINET<br>EXTEND 53 Dmm NAC INTO CONTROLLER CABINET WITH:<br>2 - 1/C +6 AND 1 - 1/C +6 INS. GR.                                                             |
|         | वि -                       | C SOURCE OF POWER<br>INFLACE NSP POWER POLE<br>53 mm NAC RISER AND WEATHERHEAD<br>EXTERNO 53 mm NAC INTO SERVICE CABINET WITH:<br>2 + 1/C *6 AND 1 - 1/C *6 INS. CR. |
|         |                            | 1) PEDESTAL FOUNDATION<br>3.6 m PEDESTAL AND PEDESTAL BASE<br>1 - W11-2 (36"X36") SIGN                                                                               |
| Þ       |                            | 1-W20-100P (24"X18")<br>2<br>PEDESTAL FOUNDATION<br>3.6 m PEDESTAL AND PEDESTAL BASE<br>1 - W11-2 (36"X36") SIGN<br>FYTERD 41 mm NNC SERVICE CARACT WITH:            |
|         |                            | EXTERD 53 mm NAC INTO SERVICE CABINET WITH:<br>1 - 5/C *12<br>1-W20-100P (24"X18")<br>(1) HANDHOLES SHALL BE PVC TYPE WITH METAL FRAMES                              |
|         | ~                          | ン AND COVERS.<br>② HANDHOLES 1& 2 ARE SPECIAL HANDHOLES ISEE                                                                                                         |
|         |                            | SPECIAL PROVISIONS).<br>(3) SEE FLASHER DETAIL FOR CONSTRUCTION OF                                                                                                   |
| ł       | • • • • • •                | PEDESTALS 18 2.                                                                                                                                                      |
|         |                            |                                                                                                                                                                      |
|         |                            |                                                                                                                                                                      |
|         |                            |                                                                                                                                                                      |
|         |                            | 270                                                                                                                                                                  |
|         |                            |                                                                                                                                                                      |
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|         |                            |                                                                                                                                                                      |
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|         |                            | 265                                                                                                                                                                  |
|         |                            |                                                                                                                                                                      |
|         |                            |                                                                                                                                                                      |
| 1       |                            |                                                                                                                                                                      |
|         |                            | CITY OF MINNEAPOLIS                                                                                                                                                  |
| G       |                            | PLAN AND PROFILE 27<br>KENILWORTH TRAIL OF                                                                                                                           |
| с.      |                            | CEDAR LAKE SIDEWALK 57                                                                                                                                               |











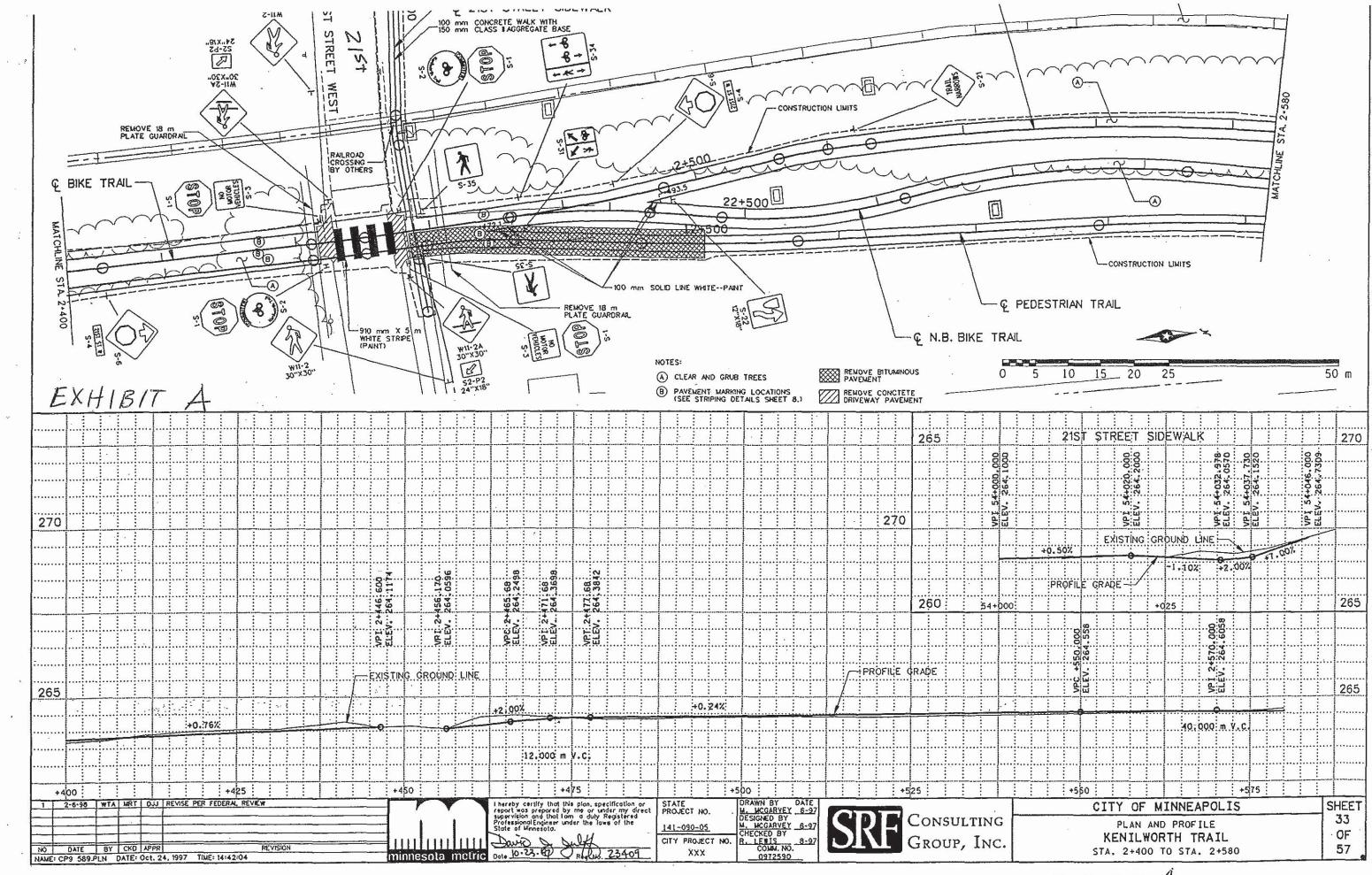
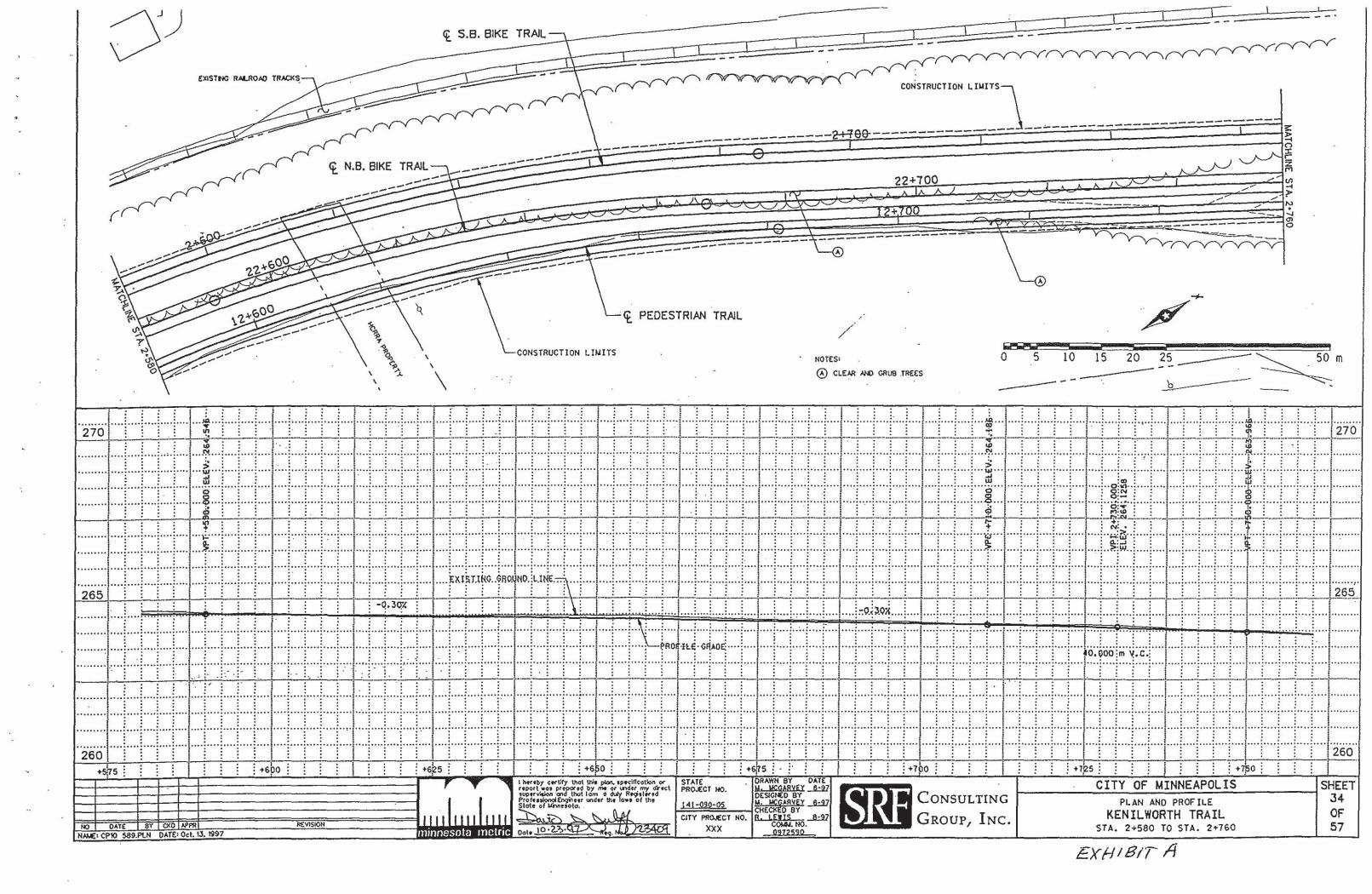
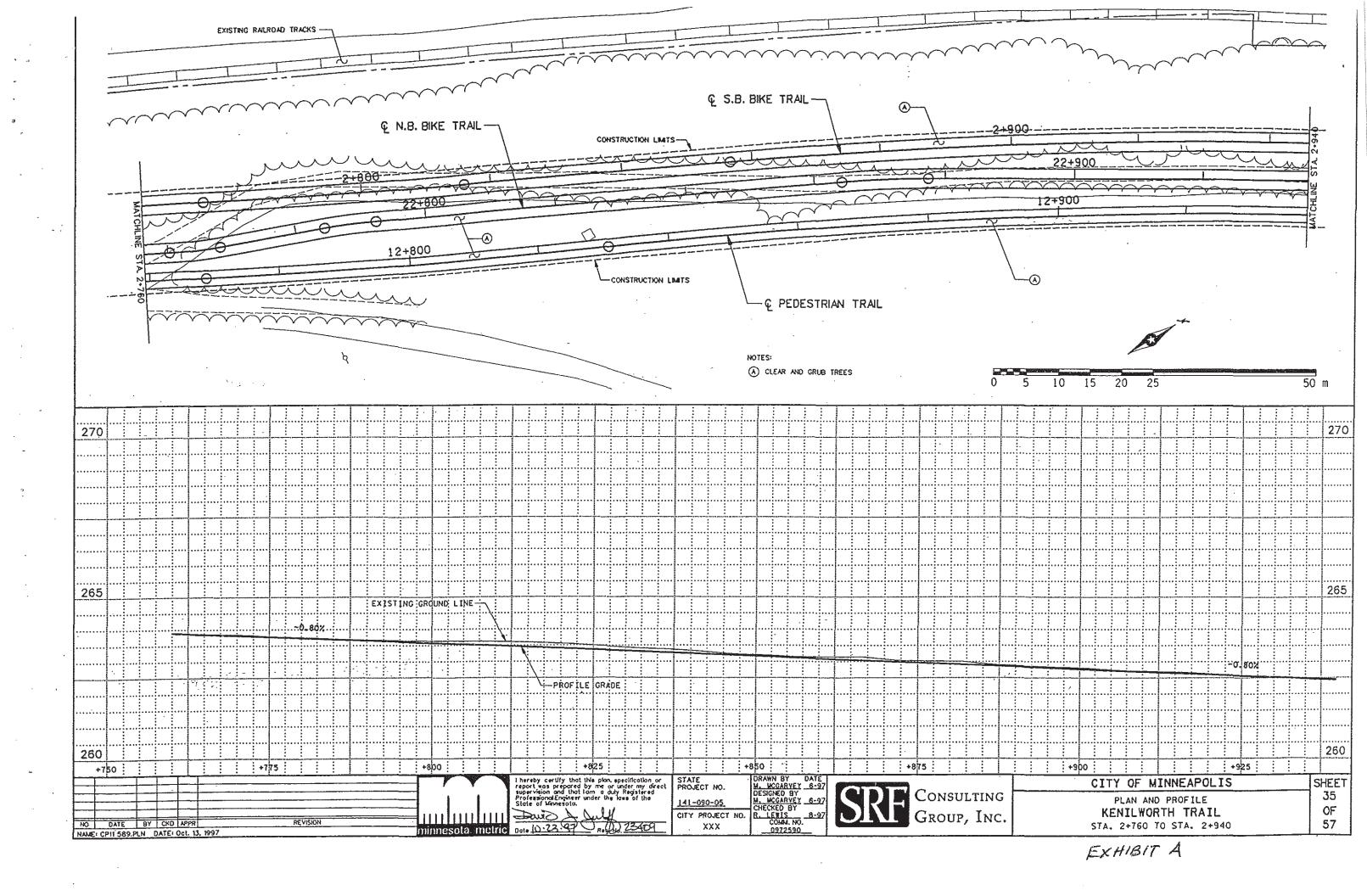


EXHIBIT À





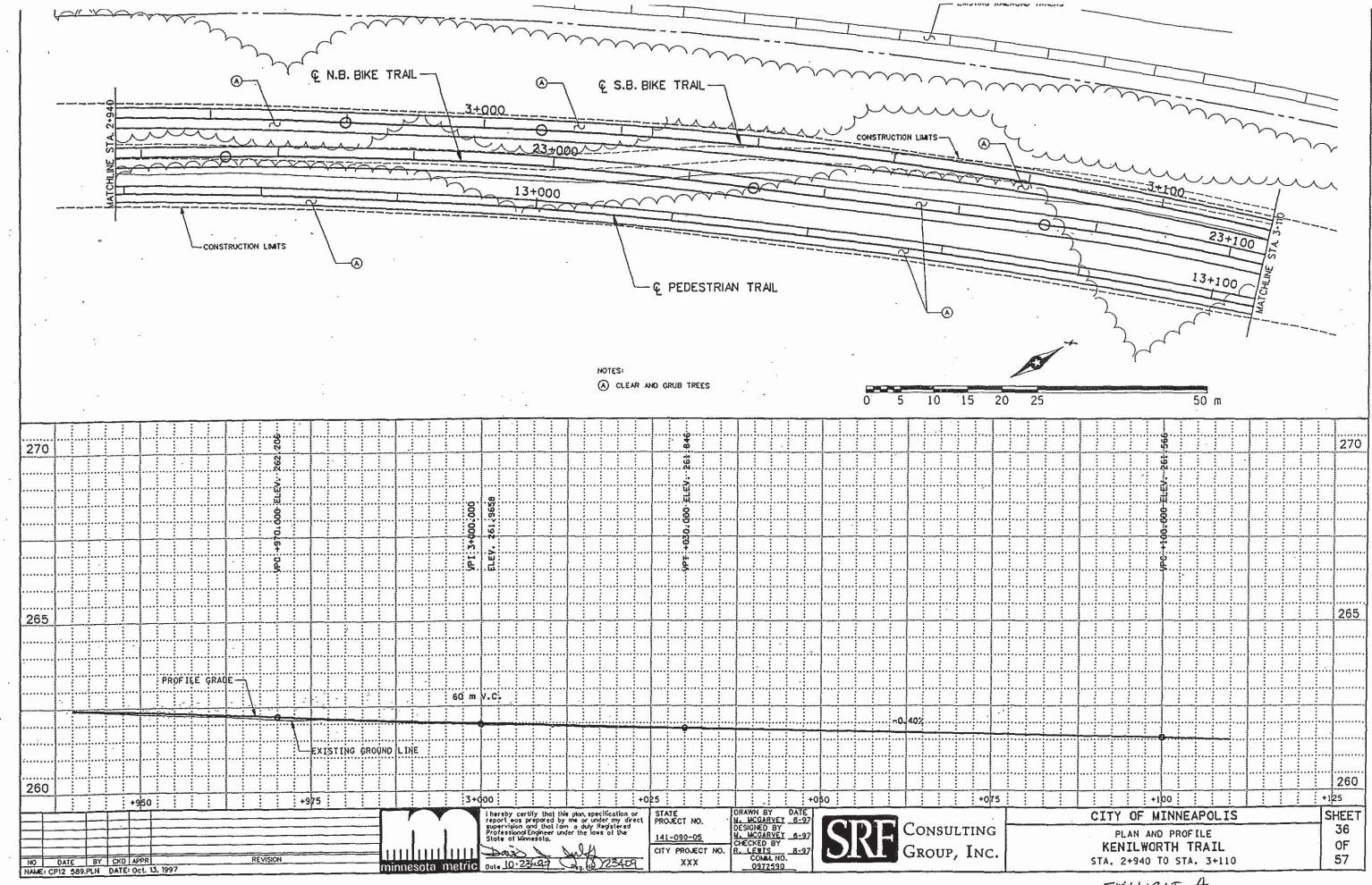
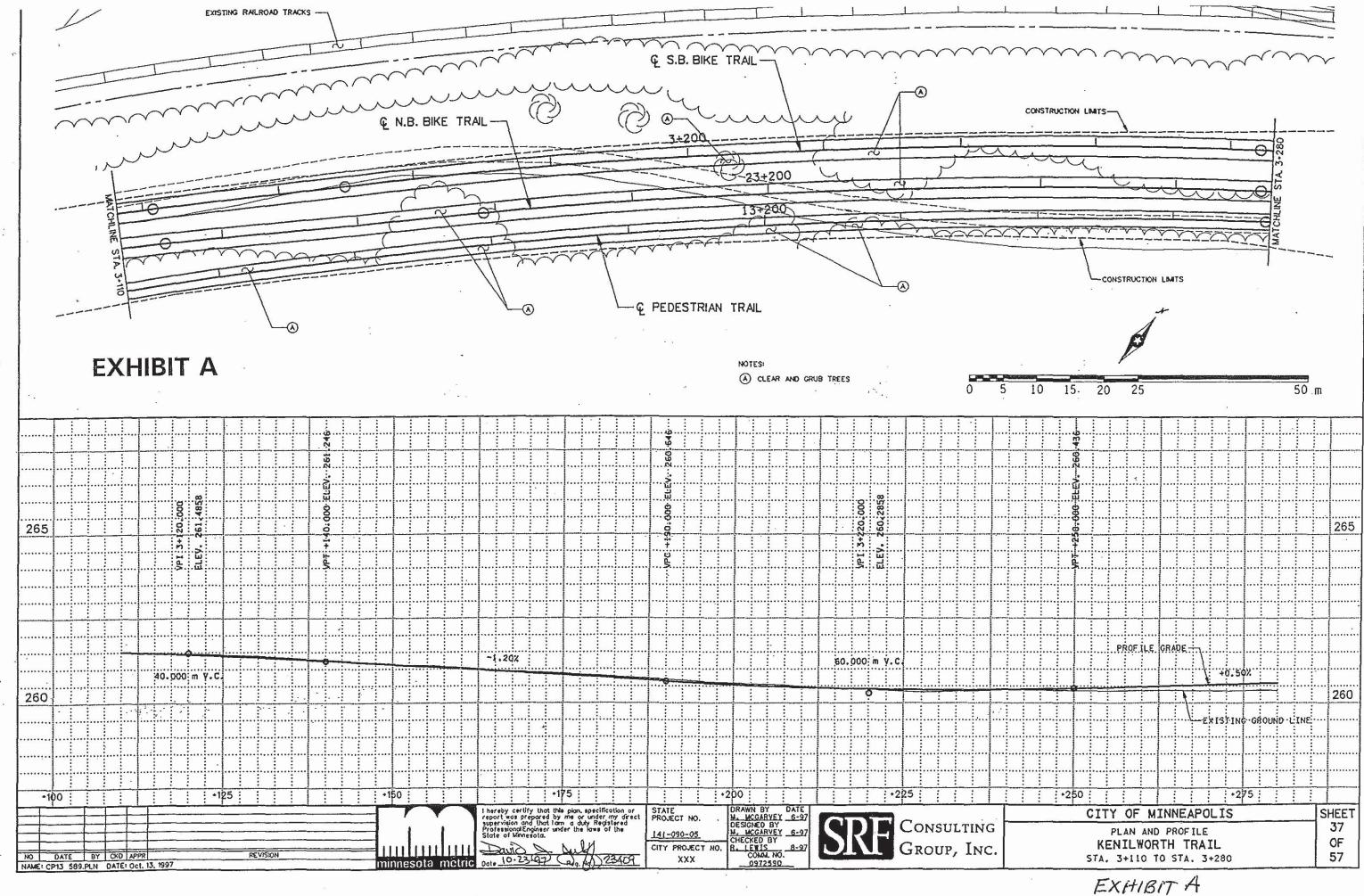
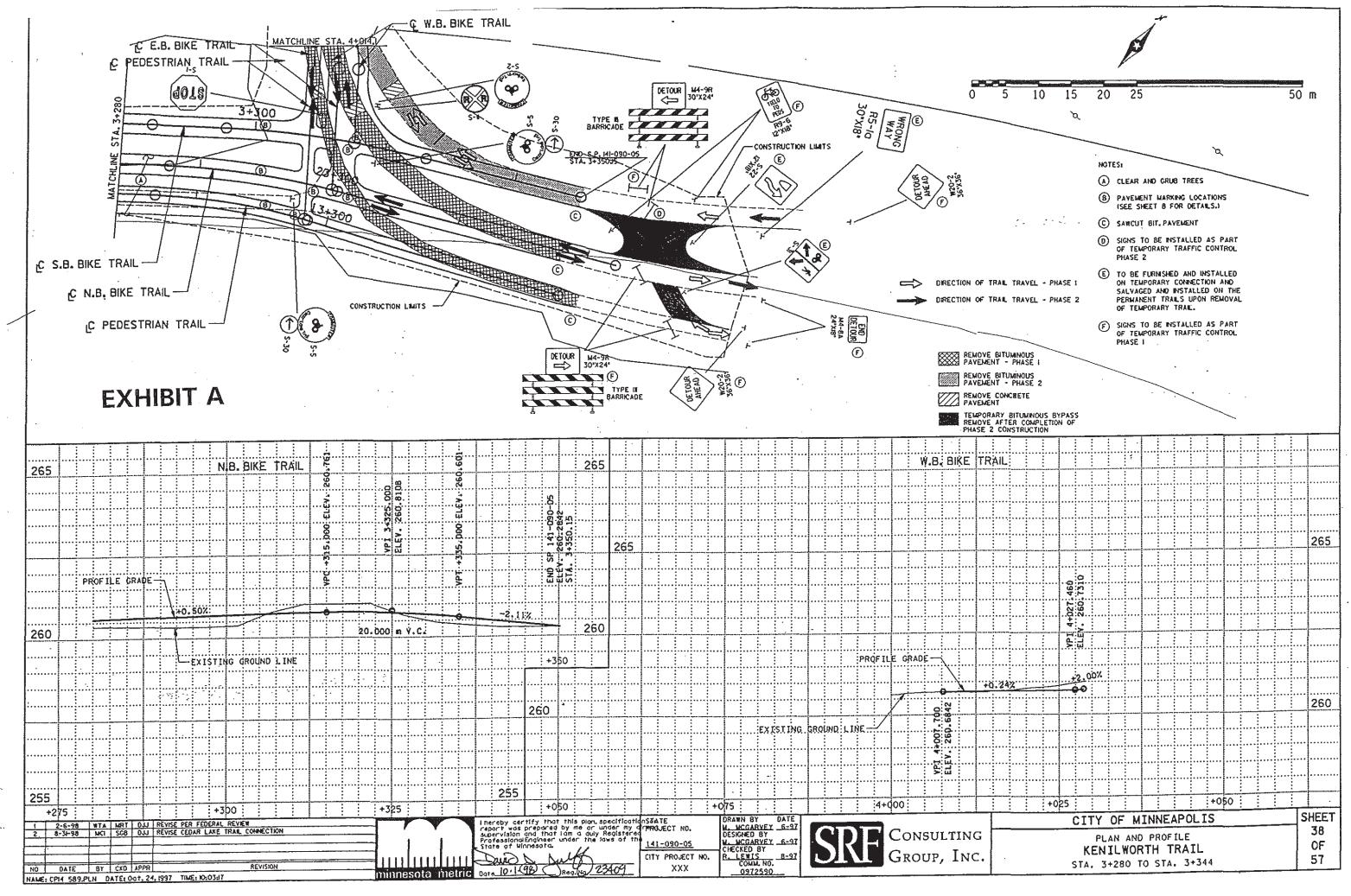
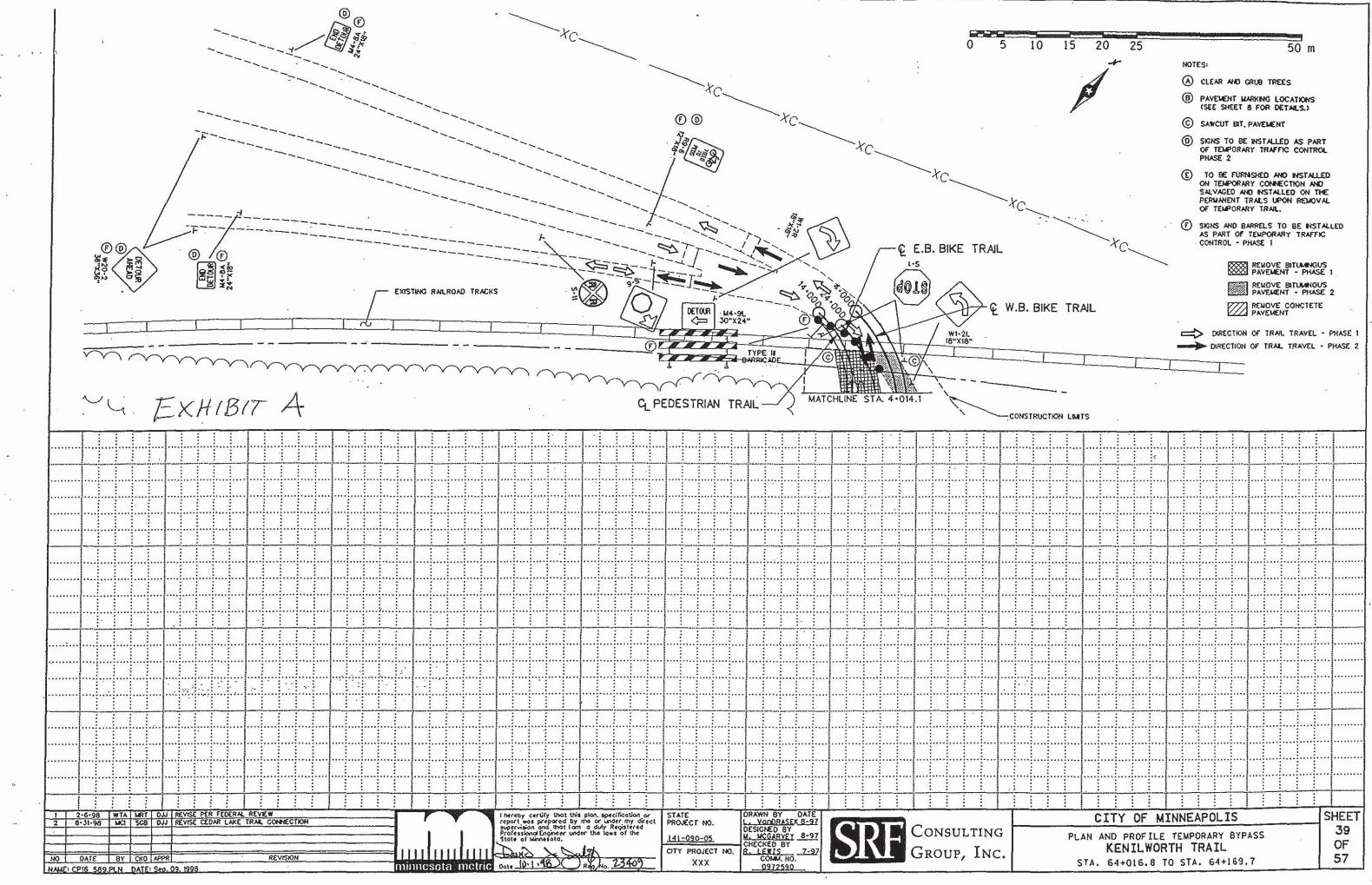
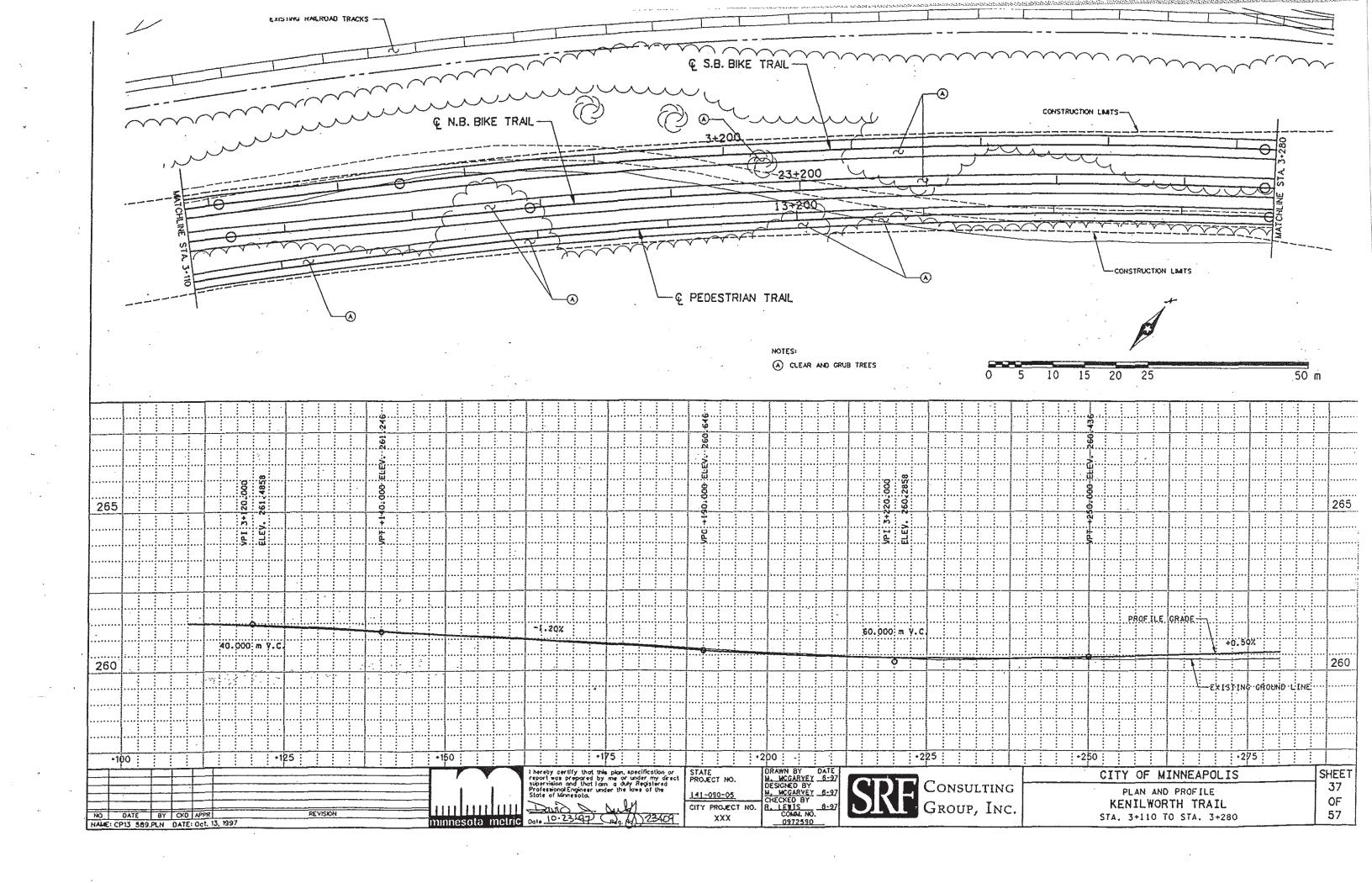


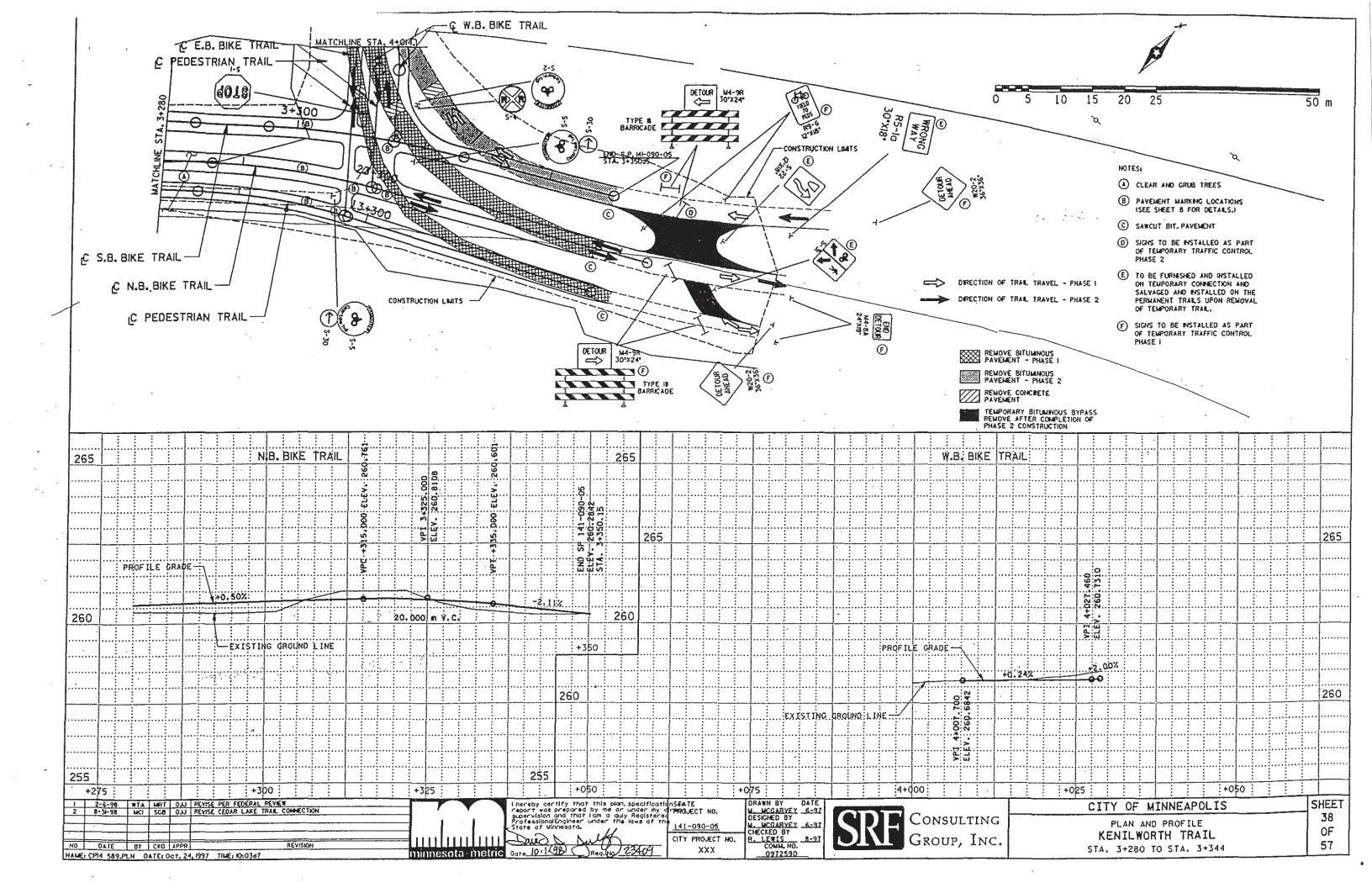
EXHIBIT A

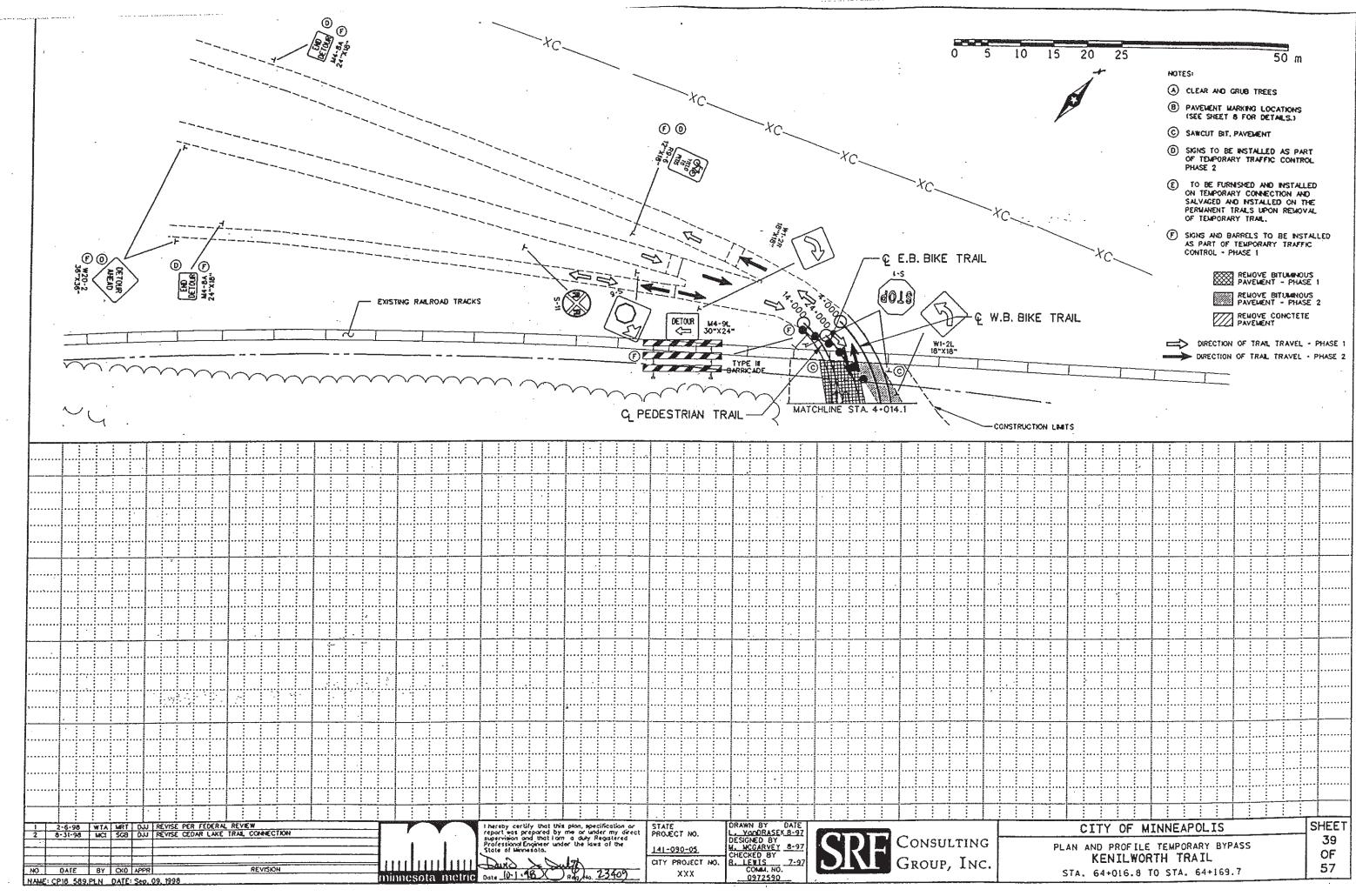


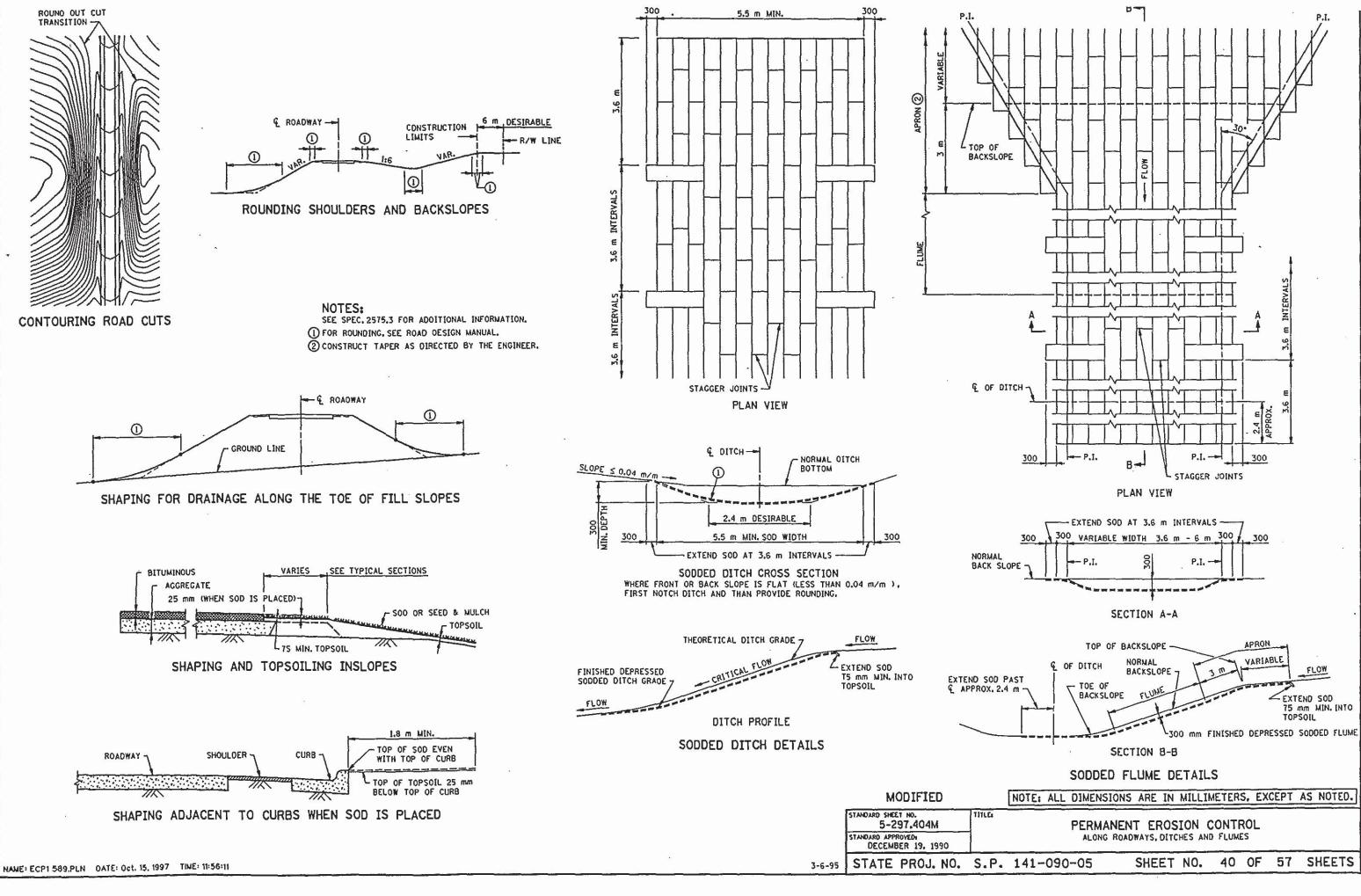




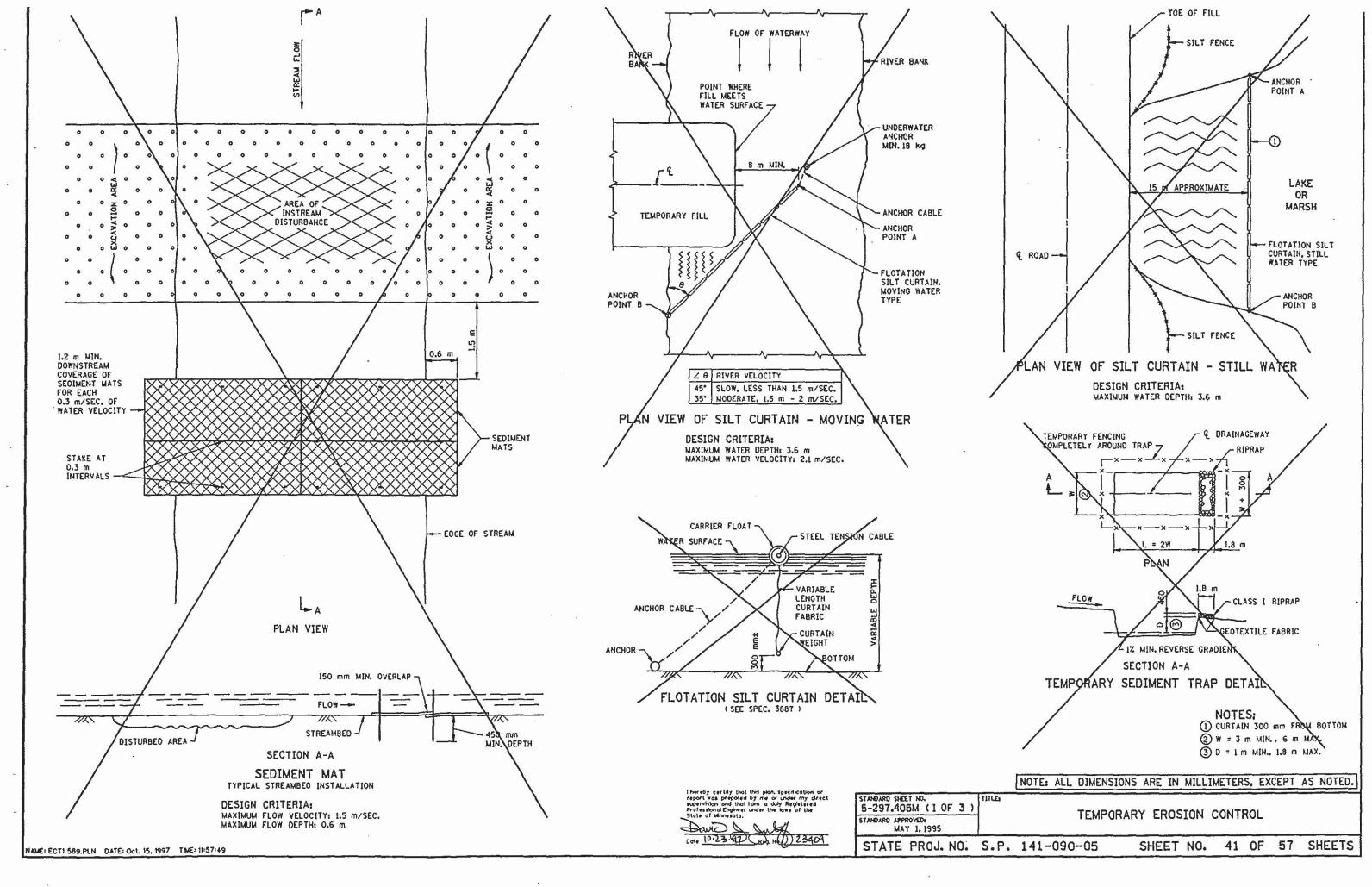


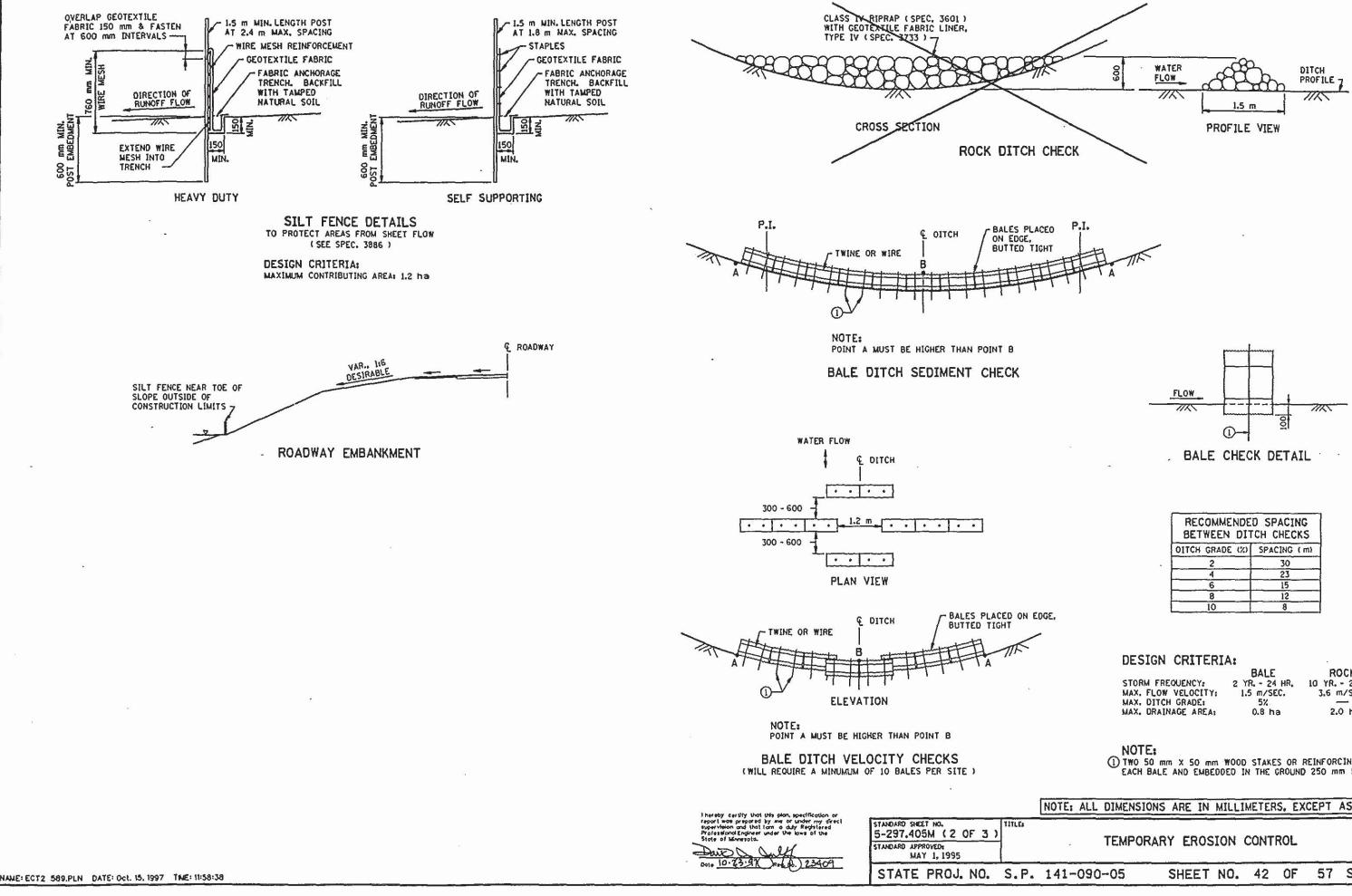






166 2 F 2 F 7





CA64S11/USR/ST

SERVER

| RECOMMENDE<br>BETWEEN DIT |              |
|---------------------------|--------------|
| OITCH GRADE (%)           | SPACING ( m) |
| 2                         | 30           |
| 4                         | 23           |
| 6                         | 15           |
| 8                         | 12           |
| 10                        | 8            |

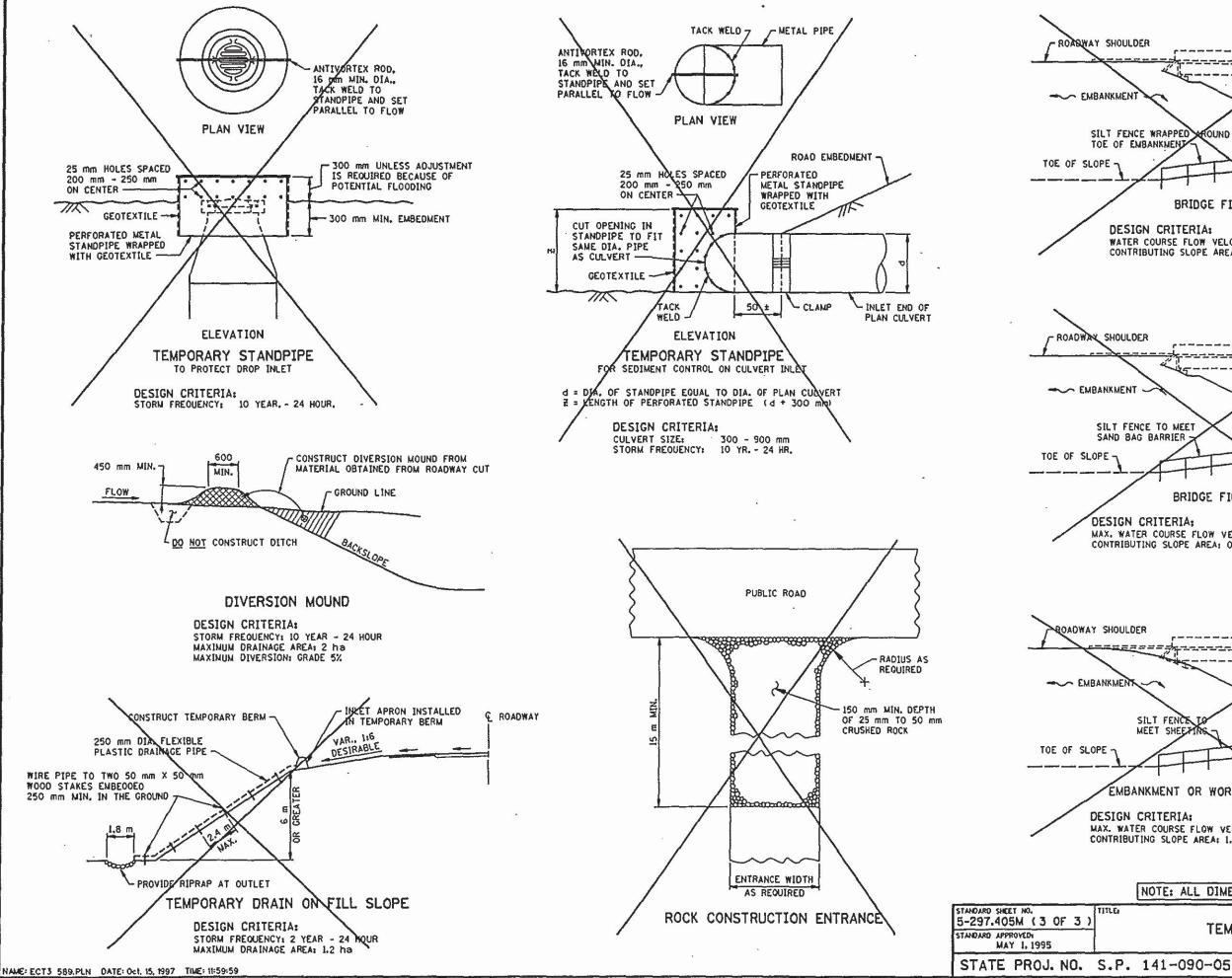
ROCK 10 YR. - 24 HR. 3.6 m/SEC.

2.0 ha

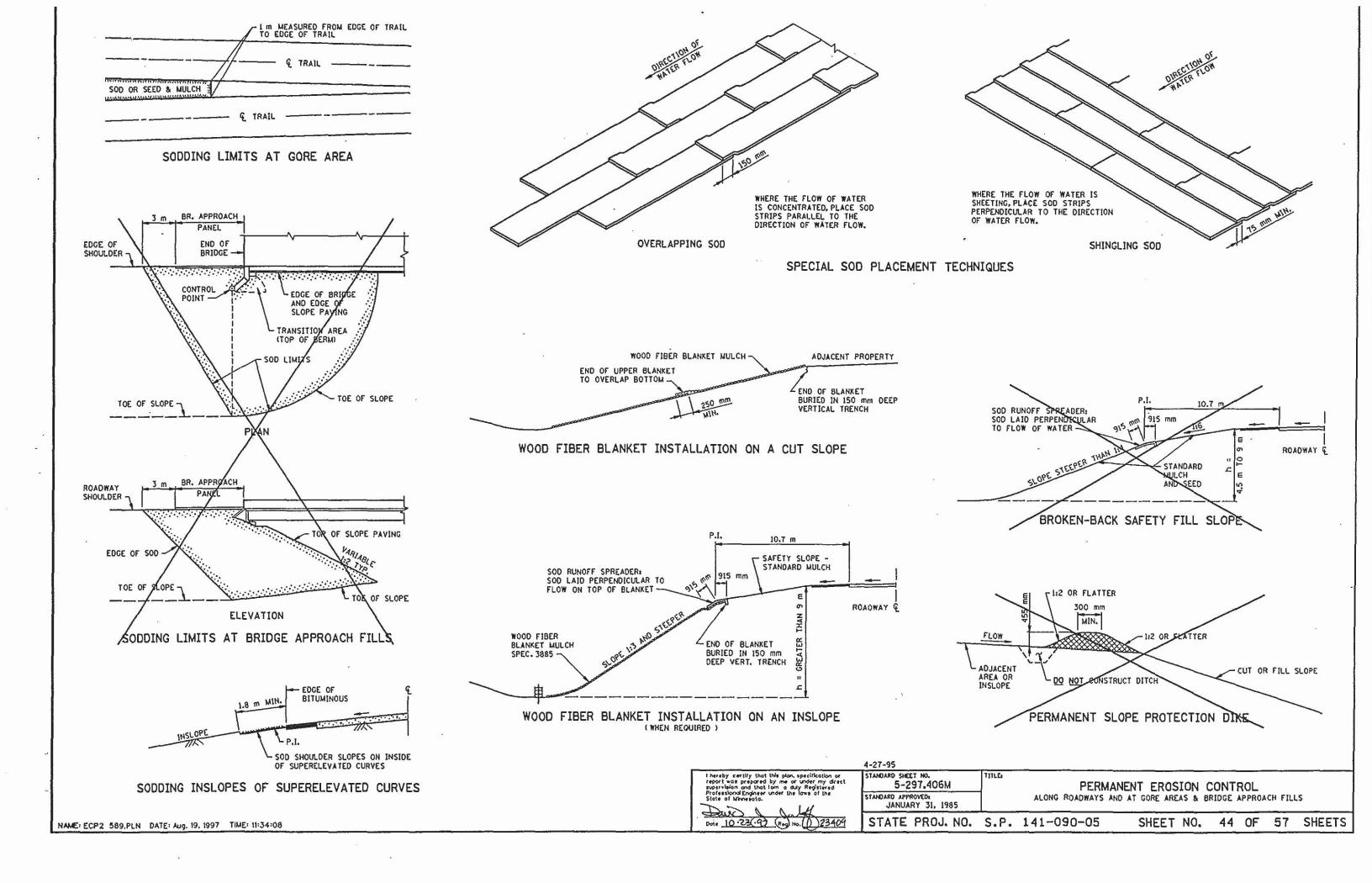
(1) TWO 50 mm X 50 mm WOOD STAKES OR REINFORCING BARS IN EACH BALE AND EMBEDDED IN THE GROUND 250 mm MINIMUM.

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS, EXCEPT AS NOTED.

57 SHEETS



FUTURE BRIDG -------BRIDGE END SLOPE YARIABLE 12 TYP SILT FENCE WRAPPED ROUND TOE OF ENBANKNEND BRIDGE FILL DESIGN CRITERIA: WATER COURSE FLOW VELOCITY: STAGNANT CONTRIBUTING SLOPE AREA: 0.2 ha - FUTURE BRIDGE annanananangkananana BRIDGE END SLOPE VARIABLE TYPE SAND BAG BARRIER 1 m HIGH ADJACENT TO WATER SILT FENCE TO MEET COURSE, EXTEND 15 m BACK FROM TOE OF END SLOPE. BRIDGE FILL DESIGN CRITERIA: MAX. WATER COURSE FLOW VELOCITY: 2 m/SEC. CONTRIBUTING SLOPE AREA: 0.4 ha - FUTURE BRIDGE EMBANKMENT OR WORK ROAD END SLOPE TEMPORARY SHEETING ADJACENT TO WATER COURSE. EXTEND 3 m BACK FROM SILT FENCE TOE OF END SLOPE. MEET SHEET EMBANKMENT OR WORK ROAD FN I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that fam a duty Registered Professional Engineer under the laws of the State of Minnesata. DESIGN CRITERIA: MAX. WATER COURSE FLOW VELOCITY: 4.5 m/SEC. CONTRIBUTING SLOPE AREA: 1.2 ha Date 10:23:97 Ref 23401 NOTE: ALL DIMENSIONS ARE IN MILLIMETERS, EXCEPT AS NOTED. TEMPORARY EROSION CONTROL SHEET NO. 43 OF 57 SHEETS



|                                                                                                                                                                                   |           | <u> </u> | <u> </u> |             |          | <u> </u> |        | _       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|----------|-------------|----------|----------|--------|---------|
|                                                                                                                                                                                   |           |          |          |             |          |          |        |         |
| 4                                                                                                                                                                                 | 268       |          |          |             |          |          |        |         |
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|                                                                                                                                                                                   | 266       |          |          |             |          |          |        |         |
|                                                                                                                                                                                   | 20.0.     |          |          |             | [        |          |        |         |
|                                                                                                                                                                                   | <u> </u>  |          |          |             |          |          |        |         |
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|                                                                                                                                                                                   |           |          |          |             |          | ·····    |        |         |
|                                                                                                                                                                                   |           |          |          |             |          | ••••••   |        |         |
|                                                                                                                                                                                   |           |          |          |             |          | \$       |        |         |
|                                                                                                                                                                                   | 268       |          |          |             | <u> </u> |          |        |         |
|                                                                                                                                                                                   |           |          |          |             | •••••    |          | •••••  |         |
|                                                                                                                                                                                   | 266.      | <u>.</u> |          |             |          | ·        | ·      |         |
|                                                                                                                                                                                   | ••••••    | •••••    |          |             |          |          |        | - N     |
|                                                                                                                                                                                   |           |          |          |             |          | •        |        | N E 2 S |
|                                                                                                                                                                                   | <b> </b>  |          |          | [           |          |          |        | -       |
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|                                                                                                                                                                                   | ••••••••• |          |          |             |          |          |        |         |
|                                                                                                                                                                                   | 26.8.     |          |          |             |          |          |        |         |
|                                                                                                                                                                                   |           |          |          |             | ļ        |          |        |         |
| -                                                                                                                                                                                 | 266       |          |          |             |          |          |        |         |
|                                                                                                                                                                                   |           |          |          |             | <b>.</b> | <u>.</u> |        |         |
|                                                                                                                                                                                   |           |          |          |             | ļ        | <u>.</u> |        |         |
|                                                                                                                                                                                   |           |          |          |             |          |          |        |         |
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|                                                                                                                                                                                   | 26.8.     |          |          |             |          |          |        |         |
|                                                                                                                                                                                   |           |          |          |             |          |          |        |         |
|                                                                                                                                                                                   | 266.      |          |          |             |          |          |        |         |
| Бр                                                                                                                                                                                |           |          |          |             |          |          |        |         |
| prf.                                                                                                                                                                              |           |          |          |             |          |          |        |         |
| ss29                                                                                                                                                                              |           |          |          |             |          |          |        |         |
| JÉSIGN FILE: h:\civil\0000\2589\md+ric\xss29cl.dgn<br>RF FILE: h:\civil\0000\2589\md+ric\xss29cl.prf<br>L.OTTER: MS-HP4MV-WNDOT<br>:CaLE: 200<br>LOT DATE/TIME: 02/05/98 11:21:11 |           |          |          |             |          |          |        |         |
|                                                                                                                                                                                   |           |          |          |             |          |          |        |         |
| Shine<br>Stril                                                                                                                                                                    | 266.      |          | ******   |             |          |          |        |         |
| 9585<br>9585                                                                                                                                                                      | 40.0.     |          |          |             |          |          |        |         |
| 258\<br>8 1                                                                                                                                                                       |           |          |          |             |          |          |        |         |
| 008/01/0                                                                                                                                                                          |           |          |          |             |          |          | ****** |         |
| C 1 4                                                                                                                                                                             |           |          |          | * * * * * * |          |          |        |         |
| E 40%                                                                                                                                                                             |           |          |          |             |          | ******   | •••••  |         |
| TIN T                                                                                                                                                                             |           | *******  |          |             |          |          |        |         |
| 2000<br>11L<br>2000<br>11L                                                                                                                                                        |           |          |          |             |          |          |        |         |
|                                                                                                                                                                                   |           |          | *******  |             |          |          |        |         |
| LOADES                                                                                                                                                                            |           |          |          |             |          |          |        |         |

|              | <br>                                   |                                  |      |       |        |          |    |          |                |     |          |   | •     |     |   | <br>    | SUBGR |      |       | 51 0           |              |      |                      | R,R  | R/ - |               |      |             |
|--------------|----------------------------------------|----------------------------------|------|-------|--------|----------|----|----------|----------------|-----|----------|---|-------|-----|---|---------|-------|------|-------|----------------|--------------|------|----------------------|------|------|---------------|------|-------------|
|              | <br>1p                                 |                                  |      |       |        |          |    |          |                | 1þ  |          |   |       | 58  |   | <br>1þ  |       |      |       | 13             |              |      |                      |      | 1D   |               |      | ;           |
|              | <br>                                   |                                  |      |       |        |          |    |          | 8.R            | RW  |          |   |       |     |   | <br>    |       |      | -n    | , Ř            |              | 12   |                      |      |      |               |      |             |
| 268          | <br>                                   |                                  |      |       |        | -19      |    | R.R. 8   | 2W             |     |          |   | 2682  | 56  |   | <br>    |       |      | ····· |                |              | ==   |                      |      |      |               |      |             |
| L            | <br>                                   |                                  |      |       |        | d .      |    |          |                |     |          |   |       |     |   |         |       | 13 0 |       |                |              |      |                      |      |      | $\rightarrow$ |      |             |
| 266          | <br>                                   |                                  |      | - 113 |        | শ        |    | 13       |                |     |          |   | 266   |     |   | <br>    |       | 30   |       | 1:209.0        |              |      |                      |      |      |               |      |             |
|              | <br>                                   |                                  | 17   |       |        | ;_       |    |          |                |     |          |   |       |     |   | <br>    | .ļļ   |      |       |                |              |      |                      |      |      |               |      |             |
|              | <br>                                   |                                  | 36   | 5     | t; 0   | 80.000.  |    |          | 1              |     |          |   |       |     |   | <br>    |       |      |       |                |              |      | B.B.RZW              | R,A  | 870  |               |      |             |
|              |                                        |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   | <br>    |       |      |       |                |              |      |                      |      |      |               |      |             |
|              |                                        |                                  |      |       |        |          |    |          |                |     |          |   | 2     | 38  |   |         |       |      |       | 461            |              |      |                      |      |      |               |      |             |
|              |                                        |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   |         |       |      |       | 99             |              |      |                      |      | H    |               |      |             |
| 268          |                                        |                                  |      |       |        | m        |    | R. R. R. | /w. 8.8.       | R/W |          |   | 268   | 66  |   |         |       |      | 113   | <u> </u>       |              | £    |                      |      |      | <u> </u>      |      |             |
|              |                                        |                                  |      |       |        | ø        |    |          |                |     |          |   |       |     |   |         |       | 11 0 |       |                |              |      |                      |      |      |               |      |             |
| 266          |                                        |                                  |      | 113   |        | 265      |    | 4.3      |                |     |          |   | 266   |     |   |         |       | 30   |       |                | 100          |      |                      |      |      |               |      |             |
| 200          |                                        |                                  | 16   |       | - 6    |          |    |          |                |     |          |   |       |     |   |         |       |      |       |                |              |      |                      |      |      |               |      |             |
|              |                                        |                                  | 36   |       |        |          |    |          |                |     |          |   |       | 70  |   |         |       |      |       |                |              |      |                      |      |      |               |      |             |
|              |                                        |                                  |      |       |        |          |    |          | ·              |     |          |   |       | /.₩ |   |         |       |      |       |                |              |      | A.R. R/W             | 8,8  | R2W  |               |      |             |
|              |                                        |                                  |      |       |        | 160.000. |    |          |                |     |          |   |       |     |   |         |       |      |       | 5              |              |      | 1                    |      |      |               |      |             |
|              |                                        |                                  |      | •     |        |          |    |          |                |     |          |   | 2     | 58  |   | <br>    |       |      |       | U              |              |      |                      |      |      |               |      | • • • •     |
|              | <br>                                   |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   |         |       |      | 113   |                |              | 12   |                      |      |      |               |      | • • • • •   |
| 268          | <br>                                   |                                  |      |       |        | 5        |    | RIR. RZ  | <u>W RR.R/</u> |     |          |   | 268 2 | 36  |   | <br>    |       | 7 0  |       |                |              |      | $\left\{ -\right\} $ |      |      |               |      |             |
|              | <br>                                   |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   | <br>    |       | 32   |       |                | ····         |      |                      |      |      |               |      |             |
| 266          | <br>                                   |                                  |      | 1.3   | ;<br>; | <u>9</u> |    | 143      | <u></u>        |     | <u>+</u> |   | 266   |     |   | <br>    |       |      |       | 1•.16d.C       | 000          |      |                      |      |      |               |      | ••••        |
| [            | <br>NOTE                               |                                  |      | 3     |        |          |    |          |                |     |          |   |       |     |   | <br>    |       |      |       |                |              |      |                      |      |      |               |      |             |
|              | <br>NOTE<br>EXTEND<br>2 m 4<br>SIDE ON | SHOULDE<br>Y <del>P;} THIS</del> | R 33 | 2     |        |          |    |          |                |     |          |   |       | 7.0 |   | <br>    |       |      |       |                |              |      | R.R. R/W             | A.R. | B/.W |               |      | • • • • • • |
|              | <br>SIDE ON                            | LY                               |      |       | t+0    | 40.000   |    | _        |                |     |          |   |       |     |   | <br>    |       |      |       |                |              |      |                      |      |      |               |      |             |
|              | <br>                                   |                                  |      |       |        |          |    |          |                |     |          |   |       | 68  |   | <br>    |       |      |       | 2              |              |      |                      |      |      | <u> </u>      |      |             |
|              | <br>                                   |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   | <br>    |       |      | 1,13  |                |              |      |                      |      |      |               |      |             |
| 268          | <br>                                   |                                  |      |       |        | 8        |    | R.R. R2W | R.R. 8/W       |     |          |   | 2682  | 66  |   | <br>    |       |      |       |                |              | =    |                      |      |      |               |      | •           |
| <u> </u>     |                                        |                                  |      |       |        | о<br>- С |    |          |                |     |          |   |       |     |   | <br>    |       | 80   |       |                |              |      |                      |      |      |               |      |             |
| 266          |                                        |                                  |      | 113   |        | 26       |    | 1.3      |                |     |          |   | 266   |     |   |         |       | 32   |       | <u>1-140 C</u> | <u>.</u> 400 |      |                      |      |      |               |      | -           |
|              |                                        | <u> </u>                         | 4    |       |        |          |    |          |                |     |          |   |       |     |   | <br>    |       |      |       |                |              |      |                      |      |      |               |      | ····        |
|              |                                        |                                  | 28   | 3     |        |          |    |          |                |     |          |   |       | 70  |   | <br>    |       |      |       |                |              |      |                      | R.A. | 879  |               |      |             |
|              |                                        |                                  |      |       | 1.0    | 20.000.  |    |          |                |     |          |   |       |     |   | <br>    |       |      |       |                |              |      | R.R. R/W             |      |      |               |      |             |
|              |                                        |                                  |      |       |        |          |    |          |                |     |          |   |       | 68  |   | <br>    |       |      |       | 55             |              |      |                      |      |      |               |      |             |
|              |                                        |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   |         |       |      |       | yg.            |              |      |                      |      |      |               |      |             |
| 268          |                                        |                                  |      |       |        | u l      |    |          |                |     |          |   | 2682  | 66  |   |         |       |      | 113   | 2              | : :          | 1 11 | H                    |      |      |               |      |             |
| 200          |                                        |                                  |      | 1     |        | ল        | P. | 8. AZV   | B.R. 874       |     |          |   |       |     |   |         |       | 11 0 |       | ·              |              |      |                      |      |      |               |      |             |
| 000          |                                        |                                  | Î    |       | ,3     | 265      |    |          |                |     |          |   | 266   |     |   |         |       | 35   |       |                | 000          |      |                      |      |      |               |      |             |
| 266          |                                        |                                  |      | 7     |        |          |    |          |                |     |          |   |       |     |   |         |       |      |       |                |              |      |                      |      |      |               |      |             |
|              |                                        |                                  | 36   |       |        |          |    |          |                |     |          |   |       |     |   |         |       |      |       |                |              |      |                      |      |      |               |      |             |
|              |                                        |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   |         |       |      |       |                |              |      |                      | R.8, | R/W  |               |      |             |
|              | <br>                                   |                                  |      |       | 1.0    | 00.000.  |    |          |                |     |          |   |       |     |   | <br>    |       |      |       | _              |              |      | R.R. 8/W             |      |      |               |      |             |
|              |                                        |                                  |      | ++    |        |          |    |          |                |     |          |   |       | 68  |   |         |       |      |       |                |              |      |                      |      |      |               |      |             |
|              |                                        |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   | <br>    |       |      | 12    | 266            |              |      | 1.3                  |      |      |               |      |             |
| 266          |                                        |                                  |      |       |        |          |    |          |                |     |          |   | 266 2 | 66  |   |         |       | 17 1 |       |                |              |      |                      |      |      |               |      |             |
| <sup> </sup> |                                        |                                  |      |       |        | +        |    |          |                |     |          | + |       |     |   | <br>    |       | 37   |       |                | _            | _    | ++                   |      |      |               |      |             |
|              | <br>·····                              | ·                                |      |       |        |          |    |          |                |     |          |   |       |     |   | <br>    |       |      |       |                | 000          |      |                      |      |      | <u></u>       | ···  | • • • •     |
|              |                                        |                                  |      |       |        | 180.000. |    |          |                |     |          |   |       |     |   | <br>    |       |      |       |                |              |      | ··                   |      |      |               |      |             |
|              | <br>                                   |                                  | ,,   |       |        |          |    |          |                |     |          |   |       |     |   | <br>    |       |      |       |                |              |      |                      | 1    |      |               |      |             |
| [            |                                        |                                  | ļ    |       |        |          |    |          |                |     |          |   |       |     | [ | <br>    |       |      |       |                |              |      |                      |      |      |               |      | • • • •     |
|              |                                        |                                  |      |       |        |          |    |          |                |     |          |   |       |     |   | <br>    |       |      |       |                |              |      | +                    |      |      |               |      |             |
|              | 10                                     |                                  |      |       |        | •        |    |          |                | 10  |          |   |       |     |   | 10      |       |      |       |                |              |      |                      |      | 10   |               |      |             |
|              |                                        |                                  |      |       |        | •••••    |    |          |                |     |          |   |       |     | : | tate Pr |       |      |       | 0.7            |              |      |                      |      |      | 45 of         | F 57 | - 7         |

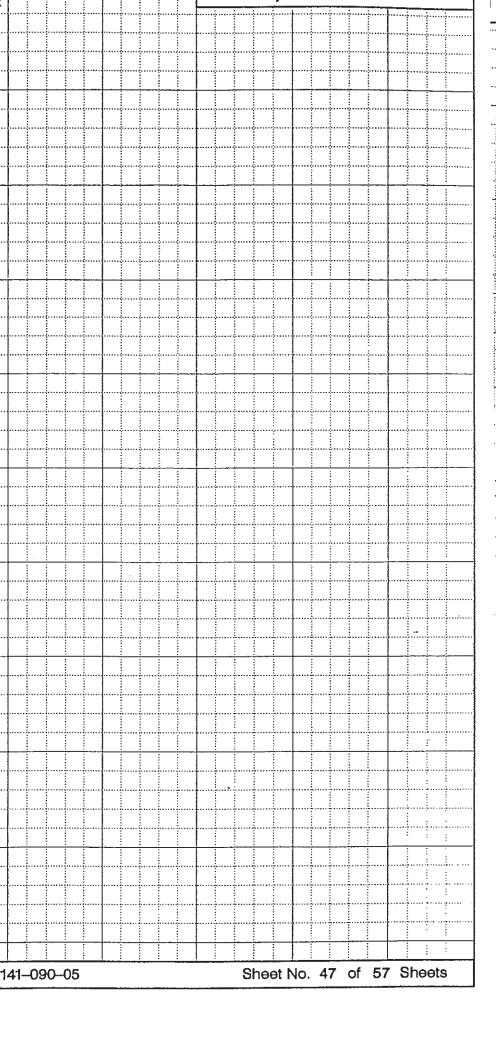
DESIGN FILE: h:\civil\008\2589\metric\xss29ci.dgn PRF FILE: h:\civil\008\2589\metric\xss29ci.prf PLOTTER: MS-HP4WV-NND01 SCALE: 200 PLOT DATE/TIME: 02/05/98 11:21:48

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|                                         |           | 1                                       |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          | ····           |          |              |          |                    |             |          | <br>1h      |       |      |   | •••••••• | 268 |    | 20         |      | 1   | h    |      | T    |      |          |     |           |    |                |            |          | ıb               |          |            | 1            |              | 1        |           |
|-----------------------------------------|-----------|-----------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------|----------|-----------|-----|----------|----------------|----------|--------------|----------|--------------------|-------------|----------|-------------|-------|------|---|----------|-----|----|------------|------|-----|------|------|------|------|----------|-----|-----------|----|----------------|------------|----------|------------------|----------|------------|--------------|--------------|----------|-----------|
| 8                                       |           |                                         |     | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                                       |          | ····}···· |     |          | - <del>1</del> |          |              |          | ·                  |             | R.R. A   | Р<br>х/w    |       |      |   | •••••    |     |    | <u>م</u> د |      |     | R.R. | A/¥  |      |      |          |     | 761       |    | <br>İ          |            |          | R.R.             | R/W      |            |              |              |          |           |
|                                         |           | 1                                       |     | - tr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                       | <u>.</u> |           | 1:3 |          | 266            |          |              | 1        | 3                  |             |          |             | ····· | •••• |   |          |     |    | 26         |      |     |      |      |      |      | 1        | -3  | 265       |    | 1.             |            |          |                  |          |            |              |              | <u> </u> |           |
| \$                                      |           | +                                       |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       | 28       |           |     |          |                |          |              | <u> </u> |                    | <del></del> |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      | <u></u>  | E   | ·····     |    | <u>ן ב</u>     |            |          |                  |          |            |              |              |          | f         |
|                                         |           | +                                       |     | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     | · · · · · · · · · · · · · · · · · · · | 37       | <u> </u>  |     | <u></u>  |                |          |              |          | +                  |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 25 0 |          |     |           |    |                |            |          |                  |          |            |              |              |          |           |
| , i i i i i i i i i i i i i i i i i i i |           |                                         |     | Ť                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |                                       |          |           |     | l}.      | 320.0          | 00       |              |          |                    |             |          |             |       |      |   |          |     |    |            | <br> |     |      |      | **** | 37   |          | 1   | 4.4.0.00  | n  |                |            |          |                  | [        |            |              |              |          |           |
|                                         |           |                                         |     | · · · · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |                                       |          | ····      |     |          | •••••          |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    |                |            |          |                  |          |            |              |              |          | •••       |
|                                         |           | +                                       |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       | ·        | ····      |     |          | •••••          | 1        | $\mathbf{T}$ |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    |                |            |          |                  |          |            |              |              |          |           |
| 8                                       | <u>i</u>  |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          | ····           |          |              |          |                    |             | R.R. R/N | ,           |       |      |   |          | 268 | 2  | 20         |      |     | R.P. | 87¥  |      |      |          |     |           |    |                |            | -        | 9.3              | 2/8      |            |              |              |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           | i   |          | 4              |          |              |          |                    |             |          |             |       |      |   |          |     |    | 10.        |      |     |      |      |      |      |          |     | 80        |    |                |            |          |                  |          |            |              |              | 1        |           |
|                                         | ····      |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     | ·····                                 |          |           | 1.3 |          | 266.<br>266    |          |              |          | 13                 |             |          |             |       |      |   |          | 266 |    | 26         | -    |     |      |      |      |      | <b>,</b> | 4.3 | 265       |    | <br>1.         |            |          |                  | I        |            |              |              |          |           |
| 3                                       | ····      |                                         |     | · • · · · · · · · · · · · · · · · · · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |                                       | 43       |           |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    | 2.0.       | -    |     |      |      |      |      | +        | Ē   |           |    | <br>3          |            |          |                  |          |            |              | Γ            |          |           |
|                                         |           | +                                       |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     | ·····                                 | 37       |           |     |          |                |          | 1            | 1        |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 20 0 |          |     |           |    |                |            |          |                  |          |            |              |              |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     | ····                                  |          | 1         |     |          | .300.0         | ۵٥       |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 37   |          |     | +420.0    | 00 |                |            |          |                  | +        |            |              |              |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     | <u> </u>  |    |                |            |          |                  |          |            |              |              |          |           |
|                                         |           | 1                                       |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    |                |            | ĺ        |                  |          |            |              |              |          |           |
|                                         |           | 1                                       |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          |                |          |              |          |                    | R/W         | R.R.     | 87 <b>4</b> |       |      |   |          |     |    | 38         |      |     |      |      |      |      |          |     |           |    |                |            |          |                  | 1        |            |              |              |          |           |
| 8                                       |           | 1                                       | ··· | -tt-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                       |          |           | 1   |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     | 84        |    |                |            |          | 9.9.             |          |            |              |              |          | •••••     |
| \$                                      | <u>i</u>  |                                         |     | i i i                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |                                       |          |           | 1.3 | ¥.       | 266            |          |              |          | 113                |             |          |             |       |      |   |          | 266 | 28 | 36         |      |     |      |      |      |      |          | 1.2 | 265       |    | 1.7            |            | Ì        |                  |          |            |              |              |          |           |
| ,                                       |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     | ļ                                     | 48       |           |     |          |                | :        | +            |          |                    |             |          |             |       |      |   |          | 00  |    |            |      |     |      |      |      |      |          | Ē   |           |    |                |            |          |                  |          |            |              | ţ.           |          |           |
| <u></u>                                 | ····÷···· | 1                                       |     | i i i                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |                                       | 37       | Î         |     |          | 280.0          | 00       |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 13 1 |          |     |           |    |                |            |          |                  |          |            |              |              |          | ••••      |
| İ                                       | <u>.</u>  | 1                                       |     | Ť                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1   |                                       | 1        |           |     |          | ∠ov.0          |          |              | Ī        | -                  |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 36   |          |     | ±400.0    | 00 |                |            |          |                  |          |            |              | ļ            |          |           |
| 1                                       | Ī         | İ                                       |     | † †                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ì   | Ì                                     |          | Ì         |     |          | ••••           |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    |                |            |          |                  | Į        | ĺ          |              |              |          |           |
| ŤŤ                                      | 1         | 1                                       |     | Ť                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |                                       |          | İ         |     |          | •••••          |          | ŤŤ           |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    |                |            |          |                  |          |            |              |              |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          | 8              |          |              |          | - <del>R.R</del> : | : 87¥<br>   | 8.8      | 1, 97 V     |       |      | İ |          | 268 |    | 38         |      |     |      |      |      |      |          |     |           |    | <br><u>.</u>   |            |          | .R.R. R.         | w        |            |              | ļ            |          |           |
|                                         | ····      |                                         | Î   | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     | Ì                                     |          | 1         |     |          | 5              |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     | 88        |    |                |            |          |                  |          |            |              |              |          | ••••      |
| İ.İ.                                    | <u>-</u>  |                                         |     | , in the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s |     | -                                     |          |           | 1   | 3        | 26             | ĺ        |              |          | 13                 |             |          |             |       |      |   |          | 266 |    | 56         |      |     |      |      |      |      |          | 1.3 | 265       |    | <br>1          | 3          |          |                  | <u> </u> |            | <u></u>      | ļ            |          | ••••      |
|                                         | Ì         |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       | 23       | 1         |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          | E   |           |    |                |            |          |                  |          |            |              | <b>_</b>     |          | •••       |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       | 37       |           |     |          | 260.0          | 00       |              |          |                    | ·           |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 21 1 |          |     |           |    | <br><u> </u>   |            |          |                  |          |            |              | ∔            |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 36   |          |     | 4.380.0   | oo | <br>           |            |          |                  |          |            |              | ļ            |          | ••••      |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     | <u>.</u>  |    | <br><u>.</u>   |            |          |                  |          |            |              | ļ            |          | •••       |
| Ī                                       | Ī         |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    | <br>ļ          |            |          |                  |          |            |              | <b>.</b>     |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          | 51             |          |              |          | R.R.               | 87¥         |          |             |       |      |   |          | 268 |    | 58.        |      |     |      |      |      |      |          |     | 1         |    | <br><u>.</u>   |            | F        | 9. <b>8.</b> 879 |          | <u> </u>   |              |              | -        |           |
|                                         | Ī         |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          | 9              |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      | į   |      |      |      |      |          |     | 6         |    |                |            |          |                  |          |            |              | +            |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       | <u>}</u> |           | 11  | }        | 20             | <u>.</u> |              |          | 1:3                |             |          |             |       |      | - |          | 266 |    | 66         |      |     |      |      |      |      |          | 3   | 26        |    | <br>113        |            | <u>_</u> |                  |          | <u> </u>   | <del>_</del> | <b>_</b>     |          |           |
| Ī                                       | Ì         | T                                       |     | T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Ī   |                                       | 7        | 1         |     |          |                | +        |              |          |                    | [           |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 35 0 |          | E   |           |    |                |            |          |                  |          |            |              | . <b> </b>   |          |           |
|                                         | Ī         |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ĪĪ  |                                       | 35       |           |     | 1.       | 240.0          | 00       |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 37   |          |     | 1:360.0   |    | <br>ļ          |            | <u>‡</u> |                  | <u>.</u> |            |              | <b>_</b>     |          |           |
| Î                                       |           |                                         |     | Ī                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |                                       |          |           |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     | ļ         |    | <br>           |            | <u>ļ</u> |                  | ļļ       |            |              |              |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     | <u> </u>  |    | <br><u> </u>   |            |          | :                |          |            |              | <u></u>      |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          |                |          |              |          |                    |             | R.R.     | R/W         |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     | ļ         |    | <br>ļļ         |            |          |                  |          |            |              | -            |          |           |
|                                         | Ī         |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          | 141            |          |              |          | 18.8               | 87W         |          |             |       |      |   |          | 268 |    | 68.        |      |     |      |      |      |      |          |     | 961       |    | <br><u>.</u>   | ļķ.        | R        | R. R/W           | <u>.</u> |            |              |              |          |           |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           |     |          | 9              |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    | <br><u>.</u>   |            | <u>.</u> |                  | ļļ       |            |              | 4            |          |           |
|                                         | Î         |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       |          |           | 113 | ý i<br>T | 2              |          |              |          | 1                  |             |          |             |       |      |   |          | 266 |    | 66         |      |     |      |      |      |      |          | 13  | 26        |    | 13             |            |          | <u> </u>         | <u> </u> |            |              |              |          |           |
|                                         | Î         |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       | 7        | 1         |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 35 0 |          |     |           |    | <br>           |            |          |                  |          |            |              | <u>  - :</u> |          | - <b></b> |
|                                         |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |                                       | 32       |           |     | t.       | 220.0          | on       |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      | 37   |          |     | 1.3.4.0.0 |    | <br>ļļ.        |            | <u>‡</u> | 1                | ļ        |            |              |              |          |           |
| 1                                       |           |                                         |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     | Ì                                     |          |           |     |          |                |          |              | ļ        |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    | <br>           | <u>į</u> į |          | Ļ                | ļ        | <u> </u> / |              |              |          |           |
|                                         |           |                                         |     | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     | İ                                     |          | Ī         |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    | <br>. <u>.</u> |            | <u></u>  |                  | ļ        | <u>†</u> ! |              |              |          |           |
|                                         |           |                                         |     | Ť                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     | •••••                                 |          | 1         |     |          |                |          |              |          |                    |             |          |             |       |      |   |          |     |    |            |      |     |      |      |      |      |          |     |           |    | <br>           |            |          |                  | ļ        |            | ļļ           |              |          |           |
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| 266                   | :<br>    |           | <u> </u> | <u> </u>     | <u>.</u> |          | <u> </u>    | <u>:</u> | ļ                                                                                                              |          |                                              |       |       | L        | <u> </u> | <u> </u> |
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|                       | 4<br>1   | <br>      | i        | <b>†</b>     |          | ·····    | <br>i       | *<br>!   | <b>†</b> *****                                                                                                 |          | ******<br>:                                  |       | ;     |          |          | <br>     |
| 26.4.                 | ļ        | ÷         |          | <b>¦</b>     | ļ        |          |             |          | <b>.</b>                                                                                                       |          |                                              |       |       |          |          | יז<br>ד  |
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|                       |          | <u>.</u>  | ÷        | †            |          |          | · · · · · · | <br>     | †                                                                                                              |          |                                              |       |       |          |          | ·····    |
|                       | <u> </u> |           | <u> </u> |              |          |          | <u> </u>    |          | I—                                                                                                             | <u> </u> |                                              |       |       | L        |          | <u> </u> |
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| 266.                  | ļ        | į         | į        | Į            |          |          | į           |          | <b>]</b>                                                                                                       |          |                                              |       |       |          | ļ        |          |
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| 264                   | <u> </u> | <u>!</u>  | -        | -            | :        | <u> </u> | -           |          | <b> </b>                                                                                                       |          |                                              |       |       |          |          | <b>F</b> |
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| 1                     | ]        | Ĩ         | Ĩ        | ſ            | 1        |          | Ī           |          | ſ                                                                                                              |          |                                              |       | 41    | F        |          | [        |
|                       | <u>.</u> | ÷         | ÷        | <b>†</b>     |          |          | ¦           |          | <u> </u>                                                                                                       |          | •••••                                        | ·     | ·     |          |          | <b>.</b> |
|                       | ļ        | ļ         | ļ        | ļ            | ļ        |          | ļ           | ļ        | ļ                                                                                                              | ļ        | ļ                                            | ļ     |       | ļ        | ļ        | ļ        |
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|                       |          | <u>.</u>  | <u></u>  | t            | İ        |          | <u>.</u>    | Ì        | t                                                                                                              |          |                                              |       |       |          |          |          |
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| 266                   |          |           | <u> </u> |              |          |          |             | <u> </u> | <b>[</b>                                                                                                       |          |                                              |       |       |          |          |          |
|                       | 1        |           |          | 1            |          |          |             | ]        |                                                                                                                |          |                                              |       |       |          |          |          |
|                       | ÷        | ÷         | ÷        | f            | <u>.</u> |          | بك<br>      | <u></u>  | ļ                                                                                                              | <u></u>  | <u></u>                                      | ····· |       |          | 1        | 3        |
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|                       | <u>.</u> | <u>:</u>  | <u>!</u> | <b>I</b>     | <u> </u> |          | <u>.</u>    | <u> </u> | <b>.</b>                                                                                                       |          |                                              |       |       |          |          |          |
|                       |          | [         |          |              |          |          |             |          | ł                                                                                                              |          |                                              |       |       |          | 1        |          |
|                       | <u>.</u> | Ì         | <u>.</u> | †            |          |          | -           | <u>.</u> | •••••                                                                                                          |          | <u>.</u>                                     |       |       |          | ·        |          |
|                       | ļ        | <u>ļ</u>  | <u> </u> | <b>ļ</b>     | <u>.</u> |          | R. R/       | i        | <b> </b>                                                                                                       |          |                                              |       |       | l        | ļ        | ļ        |
| 266                   | -        | 1         |          |              |          |          | 1           |          |                                                                                                                |          | -                                            |       |       |          |          |          |
| 1200.                 | 1        | Ţ         |          | 1            |          |          | Ĩ           | ļ        | [·····                                                                                                         |          |                                              |       |       |          |          |          |
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| 26.4                  |          | <u>.</u>  | <u>l</u> | <b> .</b>    |          |          |             |          | L                                                                                                              |          |                                              |       |       |          |          |          |
|                       |          |           |          |              |          |          |             |          |                                                                                                                |          |                                              |       | 30    | 0        |          |          |
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|                       | ļ        | <u></u>   | <u> </u> | <b> </b>     | <u>.</u> |          | <u>.</u>    | <u>.</u> | ļ                                                                                                              | [<br>    |                                              |       |       |          |          |          |
|                       |          | ĺ         |          |              |          |          |             |          |                                                                                                                |          |                                              |       |       |          |          |          |
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|                       | ļ        | ļ         | ļ        | ļ            | [        |          | 80.0        | 5777     |                                                                                                                |          |                                              |       |       |          |          |          |
| 266                   |          |           |          |              |          |          | 8.A.1       | 37 W     |                                                                                                                |          |                                              |       |       |          |          |          |
| 200.                  | <br>     | <u>.</u>  | Ì        | †            | Ī        |          | T l         | 1        | <b> </b>                                                                                                       |          |                                              |       |       |          | Ì''''    |          |
|                       |          | <u>.</u>  | <u> </u> | <b> </b>     | •••••    | •••••    |             | <b>.</b> | •••••                                                                                                          |          |                                              |       |       |          | ļ,       | :3       |
| 264                   |          |           |          |              |          |          |             |          |                                                                                                                |          |                                              |       |       |          |          | ÷        |
| <b>1-0</b> . <b>.</b> |          | 1         | 1        | [            |          |          |             |          |                                                                                                                |          |                                              |       |       |          |          | L        |
|                       | <u> </u> |           | <u> </u> |              |          |          | : L         | -        |                                                                                                                |          |                                              |       | 13    | 3        |          |          |
|                       | <u>.</u> | į         | ļ        | ļ            |          |          | ļ           |          |                                                                                                                |          |                                              |       |       |          |          |          |
|                       |          |           |          |              |          |          |             |          |                                                                                                                |          |                                              |       | 27    |          |          |          |
|                       | :        |           |          | ŧ            | ••••••   |          |             |          |                                                                                                                |          |                                              |       |       |          |          | <u>.</u> |
|                       |          | 1         | :        | E            |          |          |             |          |                                                                                                                |          |                                              |       |       |          | •        |          |
|                       |          |           |          | ļ            |          |          |             | <b>.</b> |                                                                                                                |          |                                              | ····· |       |          | ļ        |          |
|                       |          |           |          |              |          |          |             |          |                                                                                                                |          |                                              |       |       |          |          |          |
|                       |          | ······    |          |              |          |          |             |          |                                                                                                                |          |                                              |       |       |          |          |          |
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| 266      | 1                                            |          |          | (                                                | 1           | 10        |                                        | ÷              |                | ft                                            |                                                                                                                |                                              |                                              | :             | 12       |               |                                       |          |             |                  | :           |          |          | 542      | · · · · · · · · · · · · · · · · · · · |                |                                              | ; ]            |                   |           |          | -6               |          | 6          |          | :              |          |          |        | · · · · · · · · · · · · · · · · · · ·         | 10       |          |   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| 264      |                                              |          |          | <u> </u>                                         |             | 1         |                                        | <u> </u>       | î              |                                               |                                                                                                                | 113                                          | 3                                            |               | 28       |               |                                       | 113      |             |                  | <u>.</u>    |          | 13       | 5<br>7   | <u> </u>                              | 3              | ÷                                            | ;              |                   | *         | 264      | .4               |          | 4          |          |                |          | -        |        | - (main)<br>                                  | 1        |          |   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|          | í;                                           |          |          |                                                  | :           | T         |                                        |                |                | 21                                            | 1 0                                                                                                            |                                              |                                              |               | T        |               |                                       |          |             |                  | :           |          |          | Ŧ        |                                       |                |                                              |                | ·                 |           |          |                  |          | <u> </u>   |          |                |          |          |        | <u>, , , , , , , , , , , , , , , , , , , </u> |          |          |   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|          | :                                            |          |          |                                                  |             | T.        | ;                                      |                | ;              | 44                                            |                                                                                                                |                                              |                                              | 1             | 920.00   | 000           |                                       | ;        |             |                  |             |          |          |          |                                       |                |                                              | . ]            | ·                 |           |          |                  | (        |            |          |                |          |          |        | )                                             |          |          |                                        |                                              | 44            | <u> </u>                | ,                                      |                                        | -1 - 1                            | 2+040_0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | :          |            |          |          |                 |                       |            |                  |                      |           |             |              |          |                                         |                   |               |                  |
|          |                                              |          |          |                                                  | 1           | Τ.        | ······                                 |                |                |                                               |                                                                                                                |                                              |                                              | 1             |          |               |                                       |          |             | 1                | 1           |          |          |          |                                       |                |                                              |                |                   |           |          |                  | (        |            |          |                |          |          |        | ,                                             |          |          |   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|          |                                              |          |          |                                                  | :           |           |                                        | ;              |                |                                               |                                                                                                                |                                              | :                                            | 1             |          |               |                                       |          |             |                  | :           |          |          |          |                                       |                |                                              |                | ····              | •]••••    |          |                  | (        |            |          |                |          |          |        | · ***· · · ·                                  | ;        | ;<br>;   |   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|          |                                              |          |          |                                                  | :           |           | · · · · · ·                            |                |                |                                               |                                                                                                                |                                              | :                                            | :             |          |               |                                       |          |             |                  |             |          |          |          |                                       |                |                                              | ÷              |                   | · · · · · |          |                  | 1        |            |          |                |          |          |        | -                                             | ;        |          |   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| 266      |                                              |          |          |                                                  | :           | Ţ         |                                        |                |                |                                               |                                                                                                                |                                              |                                              | -             | ۴<br>G   |               |                                       |          |             |                  | 662         |          |          |          | <u>.</u>                              |                |                                              | :              | <u> </u>          | -         | 266      | -6               | 266      | 6          |          |                |          |          | •••••• | · (***** · )                                  | ;        | <u> </u> |                                        |                                              | <u>[]</u> ]   |                         | ;                                      | <u> </u>                               | ;                                 | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <u> </u>   |            |          | Ĩ        | J               |                       |            |                  |                      |           |             |              |          |                                         | <u> </u>          | 266           | i                |
|          |                                              |          |          |                                                  | ;           | Ţ.        |                                        |                |                |                                               |                                                                                                                |                                              | :                                            |               | 4        |               |                                       |          |             |                  | 264.2       |          |          | 1        | ;                                     |                |                                              | :              |                   |           |          |                  | (        |            |          |                |          |          |        | · · · · ·                                     |          |          | ]                                      |                                              |               | <u> </u>                | 1                                      |                                        |                                   | 122                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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                                                                                                      |            |            |          | <b>.</b> | 5.85            |                       |            |                  |                      |           |             |              | ]        |                                         |                   | ÷             | -                |
| 264      |                                              |          |          |                                                  | <u> </u>    |           |                                        | <u> </u>       |                | <u> </u>                                      |                                                                                                                |                                              | he 3                                         |               | Й        | <u> </u>      |                                       | 1.3      | <u> </u>    | 113              | <u>, ñ</u>  | 4        | 1.7      | 3        | -                                     |                |                                              |                |                   | ******    | 264      | 4                |          | 4          |          | <u> </u>       |          |          |        | · · · · · · · · · · · · · · · · · · ·         | -        |          |                                        |                                              |               |                         |                                        | La.                                    |                                   | 263                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| 6. 0     |                                              |          |          |                                                  |             |           | · · · · · ·                            |                | • •            | 30                                            | 1 .                                                                                                            |                                              |                                              |               | Ť        | - <del></del> |                                       |          |             |                  | :           | <u> </u> |          |          | :                                     |                |                                              | ;              |                   | -         |          |                  | <b>6</b> | <b>T</b>   |          |                | /******  |          | 1      | ·                                             | :        |          |                                        |                                              | 34            | 0 ; 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|          |                                              |          |          |                                                  |             | 1.        |                                        |                |                | 44                                            |                                                                                                                |                                              |                                              | 1.1           | .900.00  | 000           | · · · · · · · · · · · · · · · · · · · |          |             |                  |             |          |          |          |                                       |                |                                              |                | 4                 |           |          |                  | 1        |            |          |                |          |          |        |                                               |          |          |   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|          |                                              |          |          |                                                  |             | 1         | ÷                                      |                |                | [ <u> </u>                                    |                                                                                                                |                                              |                                              |               |          |               |                                       |          | 1           | 1_1              |             |          |          |          | <u></u>                               |                | í                                            | ·              | ·                 |           |          |                  |          |            |          |                |          |          |        |                                               |          |          |                                        |                                              |               |                         | Ē                                      | ;                                      |                                   | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |            |          |          |                 |                       |            |                  |                      |           |             |              |          |                                         |                   | :             | '                |
|          | ·,                                           |          |          | $\Box$                                           |             | Ţ.        |                                        |                |                |                                               |                                                                                                                |                                              | 1                                            |               | +        |               |                                       |          |             | 1                | :           |          |          | 1        | ,                                     |                |                                              |                |                   |           |          |                  |          |            | 1        |                |          |          |        |                                               | ;        | 1        |   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|          | 1                                            |          |          |                                                  |             |           |                                        |                |                |                                               |                                                                                                                |                                              | 1                                            |               |          |               | ******                                |          |             |                  |             |          |          |          |                                       |                |                                              |                | ·                 |           |          |                  |          |            |          |                |          |          |        |                                               |          |          |   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| 266      | ;                                            |          |          |                                                  |             |           | ;                                      |                |                |                                               |                                                                                                                |                                              |                                              |               | r<br>F   |               |                                       |          |             | 283              | í           |          |          |          |                                       |                |                                              |                |                   |           |          | 56               |          | 6          |          |                |          |          |        | ·                                             | ·        |          |   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|          |                                              |          |          |                                                  |             |           | ·····                                  |                |                |                                               |                                                                                                                |                                              |                                              |               | 64-3     |               |                                       |          | <u>ः</u> स् | 4<br>9           | í           |          | ····     |          | 1                                     |                |                                              | ]              | · · · · · · · · · |           |          |                  |          |            |          | :              |          |          |        |                                               |          |          |   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                                                                                                      |            |            |          |          | 6               |                       |            |                  | ļļ.                  |           |             |              |          | ļ                                       |                   |               |                  |
| 264      |                                              |          |          |                                                  |             | <u>_</u>  | <u> </u>                               |                |                | <u> </u>                                      |                                                                                                                |                                              | · · ·                                        | '             | 7        |               |                                       | 13:2     | ÷           |                  | 1:3         | 3        |          | <u> </u> |                                       |                |                                              |                |                   |           | 264      | لهد              | 264      | 4          |          | _              |          |          |        |                                               | <u> </u> |          | <u> </u>                               |                                              | <u> </u>      |                         |                                        | 113                                    |                                   | 263                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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|          |                                              |          | Ī        |                                                  | ·           |           | ,<br>                                  |                |                | 37                                            |                                                                                                                |                                              | τ                                            | <br>          | 1        |               | <br>                                  | ,        |             |                  |             |          |          |          |                                       |                |                                              |                |                   |           |          |                  |          |            |          |                |          |          |        |                                               |          |          |   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|          | 1                                            |          |          |                                                  |             |           | ·····                                  | i              |                | 41                                            |                                                                                                                |                                              |                                              | 1             | .880.00  | 000           |                                       |          |             |                  |             |          |          |          |                                       |                |                                              |                |                   |           |          |                  |          |            |          |                |          |          |        |                                               | ·····    | :        |   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                                                                                                      | J          |            |          |          |                 |                       |            |                  | ļļ.                  |           |             |              |          |                                         |                   |               |                  |
|          |                                              |          | ļ        | .i                                               | ļ.          |           |                                        |                | ļ!             |                                               |                                                                                                                |                                              | 4                                            |               |          |               |                                       |          |             |                  | 4           |          |          |          |                                       |                |                                              |                |                   |           |          |                  | į        |            |          |                |          |          |        |                                               | ,, ·     |          |   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|          |                                              |          |          | . <u>i</u> l                                     | ·····       |           |                                        |                |                |                                               |                                                                                                                |                                              |                                              |               |          |               |                                       |          | <u> </u>    |                  |             |          |          |          |                                       |                |                                              |                | ,                 |           |          | )                | (        |            |          | <u>.</u>       |          |          |        | ·····                                         | ,        |          |                                        |                                              | )             |                         | ······ ;                               |                                        |                                   | . <u>.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ł                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |          |          |                 |                       |            | ļ                | ļļ.                  |           |             |              |          |                                         | ·····             | į             |                  |
|          | <u>.                                    </u> | '        |          | R.R. 87                                          | - 87%       |           | ,<br>,                                 |                | !              |                                               | <b></b>                                                                                                        |                                              | <u>.                                    </u> |               |          |               |                                       | ;        | <u> </u>    |                  |             |          |          |          | ;                                     |                | <u> </u>                                     | ·              |                   |           |          | $\left  \right $ | <u> </u> |            | !        |                |          |          |        |                                               |          | '        | <u>_</u> :                             |                                              | <u></u> _     | - <b> </b> <sup>†</sup> | <u> </u>                               |                                        | <u> </u>                          | ÷                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | t ÷                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            | <u> </u>   |          |          | <u> </u>        |                       | <u>.</u>   |                  | $\square$            | <u> </u>  | <u> </u>    |              |          |                                         | <u></u>           | <u>.</u>      | _                |
| 266      | · · · · · · · · · · · · · · · · · · ·        |          |          |                                                  | 4           |           | ·                                      |                |                | <u> </u>                                      | <sup>1</sup>                                                                                                   | <u>.</u>                                     |                                              | ·             | 253      |               |                                       |          |             |                  | .4          |          |          |          |                                       |                |                                              | ļ.             | ,                 |           |          | ا6               | 266      | .6.        |          | <u></u>        |          |          |        |                                               | ·        |          |                                        |                                              | l             |                         | ······ '                               |                                        |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                      |            |            |          |          |                 | 392                   |            |                  | <b>}</b>             |           |             |              |          |                                         | ·                 | 26.6          | د                |
|          | ·,                                           |          |          |                                                  | Į           |           | ·                                      |                |                | <u> </u>                                      |                                                                                                                | ,)                                           | 4                                            |               |          |               |                                       |          |             | <u>د</u>         | 4           |          |          |          |                                       |                |                                              |                |                   |           |          |                  |          |            |          | ;              |          |          |        |                                               |          |          |                                        |                                              | . <u>.</u>    |                         |                                        |                                        |                                   | 63.9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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                                                                                                      |            |            |          |          |                 | 263.992               |            |                  | <u> </u>             |           |             |              |          |                                         | ÷÷                | ÷             |                  |
| 26.4     |                                              |          |          |                                                  |             |           | <u></u>                                | <del>.</del>   |                |                                               |                                                                                                                | -23                                          | 3                                            | ÷             | 25       |               |                                       |          |             |                  | <u>.</u>    |          | <u>.</u> |          |                                       |                |                                              |                | ,                 |           |          | .4               | 264      | .4.        |          | +              |          |          |        | ,                                             |          |          | <u> </u>                               |                                              |               | <u>_</u>                |                                        | 123                                    |                                   | 26                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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                                                                                                        | <u> </u>   | 113        | 3        | <u> </u> | 1.3.            | 2                     | <u> </u>   | 113              | <u> </u>             |           | <u></u>     | <u></u>      |          |                                         | <u>.</u>          | 26.4          | 4                |
|          |                                              |          |          | . <u>.</u> ]                                     | -{ <u>-</u> |           | ······                                 |                |                |                                               | 5 0                                                                                                            | . <u>.</u>                                   |                                              |               |          |               |                                       |          | . <u>.</u>  | . <b>ļ</b> ļ     |             |          |          |          | :                                     |                |                                              |                |                   |           |          |                  | ····-    |            |          |                |          |          |        |                                               |          |          |   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                                                                                                      |            | , <b>*</b> |          |          | <u>i</u>        |                       |            | ÷)               | ļ <u></u>            | <u>i</u>  | <u></u>     |              |          |                                         | ÷                 | ÷             |                  |
| <u>i</u> | <u> </u>                                     |          |          | <u>;</u> ;                                       |             |           | <u>,</u> ,                             |                | <u> </u>       | 38                                            | <b></b>                                                                                                        | <u> </u>                                     | ÷                                            |               | 860 00   | _000          |                                       | <u> </u> | <u>.</u>    | <b></b>          | <u> </u>    |          |          |          | <u> </u>                              |                | <u>+                                    </u> | ÷              | <u> </u>          |           |          | <u> </u>         | <u> </u> |            |          | <u> </u>       | <u> </u> |          |        |                                               | <u> </u> | <u> </u> | <u> </u>                               | !`                                           | 44            | <b>-</b>   <sup> </sup> | <u> </u>                               | <u>.</u>                               | <u></u>                           | 1 080-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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                                                                                                        | <u></u>    | <u> </u>   |          |          |                 | ;                     |            |                  |                      |           |             |              |          | 1                                       | <u>: :</u><br>: : | <u>.</u><br>; | -                |
|          |                                              | <u> </u> |          | . <u>.</u>                                       |             |           |                                        |                |                | <u>.</u> ]                                    |                                                                                                                | . <b>.</b>                                   | ÷                                            | <u>í</u>      |          |               |                                       |          | . <u></u> ] |                  |             |          |          |          |                                       |                |                                              | ļ              | , <b>ļ</b>        |           |          |                  |          |            |          |                |          |          |        |                                               | ····     |          |                                        |                                              | - <u>į</u> ]  | ·{}                     | ······································ |                                        |                                   | ÷                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |          |          |                 | <u></u>               |            |                  | <u> </u> ‡-          |           |             |              |          |                                         |                   |               |                  |
| ļļ       | ÷;;                                          |          |          | . <u>.</u>                                       | <u> </u>    |           |                                        | <u>i</u> i     |                | <u> </u>                                      | <b>.</b>                                                                                                       | . <b>.</b>                                   | <del>.</del>                                 |               |          |               |                                       |          |             |                  |             |          |          |          |                                       |                | ·                                            | ·····          |                   |           |          | <b>.</b>         | ·        |            |          | ·              |          |          |        |                                               |          |          |   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| ļ        | ÷;                                           |          | <u> </u> | R <sub>P</sub>                                   | R. R/.      | ,         | ····•                                  |                |                | . <u>.</u>                                    | . <b> </b>                                                                                                     | <u> </u>                                     |                                              |               |          |               |                                       |          |             |                  |             |          |          |          |                                       |                |                                              |                |                   |           |          | ·                |          |            |          |                |          |          |        |                                               |          |          |                                        |                                              |               | ·[;                     |                                        | ·;                                     | ! 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| 266      | ÷                                            |          |          | <u>.</u>                                         |             |           |                                        |                |                | . <u>.</u>                                    |                                                                                                                |                                              |                                              |               | 393      |               |                                       |          | l           | . <b>.</b>       | ·····       |          |          |          |                                       |                | ·!···· ·                                     | ·····          |                   |           | 266      | ·6               | 266      | .6         |          |                |          |          |        |                                               |          |          |                                        |                                              | ·}            | . <b> </b> <sup>;</sup> |                                        |                                        |                                   | E I O                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| <u> </u> | <u>+</u> ,                                   |          |          |                                                  |             | +         |                                        | <u> </u>       |                | <u>+_</u>                                     | +                                                                                                              | 113                                          |                                              |               | 264      |               |                                       |          | 13          | - <del>  -</del> |             |          | <u> </u> |          | <u> </u>                              |                | <u>:</u> ]]                                  |                | <u> </u>          |           | <u> </u> | +                | <u> </u> |            | <u> </u> |                |          |          |        |                                               |          |          | <u></u> ;                              | <u> </u>                                     | $\frac{1}{1}$ | +                       | <u>.</u> ,                             | <u> </u>                               | $\xrightarrow{:}$                 | 264.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <u>.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            | -          |          | +        |                 |                       | -          | 26 <u>4</u>      | +                    | 1:3       | <u></u> -   |              |          | +++++++++++++++++++++++++++++++++++++++ | <u>:</u><br>; 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| 26.4     | ÷;                                           |          |          |                                                  |             |           |                                        | <del>.</del> ; |                |                                               |                                                                                                                |                                              |                                              |               | <u> </u> | <u> </u>      | <u> </u>                              |          |             | · [;             |             |          | -        |          |                                       |                |                                              | <u>.</u>       |                   |           | 264      | 4 <b></b> .      |          | A.         |          |                |          |          |        |                                               |          |          | - <del> </del> ;                       |                                              |               | .+'                     |                                        | 1.3                                    |                                   | <u> </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <u> </u>   |            | 3        | +        |                 | <u> </u>              | 113<br>E   |                  |                      | 113       | <u>/ 1</u>  |              | +        |                                         | <del></del>       | 26.4          | 4                |
| <u>i</u> | ÷                                            |          |          | <u></u> ]                                        |             |           |                                        |                |                |                                               |                                                                                                                | <u>+</u>                                     | 4 <del> </del> -                             |               | ,        |               |                                       |          | <u></u> ]   |                  | ·           |          |          |          |                                       | )              | ·                                            |                | ,                 |           |          | ·                |          |            |          |                |          |          |        | ,                                             |          |          | ;                                      |                                              | 25<br>44      |                         | '                                      |                                        |                                   | ÷                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |            |          |          | <del>-</del>    | <u>i</u>              |            |                  | -<br>                |           | <u>i</u>    |              |          |                                         | ֠                 | <br>1         |                  |
|          | ······································       |          |          | ÷                                                |             |           |                                        | <b>-</b> ;     |                | 36                                            |                                                                                                                | <u>+</u>                                     |                                              | 1 <u>+</u> 8/ | 840.00   | .000.         |                                       |          | . <u>.</u>  |                  | ·           |          |          |          |                                       |                |                                              |                |                   |           |          | ·                |          |            |          |                |          |          |        |                                               |          | ;        |                                        |                                              |               | . <b> </b> ;            |                                        |                                        | ŧ                                 | <u>+96</u> ¢.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | d.000.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |            |          |          |                 |                       |            |                  | <u></u><br> †        | <u></u>   |             |              |          |                                         | <u>.</u>          | ÷             | •                |
|          | ÷'                                           |          | <u>-</u> | ÷                                                |             |           |                                        |                |                | . <u>.</u>                                    |                                                                                                                | <u>+</u>                                     |                                              |               |          |               |                                       |          | J           |                  |             |          |          |          |                                       |                |                                              |                |                   |           |          | - <u>-</u>       | r        |            |          |                |          |          |        |                                               |          |          | ;                                      |                                              | <u>.</u>      | -{ <sup>i</sup>         |                                        |                                        |                                   | <u></u> }                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | t T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |            | ·        | ····-    | <u></u>         |                       | <u> </u>   | ÷)               | <u>}</u>             | i.        | <u>1</u>    | <u>-</u>     |          |                                         | <u>i</u>          |               |                  |
| <u> </u> | ÷                                            |          |          | <del>;                                    </del> |             |           |                                        | <u> </u>       | <u>;</u>       | <u>.:</u> ]                                   | +                                                                                                              | +                                            | <u></u>                                      | <u> </u>      |          |               |                                       | ;        | :           | <b>↓</b> ∔       | <del></del> |          |          |          | '                                     | <del>: :</del> | $\frac{1}{1}$                                |                |                   |           |          | +                |          | <u></u>    | <u> </u> |                |          |          |        |                                               |          | ;        | <u> </u>                               | <u>;</u> ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;; | $\frac{1}{1}$ | +                       |                                        |                                        | $\frac{\cdot \cdot \cdot}{\cdot}$ | $\rightarrow$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | +          | ; <u> </u> |          |          | :               |                       | <u>:</u>   |                  | ÷                    |           |             |              | +        |                                         | <del>: - :</del>  | <u>.</u>      | -                |
|          | ÷;;                                          |          |          | ÷                                                | R.A. A/W    | AT        |                                        |                |                | l                                             | . <b>.</b>                                                                                                     | ÷                                            |                                              |               |          |               |                                       |          | l           | ļ                |             |          |          |          |                                       |                |                                              |                |                   |           |          | ······           |          |            |          |                |          |          |        |                                               |          |          |                                        |                                              | . <b>.</b>    | ·[i                     | ·'                                     |                                        | · <u></u>                         | in the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second 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     |          | <u><u>i</u></u> |                       | <u>i</u>   |                  | <u>:</u>             | 0         | <u>+</u>    | <del>-</del> |          | . <u> </u>                              | <u>†</u> ‡        |               | -                |
| 266      | ÷                                            |          |          | ÷                                                |             |           | ······································ | <u>i</u> i     | <u></u>        | <u>.</u>                                      | . <b>}</b>                                                                                                     | ÷                                            | <u></u>                                      |               | 1 433    |               |                                       |          | . <u></u> ] | . <b> </b>       | <u> </u>    |          | A        | R.F. 874 | - <del>1</del>                        |                | ·                                            | ;              |                   |           |          | <b>46</b> ].     | 266      | ,6.        |          |                |          |          |        |                                               |          |          | ;                                      |                                              | . <b>.</b> l  | ·;                      |                                        |                                        |                                   | 160-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |            |          |          | ·····           | <b>.</b>              | <u></u>    |                  | <u>1</u> 2           | <u>}.</u> | <u>i</u>    | <u>-</u>     |          |                                         |                   | . 266         | 1                |
|          | ÷i                                           |          |          | ÷                                                |             |           | <u> </u>                               |                |                | l                                             | Ì                                                                                                              | +                                            | 1:3                                          |               | 264      |               |                                       |          | 3           |                  | ······      |          |          |          |                                       |                |                                              |                | · · · · ·         |           |          | ······           |          |            |          |                |          |          |        |                                               |          |          | ;                                      |                                              | . <b>.</b> ļ  | ·                       |                                        | L13                                    | I                                 | 264                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Z D G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |            |          | ····-    | <u>-</u>        |                       | <u>i</u>   | 1.               | 1986                 | CI-92     | ľ.          | <b>`</b>     |          |                                         | ÷                 |               |                  |
| 264      | ······                                       |          |          | i                                                |             |           |                                        |                | . <del>.</del> |                                               |                                                                                                                |                                              |                                              | <u> </u>      | <u> </u> |               | <u> </u>                              | ÷        | <u></u>     | · [              |             |          |          |          | <u></u>                               |                | +                                            | ·              | <u> </u>          |           |          | 4                |          | 4          |          | <del> </del> . |          |          |        |                                               | ,`       |          |                                        | <u> </u>                                     | 20            | 10                      | **********                             |                                        |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                      | <u> </u>   | <u> </u>   | 3        |          | <u></u>         |                       |            |                  | E                    | <u> </u>  | <del></del> | <u>}</u>     |          | <del>†</del> ;                          | 1                 |               | 4                |
|          |                                              | +        |          | +                                                |             |           | '                                      | <u> </u>       |                | 13                                            | 3 3                                                                                                            | $\frac{1}{1}$                                |                                              |               |          |               |                                       | <u> </u> | <u>:</u>    | <b>↓∔</b>        | <del></del> | <u> </u> |          |          |                                       |                | $\frac{1}{1}$                                |                | <u> </u>          |           |          | +                |          | <u> </u>   | <u> </u> |                |          |          |        | _                                             | +        | <u> </u> | <u> </u>                               |                                              | 20            |                         |                                        | <u> </u>                               |                                   | ++                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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                                                                                                        |            | ÷          |          |          |                 |                       | ;          | <u> </u>         | ┝─┼                  |           |             |              |          |                                         |                   | <u>.</u>      | -                |
|          | ·                                            |          |          | ÷                                                |             |           |                                        |                | 1 1            | 27                                            |                                                                                                                | <u></u>                                      |                                              | ۴۵-           | 820.00   | .000          |                                       |          | l           | <b>.</b>         | ·           |          |          |          |                                       |                |                                              |                |                   |           |          | ·                |          |            |          |                |          |          |        |                                               |          |          | ······································ |                                              |               | ·;                      |                                        |                                        |                                   | 949                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | .d.oop.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | , <b>.</b> |            |          | ·        | <u> </u>        |                       | <u>i</u>   |                  |                      |           |             | <u>:</u>     | ·        |                                         | <u>.</u>          | 4<br>T        | ·                |
|          | ÷;                                           |          |          |                                                  |             |           |                                        |                |                | 21                                            | . <b>.</b>                                                                                                     |                                              |                                              | ,             |          |               |                                       |          | . <u>.</u>  |                  |             |          |          |          |                                       |                |                                              | <u>.</u>       |                   |           |          |                  | ·        |            | ;        | ·}             |          |          |        |                                               |          |          |                                        |                                              | )             | - <b> </b> <sup>‡</sup> |                                        | ······································ |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            | $\sim$     |          | ····-    |                 |                       |            |                  | <b>}</b> †           | <u>-</u>  | <u>†</u>    |              |          |                                         | :;<br>:           | <u>.</u>      |                  |
|          |                                              |          |          | . <u>.</u>                                       |             |           |                                        |                |                | .įJ                                           |                                                                                                                |                                              | ÷                                            | ·····         |          |               |                                       |          |             |                  |             |          |          |          |                                       |                | ·                                            | ·····          |                   |           |          |                  |          |            |          |                |          |          |        |                                               |          |          |                                        |                                              | J             |                         |                                        | ······································ |                                   | <b>; , , , , , , , , , , , , , , , , , , ,</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <u> </u>   | <u> </u>   | <u>.</u> |          |                 | ··· <del>†</del> ···· |            | - <u>-</u> !     | <u> </u>             |           | <u>-</u>    |              |          |                                         |                   |               | -)               |
|          |                                              |          |          |                                                  |             |           | ······································ |                |                | . <u>[]</u>                                   |                                                                                                                |                                              | ļ.                                           |               |          |               |                                       |          | l           |                  |             |          |          |          |                                       |                |                                              |                |                   |           |          |                  |          |            |          |                |          |          |        |                                               |          |          | ·······;                               |                                              |               | ;                       |                                        |                                        |                                   | <u>+</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | {·····                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |            |          |          | ····‡···        |                       |            |                  | +                    | 1         | <u></u>     |              |          |                                         | ÷?                | :             | )                |
| ļ        | ÷'                                           | ·        |          | <del>;</del>                                     |             |           | <u> </u>                               | <u> </u>       |                | <u>:</u> )                                    | <u> </u>                                                                                                       | <u>;                                    </u> | <u> </u>                                     | <u> </u>      |          |               |                                       |          | ÷           | - <b> </b>       | ÷           |          |          |          | <u> </u>                              |                | +                                            | <del>.  </del> |                   |           |          | <u>+</u> -+      |          | <u> </u>   | <u> </u> | $\leftarrow$   |          | <u> </u> |        |                                               |          | '        |                                        | <u> </u>                                     |               | - <b> </b> <sup>;</sup> |                                        | <u> </u>                               | <u> </u>                          | +                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <u>+</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |            | <u> </u> |          |                 |                       |            |                  | ┼╌┊                  |           | <u>:</u>    | <u> </u>     |          |                                         | <del>:</del>      | :             | 4                |
|          | ,;                                           |          |          |                                                  |             | <u>1D</u> | ····                                   | ;              |                | Ļ]                                            |                                                                                                                | . <u>.</u>                                   | <i></i>                                      |               | <u> </u> |               |                                       |          | <u> </u>    |                  |             |          |          | 1þ       |                                       |                |                                              | ,              |                   |           |          | - <b>[]</b> -    |          |            |          |                |          |          |        | <u> </u>                                      | 10       | <u> </u> | <u> </u>                               | <u> </u>                                     |               | <u></u> ;               |                                        |                                        | i                                 | <u>;                                    </u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <u></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <u> </u>   | <u> </u>   |          | <u> </u> | <u> </u>        | _ <u></u>             |            | <u>     </u><br> | <u>b</u> .           | <u></u>   | <u> </u>    | <u>;</u>     | <br>     |                                         |                   |               | 1                |
|          |                                              |          |          |                                                  |             |           |                                        |                |                | <u>,                                     </u> |                                                                                                                | ļ                                            |                                              | ,ļ            |          |               |                                       |          | J.          | . <b>.</b>       |             |          |          |          |                                       |                |                                              | ,              | <b>.</b>          | •••••     | ·····    |                  | ł        |            |          |                | <i></i>  |          | 5      | Stə'                                          | ut⊖      | Pro      | oj. M                                  | . No.                                        | . 14          | +1-1                    | -091                                   | <u>л-</u> с                            | J5                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | _          |            |          |          |                 | 5                     | She        | et r             | 10.                  | 5u        | 10          | /f = c       | 57 c     | Sne                                     | eets              | <u>د</u>      |                  |
|          |                                              | ·        |          |                                                  |             |           |                                        | ·              | المحسنية.      | المست                                         | the second second second second second second second second second second second second second second second s |                                              |                                              | <u> </u>      |          |               |                                       | <u> </u> | السبيني     | - تسبيه المشار   | -           |          |          |          |                                       | <u> </u>       |                                              |                |                   |           |          |                  |          | <u> </u>   | -        |                |          |          |        |                                               |          |          |   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| 6           |       | 03     | RZW        |         |          | ļļ                                           |   |      |         | ļ        |          |          |            |          |          | ıþ.      |         |         |          |     |          | 266. |     | 66  | <br>        |           |        | 10        |            |          |                          |               |      | ę                        |                           |           |          |          |            | ·····                                 | tþ.          |             |          |              |                                        |
|-------------|-------|--------|------------|---------|----------|----------------------------------------------|---|------|---------|----------|----------|----------|------------|----------|----------|----------|---------|---------|----------|-----|----------|------|-----|-----|-------------|-----------|--------|-----------|------------|----------|--------------------------|---------------|------|--------------------------|---------------------------|-----------|----------|----------|------------|---------------------------------------|--------------|-------------|----------|--------------|----------------------------------------|
|             |       |        |            |         |          | ļ                                            |   |      | 5       | <u>д</u> |          | ļļ.      |            | 5        |          |          | 22      |         |          |     |          |      |     | ļ   | <br>        |           |        |           | ļ          |          |                          |               |      | 671                      | • • • • • • • • • • • • • | 8.8 R/    | w        | 151      |            |                                       | <u></u>      |             |          |              |                                        |
| 4           |       |        |            |         | <u></u>  | <u>.                                    </u> |   |      | 263     | g        | 3        |          | .3         | 92       |          | rs       | 263     |         |          |     |          |      |     | 64  | <br>        |           |        |           | ļ          |          |                          |               |      | <u>c</u>                 |                           |           |          | m        |            |                                       | 263-1        |             |          |              |                                        |
|             |       |        |            |         |          | 36 - 6                                       | 0 |      |         | ÷        | <u>+</u> |          |            |          |          |          |         | 7-'     |          |     | <u> </u> |      |     |     |             |           |        |           |            | <u> </u> |                          | 113           |      | 4                        | 1                         | 31        | 13       | Ň        | 1:         | 113                                   | <u> </u>     | 113         |          |              |                                        |
|             |       |        |            |         |          | 51                                           |   |      | 1       | 0.000.   | 1        |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          | 38 0                     | )             |      |                          |                           |           |          |          | <u> </u>   |                                       |              |             |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          | 51                       |               |      | 280.                     | 000                       |           |          |          |            |                                       |              |             |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          | {          |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          |                          |               |      |                          |                           |           |          |          |            |                                       |              | Ì           |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          |                          |               |      |                          |                           |           |          |          |            |                                       |              |             |          |              |                                        |
|             |       | _8.R.  | 0,0        | Î       |          |                                              |   |      |         |          |          |          |            |          |          |          |         |         |          |     |          | 266  | 2   | 66  |             |           |        |           |            | ĺ        |                          |               |      |                          |                           |           |          |          |            |                                       |              |             |          |              | 21                                     |
|             |       |        |            |         |          |                                              |   |      | 593     |          |          |          | 19         |          |          | 547      | 5       |         |          |     |          |      |     |     |             |           |        |           |            |          |                          | 1             |      | y y                      |                           | R. 874    |          | 5        |            | 8                                     |              |             |          |              |                                        |
|             |       |        |            | •••••   |          | 1                                            |   |      | 53      | 2        |          |          | E C        | <u> </u> |          | ľ        | 2       |         |          |     |          | 264  |     | 64  |             |           |        |           |            |          |                          |               |      |                          |                           |           |          | <u>Ľ</u> |            |                                       |              |             |          |              |                                        |
|             |       |        |            |         | <u> </u> | 34 -1                                        | 1 | 113  |         | ý        |          |          |            |          | 1.3.1.1. | 310      |         | <u></u> |          |     |          |      |     | 0.4 | -           |           |        |           |            |          |                          | 13            |      | 26                       | 1                         | j.        | 3        | Ň        | l ily      | 3 8                                   | 11           | 13          | 1        |              | 2                                      |
|             |       |        |            |         |          | 50                                           |   |      |         | İ.       | <b></b>  | 1        |            |          |          | <u> </u> |         |         |          |     |          |      |     |     |             |           |        |           |            |          | 47 0                     |               | E    |                          |                           |           | Ę        |          | 3          | Ē                                     |              | · · · · · · |          |              |                                        |
|             |       | ····•  |            |         |          |                                              |   |      | 2+.140  | 0.000    |          |          |            |          |          |          |         |         |          |     |          |      | ••• |     |             |           |        |           | ·          |          | 51                       |               |      |                          |                           |           |          | †        |            |                                       | -            |             |          |              |                                        |
| + + +       |       |        |            |         |          |                                              |   |      |         | +        | <u> </u> |          |            |          |          | +        | _       |         |          |     | <u> </u> |      |     |     |             |           |        |           |            |          |                          |               | 2    | 26b                      | 000                       |           |          |          |            |                                       |              |             |          | +            |                                        |
|             |       |        | ••••       |         |          | ····-                                        |   |      |         |          |          |          |            |          |          |          |         |         |          |     |          |      |     |     | <br>        |           |        |           |            |          | ·····                    |               |      |                          |                           |           |          | <u>+</u> |            |                                       |              |             | ·····    |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          | ·        |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          |                          |               |      |                          |                           | <u></u>   |          | <u> </u> |            |                                       |              |             |          | -            |                                        |
| \$          |       | R.R. A | к <i>м</i> |         |          | ····                                         |   |      | 1       | g        |          |          | 0          |          |          |          |         |         |          |     |          | 266  | 2   | 66  | <br>        |           |        |           |            |          | ·                        |               | ···· | ŋ                        | R                         | A, A/W    |          | 6        |            |                                       |              | ·····       |          |              |                                        |
|             |       |        |            |         |          | <u>+</u>                                     |   |      | ie<br>M | 4        |          |          |            |          |          |          |         |         |          |     |          |      |     |     | <br>        |           |        |           |            |          |                          |               |      | - ă                      | P4                        |           |          | គ្ន      |            | 0<br>Li                               | 3            |             |          |              |                                        |
| 4           |       |        | <u> </u>   |         |          | 28                                           |   | 413  | 96      | 1        | -1532    | 5        | 56         | 1.       | 3/       | 43       | .263    | 1,      | <u>}</u> | _   | <u> </u> | 264  | 2   | 64  |             |           |        | 4         |            |          |                          | 117           |      | 263                      |                           | 3 1.      |          |          |            | , , , , , , , , , , , , , , , , , , , |              | 112         |          | +            | 2(                                     |
|             | ····· |        |            |         |          | 48                                           |   |      | ;       | +        | 1        |          |            |          |          |          |         | 7       |          |     |          |      | ••• |     | <br>        |           |        |           |            |          |                          |               | Ē    |                          |                           |           | <u>.</u> |          | ⊒          | 1                                     | मेज ह        |             |          |              |                                        |
|             |       |        |            |         |          | 40                                           |   |      | .21.120 | 0.000.   |          |          |            |          |          |          |         |         |          |     |          |      |     |     | <br>        |           |        |           | ļļ         |          | 58 C<br>51               | )             |      |                          |                           |           |          | ļ        |            |                                       |              |             |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          | ļļ.      |            |          |          |          |         |         |          |     |          |      |     | ļļ  | <br>        |           |        |           | N          | 1015     | 51                       |               |      | -240.                    | 000                       | <br>      |          | ļ        |            |                                       |              |             |          |              |                                        |
|             |       |        |            | ļļ      |          | <u>i</u>                                     |   |      |         |          |          | ļļ.      |            | ļļ       |          |          |         |         |          |     |          |      |     |     | <br>        |           |        |           | E 2        | XTEN(    | ) SHOU<br>TYP.)-1<br>NLY | ilder<br>Fhis |      |                          |                           | ļļ        |          | ļļ.      |            | ·····                                 |              |             |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      | _       |          |          |          |            |          |          |          |         |         |          |     |          |      | 4   |     |             |           |        | 1_        | S          |          | NLY                      |               |      |                          |                           |           |          |          |            |                                       |              |             | <u> </u> |              |                                        |
| 6           |       |        |            |         |          | ļ                                            |   |      |         | 4        |          | ļļ.      |            | ø        |          |          |         |         |          |     |          | 266  |     | 66  | <br>        |           | R. BZY |           | ļ          |          |                          |               |      |                          |                           | ļļ        |          | ļ        |            |                                       |              |             |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      | 52      | ]        |          |          |            | 6        |          |          | 13      |         |          |     |          |      |     |     |             |           |        |           |            |          |                          |               |      | <u> </u>                 |                           | ļ         |          | <u>F</u> |            | المتشمينية                            | 237          |             | .ļļ      |              |                                        |
| <u></u>     |       |        |            |         |          |                                              |   |      | 263     | 9        |          | · .      | 13         | .26      | ,        | 3.1.     | 9<br>20 |         |          |     |          | 264  |     | 64  |             |           |        |           |            |          |                          |               |      |                          |                           | Į         |          | 5        | 1,9        |                                       | 3            |             |          |              |                                        |
|             |       |        |            |         |          | 21 3                                         | 3 |      |         |          | 3        |          | E          |          |          |          | Ē       |         | <u> </u> |     |          |      |     |     |             |           | Ĩ      | 1         | <u> </u>   |          |                          | 113           |      | <u>N</u>                 | <u> </u>                  | 15 /1     | 3        | <u>N</u> | - <u></u>  | <u>-3</u>                             |              | <u>13:</u>  | <u> </u> |              |                                        |
|             |       |        |            |         |          | 49                                           |   |      | 2+100   | 0.000    | ,        |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          | 58 0                     | )             |      |                          |                           |           |          |          |            |                                       |              |             |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          | -          |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          | 51                       |               | 2    | 220.                     | 000                       |           |          |          |            |                                       |              | <u>.</u>    |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         | 1        |          |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          |                          |               |      |                          |                           |           |          |          |            |                                       |              |             |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          |                          |               |      |                          | Ì                         |           |          |          |            |                                       |              |             |          |              |                                        |
| <u>a 11</u> | T     |        |            |         |          |                                              |   |      |         | 1        |          |          |            | ø        |          |          |         |         |          |     |          | 266  | 2   | 66  |             | 7.A 8/    | v.     |           |            |          |                          |               |      |                          |                           |           |          | T        |            |                                       |              | i           | Ĩ        | _            | 2                                      |
| 6           |       |        |            | Ì       |          |                                              |   |      | 808     | 2<br>2   |          | ΪŤ       |            | 6        |          |          | 770     | 1       |          |     |          |      |     | 00  |             |           |        |           |            |          |                          |               |      | ۲ <u>۶</u>               |                           |           | 431      |          |            | 418                                   |              |             |          | 1            |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          |            | 6        |          | -        | 63.     |         |          |     |          |      | +   | 6.4 |             |           |        | +-        |            |          |                          |               |      | M                        |                           |           |          |          |            | <u>7</u>                              |              |             |          |              | 20                                     |
|             |       |        |            | <u></u> |          | 19                                           | 1 | .,.3 | 26      | ¥        |          |          | 1.3        | 56       |          | <u></u>  | Ņ       |         | <u>3</u> |     | <u></u>  |      |     | 6.4 |             |           |        |           | <u></u>    |          |                          | 113           |      | Q                        | <u> </u>                  | 3:3       | 263      |          | 151.3      |                                       |              | <u></u>     | <u>.</u> |              | 2                                      |
|             |       |        |            |         |          | 47                                           |   |      |         | 1        | <b>1</b> | <u> </u> |            |          |          |          |         | Th      |          | -   |          |      |     |     |             |           |        |           |            |          | 57 0                     | )             |      | -                        |                           |           | 1        |          |            |                                       | <b></b>      | ·····       | 1        |              |                                        |
|             |       |        |            |         |          |                                              |   |      | .2-08   | 30.000   | <i></i>  | +        |            |          |          |          |         |         | ····     |     |          |      |     |     |             | <i></i> - |        |           |            |          | 51                       |               |      |                          |                           |           |          | ļ        |            |                                       | -            |             | <u>.</u> |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          |            |          |          |          |         |         |          |     |          |      |     |     | <br>        |           |        |           |            |          |                          |               |      | +200.                    | 000                       |           | ·        | <u> </u> | <u>i</u> i | · · ·                                 |              | <u>-</u>    | <u>.</u> | , . <b>.</b> |                                        |
|             |       |        |            |         |          |                                              | _ |      | _       | <u> </u> |          |          |            |          |          |          |         | +       |          |     | <u> </u> |      |     |     |             | - <u></u> |        |           | <u>   </u> |          |                          |               |      | $\left\{ \cdot \right\}$ |                           | <u> </u>  |          |          |            |                                       | +            |             |          | +            |                                        |
|             |       |        | <u>;</u>   |         |          | <u>.</u>                                     |   |      |         |          |          |          |            |          |          |          |         |         |          |     |          |      |     |     | <br>        |           |        |           |            |          |                          |               |      |                          |                           | <u>.</u>  |          |          |            |                                       |              |             |          |              |                                        |
| 6           |       |        |            |         |          | ļļ                                           |   |      |         | d        |          |          | <u>م ا</u> |          |          |          |         |         |          |     |          |      | 2   | 66  | <br>        |           | к/н    |           |            |          |                          |               |      |                          |                           |           |          |          |            |                                       |              |             | .÷       |              |                                        |
|             |       |        |            |         |          | ļļ                                           |   |      | 2       | ]        |          |          | 00<br>M    | ļ        |          |          |         | ļļ      |          |     |          |      |     |     | <br>        |           |        |           |            |          |                          |               |      | 433                      |                           | <u>.</u>  |          | 5        |            | ·····.                                | 20           | <u>.</u>    |          |              |                                        |
| 4           |       |        |            |         |          |                                              |   |      | 263     | 9        |          | 13.41    | 3 0        | 1        |          |          |         |         |          |     |          |      |     | 64  |             | <br>      |        |           |            |          |                          | 213           |      | 263                      |                           | · · · / · |          | 263      |            | trs                                   | - 92<br>- 79 |             | <u> </u> |              |                                        |
|             |       |        |            |         |          | 28 0                                         | • |      |         |          |          |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           | 1 1        |          |                          |               |      |                          |                           | 2         | <u> </u> |          | <u> </u>   | SE                                    |              | <u> </u>    | ÷        | <u></u>      | ······································ |
|             |       |        |            |         |          | 44                                           |   |      | 2.06    | 50.000   | 1        |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          | 47 0                     | )             |      |                          |                           |           |          |          |            | <u></u>                               |              |             |          |              | •<br>•• •• ••                          |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          | 51                       |               |      | +180.                    | 000                       |           |          |          |            |                                       |              | 1           |          |              | :                                      |
|             | ····· |        |            |         | 1        |                                              |   |      |         | 1        |          |          |            |          |          |          |         |         |          |     |          |      |     |     |             |           |        | 1         |            |          |                          |               |      |                          |                           |           |          |          |            | ;                                     |              |             |          | :            |                                        |
| ÷           |       |        |            |         |          |                                              |   |      |         | 1        |          |          | ·····      |          |          |          |         |         |          |     |          |      |     |     |             |           |        |           |            |          |                          |               |      |                          | l                         |           |          |          |            |                                       |              |             |          |              |                                        |
| 1 1 1       | ····· |        |            |         |          | <u>.</u>                                     |   |      |         | +        |          | ·        |            |          |          | •••••    |         |         |          |     |          |      |     |     |             |           |        | ··· ····· |            |          |                          |               |      |                          |                           | T T       |          | † – †    |            | Î                                     |              |             |          |              | 1                                      |
|             |       |        |            |         |          |                                              |   |      |         |          |          |          |            |          |          |          | •       | · ·     | •        | 1 4 |          |      |     | . i | <br>- 1 · · |           |        |           |            |          |                          |               |      |                          |                           |           |          |          |            |                                       |              |             |          |              |                                        |
|             |       |        |            |         |          |                                              |   |      |         | +        | <u> </u> |          |            |          |          |          |         |         | l        |     |          |      |     |     |             |           |        | -         |            |          |                          |               |      |                          |                           |           |          |          |            |                                       |              |             |          |              |                                        |

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| Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-     Non-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2400.000.     2400.000.       266     2068       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10       10     10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

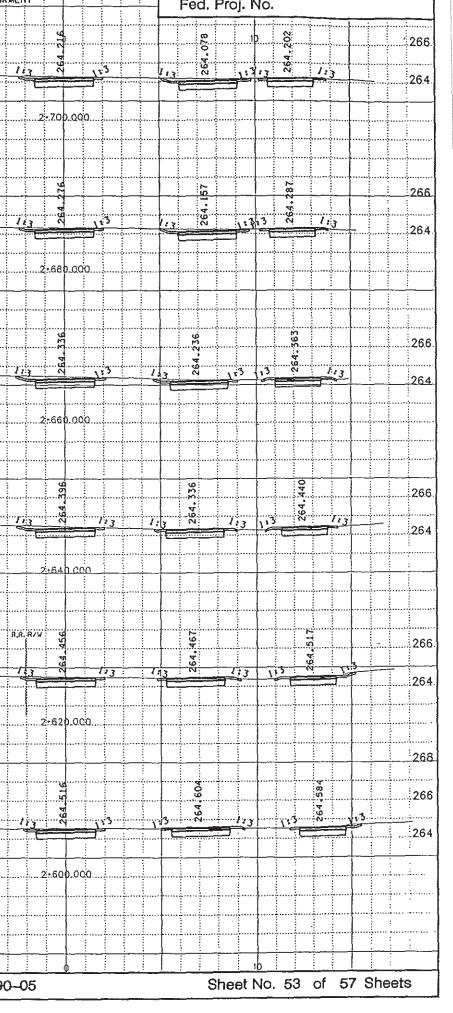
DESIGN FILE: h:\c!v!!\008\2589\metric\xssbr21.dgn PRF F1L5: h:\c!v!!\008\2589\metric\xssbr21.brf PLOTTER: MS-HP4MV-MM00T SCALE: 200 PLOT DATE/TIME: 02/05/98 12:38:54

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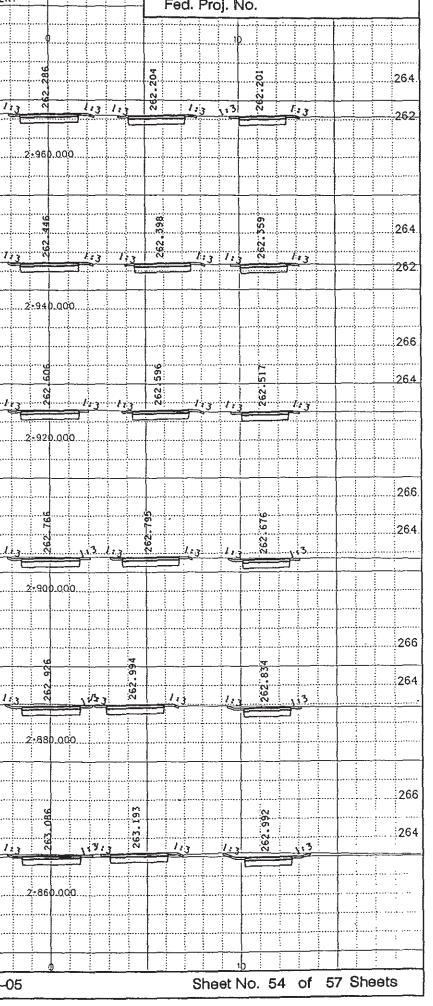
DESICN FILE: h:\civil\008\2589\metric\xss2lci.dgn PRF FILE: h:\civil\008\2589\metric\xss2fci.prf PLOTTER: WS-HH4WV-WNDOT SCALE: 200 PLOT DATE/TIME: 02/05/98 13:08:37

|          | F             | 1.R. 8/1                 | N                                     |             |                                               |         |                |         | SUBG | RADE     | E           |             |           |             |         |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     | 268  |      |     |         |                 |             |          |   | AVAI     |               |                |         | GRAD     | E              |          |         |                   |
|----------|---------------|--------------------------|---------------------------------------|-------------|-----------------------------------------------|---------|----------------|---------|------|----------|-------------|-------------|-----------|-------------|---------|---------|-----------|-------|-----|----------|----------|----------|----------|------------|-----------------------------------------|----------|-----------|----------|-----------|----------|-----------------|-----|------|------|-----|---------|-----------------|-------------|----------|---|----------|---------------|----------------|---------|----------|----------------|----------|---------|-------------------|
| 66       |               |                          |                                       |             |                                               | 10      | )              |         |      |          |             |             | 1         | 1           | 569     | 5       |           |       |     |          |          | 668      |          |            | 10                                      | ,        |           |          | 9         |          |                 |     | 266  | 26   | 6   | A       | 9 8 A           |             |          |   |          | 10            |                |         |          |                |          |         |                   |
| (U.:     |               |                          |                                       |             |                                               | Ī       |                |         |      |          |             |             |           |             | ******* |         |           |       |     |          |          | Š.       |          |            | ſ                                       |          |           | į        | 64        |          |                 |     | 2,00 |      |     |         |                 |             |          |   |          | 1             |                |         |          |                |          |         |                   |
| e A      |               |                          | ****                                  |             | <u></u>                                       | T       |                |         |      | <u></u>  | <u></u>     |             |           | <u> </u>    | ····•   |         | -1        | 3     |     | <u> </u> |          |          |          |            | 3                                       | <u></u>  |           | 3        | · ey      |          | 2               |     | 264  | 26   | A - |         |                 |             | <u> </u> |   |          |               |                |         |          | <u> </u>       |          |         | į,                |
| 26.4     |               |                          |                                       |             |                                               |         |                |         |      | 3        | 6 0         | )           | <br>]     |             |         |         |           |       |     | •••••    |          |          |          | -          | [.                                      |          |           |          |           | <b>T</b> |                 |     | 20+  | 1    |     |         | ΤŤ              |             |          |   |          | -             |                |         |          | 19             | 0        |         |                   |
|          |               | -'†-                     |                                       | Ì           |                                               |         |                |         |      | 5        | _           |             | <u> </u>  |             | 58      |         |           |       |     |          |          | -        |          |            | -+                                      | -        |           |          |           | +        | <u> </u>        | -   |      |      |     |         | ╉╂              |             |          |   | +        | +             |                |         |          | 51             | <u> </u> |         |                   |
|          |               |                          |                                       |             | ·                                             | ·····{· | ····           |         |      |          |             |             |           |             | ×-58    | 0.00    | 0         |       | ,   |          |          |          |          |            | ·····                                   |          | <br>      |          |           | ·· ····  |                 |     |      |      |     |         |                 |             |          |   |          |               | ·····          |         |          |                |          |         |                   |
| <u>-</u> |               |                          |                                       |             | ļ                                             |         |                |         |      |          |             |             | <u>.</u>  |             | ·····   |         | ļ         |       |     |          |          |          |          |            | ····-                                   |          |           |          |           |          |                 |     |      |      |     | ·       |                 |             | ····-    |   |          |               | ļ,             |         | ····     |                |          | ····    |                   |
| 268      |               |                          |                                       |             | ·····÷·                                       |         |                |         |      |          |             |             |           |             |         |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     | 268  |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          |               |                          | /w                                    |             | ļļ.                                           |         |                |         |      |          |             |             | ļ         |             |         |         |           |       |     | }        |          | ļ.       |          |            | ·····).                                 |          | ļ         |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
| 266      |               |                          |                                       |             |                                               |         |                | _       |      |          |             | <u>.</u>    | <u> </u>  | <u> </u>    | 57      |         |           |       |     |          | 653      |          |          |            |                                         |          |           |          | 604       | <u> </u> | ļ               |     | 266_ | 26   | 6   |         | R,R             | H/W         |          |   |          |               | <u> </u>       |         |          |                |          |         |                   |
| į        |               |                          | <u>.</u>                              |             |                                               |         |                | ļ       |      |          |             |             | <u>.</u>  |             | 64      |         |           |       |     |          |          |          |          |            |                                         |          |           |          | 264       |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
| 26.4     |               | T                        |                                       | -           |                                               |         |                |         |      |          | +-          |             |           | ÷E          |         |         | 3         | 3     | 7   | ć        |          |          | J.       | <u> </u>   |                                         |          |           |          |           |          | <u></u>         | † I | 264  |      | 4 - |         | -               |             |          |   |          |               |                |         |          | _              |          |         |                   |
|          |               |                          | Ì                                     |             |                                               |         |                |         |      | 2        | 1 2         | 2           | 1         |             |         |         |           |       |     | [        | į        |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          | 46             | 0        |         |                   |
|          |               |                          |                                       |             |                                               |         |                |         |      | 5        | o           |             |           |             | -56     |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      | Ì   |         |                 |             |          |   |          |               | (·····         |         |          | 51             |          |         | -                 |
|          |               |                          | ····                                  | i           | Ì                                             |         |                | ····;   |      | ···•     |             |             | <br>      | ·····2      | (1) D.  | 0.00    | D         |       |     |          | ·····    |          |          |            | ·····                                   | i.       |           |          |           |          |                 |     |      |      |     |         |                 | i<br>       |          |   |          | -             |                | i       | ·····    |                | i        |         | ŝ                 |
|          |               | -+-                      |                                       | -           |                                               | +       |                | -       |      |          | +           |             | <u> </u>  | . <u></u>   |         |         |           |       |     |          |          |          |          |            | -+                                      |          | - <u></u> |          |           |          |                 | -   |      |      |     |         | -+              | _           |          |   |          | +             |                |         |          |                |          |         |                   |
| 26.8     |               |                          |                                       |             |                                               |         |                |         |      |          |             |             |           |             |         |         |           | ••••• |     |          |          |          | ····-    |            | ····                                    |          |           |          |           | ·· ····  |                 |     | 268  |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         | ••••              |
| ·····    |               | R.R                      | 824-                                  | ļ           |                                               |         |                |         |      |          |             |             |           |             | 4       |         |           |       |     |          |          |          | e!.      |            |                                         |          |           |          | ·····     |          |                 |     |      |      |     |         | 'A',H. A        | 29          |          |   |          |               |                | •••••   |          | ····-          | ····     |         |                   |
| 266      |               |                          | ļ                                     | <u>.</u>    | ļļ.                                           |         |                |         |      |          |             |             | ļ         |             | 5       |         |           |       |     |          |          | Ğ        | ě.       |            |                                         |          |           |          | ъ<br>Т    |          |                 |     | 266  | 26   | 6   |         |                 |             |          |   |          |               | <u> </u>       |         |          |                |          |         |                   |
|          |               | ļ.                       | <u> </u>                              | ļ           | ļ                                             |         |                |         |      |          |             |             |           |             | 264     |         | ļ         |       |     |          | <u>.</u> |          | Ş        |            |                                         | ç        |           |          | 254       |          |                 |     |      | ]    |     |         |                 |             |          |   |          |               | ļ              |         |          |                |          |         | $r^{\dagger}_{r}$ |
| 264      |               |                          |                                       | <u> </u>    |                                               |         |                | ÷       |      |          | 1           | <u> </u>    | <u> </u>  | E           |         |         |           | -     |     |          | Ē        | <u> </u> |          |            |                                         | <u> </u> |           | -        | Ċ         |          | <u> </u>        |     | 264  | 26   | 4   |         |                 | <u> </u>    |          |   |          | +             |                |         |          |                |          |         |                   |
|          |               |                          |                                       |             | <u> </u>                                      | 1       |                |         |      | 17       | 7 2         | 2           | <u> </u>  |             |         |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          | 40             | 0        |         |                   |
|          |               |                          | 1                                     |             |                                               |         |                |         |      | 5        | 0           |             |           | ,           | •.5.4   | 0.00    | 0         |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         | 1               |             | Ī        |   |          |               | -              |         |          | 51             |          |         |                   |
|          |               | Ī                        | Ī                                     |             |                                               | Ī       |                |         |      |          | T           |             |           |             |         |         |           |       |     | 1        |          |          |          |            | ľ                                       |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          | <del>.</del>  |                          | 1                                     | 1           | 1                                             | 1       |                | Ì       | 1    | Ì        |             |             |           |             |         |         |           |       |     |          |          | 1        |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          | ···÷-··-÷     |                          | i i i i i i i i i i i i i i i i i i i | 1           | i i i                                         |         | <u>.</u>       | T.      |      |          |             | 1           | ÷         | +           |         |         |           |       |     | ••••••   | ···· [   |          |          |            | •••••                                   |          |           |          | ••••      | ·        |                 |     |      |      |     |         |                 |             |          |   |          |               | 1              |         |          | ···· ]         |          |         |                   |
|          | $\frac{1}{1}$ |                          | <del>R.R<mark>.</mark> R7</del>       | -           |                                               | +       |                |         |      |          | +           |             | <u>.</u>  |             | 186     |         |           |       |     |          | 1        |          |          |            | 555                                     |          |           | e<br>V   |           | +        | <u> </u>        |     |      |      |     |         | R. R            | <u>w :</u>  |          |   | <br>i    | +             |                |         |          | -†             |          |         |                   |
| 266      |               |                          |                                       |             | ····                                          |         | <u>.</u>       |         |      |          |             |             | <u>.</u>  | · · · · · · | 4       |         |           |       |     |          |          |          |          |            | 5                                       |          |           | עי<br>די | ·····     |          |                 |     | 266  |      | 6   |         |                 |             |          |   |          |               |                |         |          | {              | ••••     | ····    | ••••              |
|          |               |                          | <u> </u>                              | <u>.</u>    | <u> </u>                                      |         |                | <u></u> |      |          |             |             |           | 3           | 26      |         | 7         |       |     |          |          | ····     | 3        |            | 9                                       |          | 133       |          | <u>}.</u> | ··       |                 |     |      |      |     | <u></u> |                 |             |          |   | <u></u>  | <u></u>       | ·····          | ļ       |          |                |          | <u></u> | $\vec{r}$         |
| 26.4     |               |                          |                                       |             | <u></u>                                       |         |                |         |      |          | <del></del> |             |           | E           |         |         |           |       |     |          |          | ÷        |          |            |                                         |          |           | ÷        |           | π        |                 |     | 264  | 26   | 4   |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          |               |                          |                                       | ļ           | Ļ                                             |         |                |         |      | 2        | *******     | )           | ļ         |             |         |         |           |       |     |          |          |          |          |            | · • • • • • • • • • • • • • • • • • • • |          |           |          |           |          |                 |     |      |      |     |         |                 |             | :<br>;   |   |          |               |                |         |          |                | 0        |         |                   |
|          |               |                          |                                       |             |                                               |         |                |         |      | 5        | 2           |             | :         | 2           | r. 52   | 0.00    | 3         |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               | <u> </u>       |         |          | 51             |          |         |                   |
|          |               |                          |                                       | <u>.</u>    | <u>l                                     </u> |         |                |         |      |          |             |             | <u>.</u>  |             |         |         |           |       |     | ]        |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          |               |                          |                                       | 1           |                                               |         |                |         |      |          |             |             | Į         |             |         |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          |               | Ī                        |                                       | 1           |                                               |         |                |         |      |          |             |             | -         |             |         |         |           |       |     |          |          | Ī        |          |            |                                         |          |           |          |           |          |                 |     |      |      | ļ   | A       | 8, 80           |             |          |   |          |               |                |         |          |                |          |         |                   |
| 200      | Ŗ             | .8. R/1                  | /                                     | -           | Ī                                             | 1       | Ì              | Ì       |      | 1        |             |             |           | -           | 3.8     |         |           |       |     |          | N.       |          |          |            | 2                                       |          |           |          |           |          |                 |     | 266  |      | c   |         |                 | 7           | Ĩ        |   |          |               |                |         |          |                |          | Ĥ,      | <b>R</b> .        |
| 26.6     |               | ···- - <del> </del> - ·· |                                       | -           | İ                                             |         | ····÷··        | Ì       |      |          |             |             | 1         | 1           | স<br>ব  |         |           |       |     | •••••    | 4        |          |          |            | 64.4                                    |          |           |          |           |          |                 |     | 200  | 20   | Q   |         | ···}·· ·        |             |          |   |          |               | 1              |         |          | ····           |          |         |                   |
|          |               |                          |                                       |             | $\square$                                     |         |                |         |      | <u> </u> | +           |             | :<br>. \1 | 3           | 26      |         | :<br>: 1: | 13    | 113 |          | 8        |          | 11       | <u>5</u> 3 | -26                                     |          |           |          | <u> </u>  | +-       |                 |     |      |      |     |         | *               | ÷           | <u> </u> | ÷ | +        | +-            | ÷              | _       | =        | _              | <u> </u> |         | t                 |
| 26.4     |               |                          |                                       |             |                                               |         | <u>.</u>       |         |      |          |             |             |           |             |         |         |           |       |     |          |          |          | <u>.</u> | Ę          | -                                       | =        |           |          |           |          |                 |     | 264  | 26   | 4   |         |                 |             |          |   |          |               |                |         |          | 33             | 0        |         | ]                 |
|          |               |                          | <u>+</u>                              | <u>.</u>    |                                               |         |                |         |      | 3<br>4   | 7 C         | ,<br>       |           | <u>.</u>    | ļ       |         |           |       |     |          |          |          |          |            | •••••                                   |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         | <u>.</u> |                |          |         | •••               |
|          |               |                          |                                       |             | ļ                                             |         | ·              |         |      |          |             |             | ļ         | 2           | -50     | 0.00    | ю         |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          | 51             |          |         | ••••              |
|          |               |                          |                                       | ļ           | ļ                                             |         | ļ              |         |      |          |             |             | ļ         |             | ļ       |         | ļļ        |       |     |          | ļ        | ļ.       |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               | ļ              |         |          |                |          |         |                   |
|          |               |                          |                                       |             |                                               |         |                |         |      |          |             | <u> </u>    |           |             |         |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      | 26   | 8   |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          |               |                          |                                       |             |                                               |         |                |         |      |          |             |             | 1         |             |         |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          | İ               |     |      |      |     | R       | <u>8. 8 (</u> ) | W           |          |   |          |               |                |         |          |                |          |         |                   |
| 26.6     | 8.R. 87)      |                          |                                       |             |                                               |         |                |         |      |          |             |             |           |             | 90      |         |           |       |     | 50       |          |          |          |            | [                                       |          |           |          |           |          |                 |     | 266  | 26   | 6   |         |                 |             |          |   |          |               |                |         |          |                | -        |         |                   |
| 200      |               |                          | <u>-</u>                              | 1           | ĪĪ                                            |         | Ì              | Ì       |      | 1        |             |             | 1         | ·           | 4       |         |           |       |     | र<br>प   | Ì        |          | Ī        |            |                                         |          |           |          |           | 1        |                 |     | 200  |      |     |         |                 |             | ľ        |   |          |               | -              |         |          |                | ļ        |         |                   |
|          |               |                          |                                       | 1           | r                                             |         | ····           | ·       |      |          |             |             | 1         | 3           | 264     | •••••   |           | 13    | 3   | <u>8</u> | <u></u>  |          | 3        |            |                                         |          |           |          |           |          | · · · · · · · · |     |      |      |     |         | ····            | <u>i-</u> - |          |   |          |               | <u></u>        |         |          |                |          |         | 1                 |
| 264      |               |                          |                                       | <del></del> | <del> </del>                                  |         | <del>nii</del> |         |      |          | 7 0         | <del></del> |           |             |         |         |           |       |     |          | ;        | -        |          |            |                                         |          |           |          |           | ··[,     |                 |     | 264  | . 26 | 4   |         |                 |             |          |   |          |               |                |         |          | 40             | 0        |         |                   |
|          |               |                          |                                       | <u> </u>    |                                               |         |                |         |      | 5        |             | >           |           | -           |         |         |           |       |     |          |          | ÷        |          |            |                                         |          |           |          | -         |          |                 |     |      |      |     |         | -4-             |             |          |   |          | +-            | <u>:</u>       |         |          | 51             |          |         |                   |
|          |               |                          |                                       |             | ļ                                             |         |                |         |      |          | \$          |             | <u>.</u>  | 2           | .48     | b.00    | ю         |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          | <u></u>        |          |         | •••               |
|          |               | <b> </b>                 |                                       | ļ           |                                               |         |                |         |      |          |             |             | ļ         | ļ           |         |         | ļļ        |       |     | ]        |          |          |          |            |                                         |          |           |          |           |          |                 | ļ   |      | Įļ   |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          |               |                          |                                       | ļ           | <u>.</u>                                      |         |                |         |      |          |             |             | ļ         |             | ;<br>;  |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
|          |               | T                        |                                       |             |                                               | T       |                |         |      |          |             |             |           |             |         |         |           |       |     |          |          |          |          |            |                                         |          |           |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                |          |         |                   |
| ····     |               | 1                        | 1                                     | 1           |                                               | T       | ļ              |         |      | 1        |             | 1           |           |             |         |         |           |       |     |          |          | 1        |          |            |                                         |          | ļ         |          |           |          |                 |     |      |      |     |         |                 |             |          |   |          |               |                |         |          |                | ĺ        |         |                   |
|          |               |                          | İ                                     |             |                                               |         |                |         |      |          | +           |             |           | -           |         |         | <u> </u>  | -     |     |          |          |          | _        |            |                                         | <u> </u> |           |          |           | +        |                 |     |      |      |     |         | -               |             |          |   |          | 1             |                |         |          |                |          |         |                   |
|          |               |                          |                                       |             |                                               | <u></u> |                |         |      |          |             |             | <br>      |             | ·9      | <b></b> | <u>}</u>  |       |     | }        |          | ····.    |          |            | ip                                      | ·        |           |          |           |          |                 |     |      | -    |     |         |                 |             |          |   | <u> </u> | <u>10</u><br> | <u>.</u><br>Da | <u></u> | :<br>!=  | یلی۔<br>مہر ہے | + 0      | 90-     | 7                 |
|          |               | 1                        |                                       | +           | ÷                                             |         |                |         | Į.   |          |             | 1           | ŧ         | 1           | :       |         | : :       |       | : 1 | 1        | :        | - 1      |          | 1          | İ                                       |          |           |          |           |          |                 |     |      | J    |     |         |                 |             |          |   | 218      | ue -          | LLC            | .J. P   | JU.      | 14             | 1-U      | 50~     | 4                 |



| DESIGN FILE: htvc/v/tvO06/2589\metr[c/xss2]cl.dgn<br>PRF FILE: ^tvc/v1/tv008/2589\metr]c/xss2[cl.prf<br>PLOTTER:_MS-HP4MV-ANDOT | SCALE: 200<br>PLOT DATE/TIME: 02/05/98 13:08:57 |
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| DESIGN FILE<br>PRF FILE: *                                                                                                      | PLOT DATE/1                                     |

|          | į            |                  |           |               | ļ          |          |                |            |          |   |          | 2            | 080<br>  | , ка         | UE       |         |    |       |               |                  |      |           |         |         |          |          |          |    |               | <br>     |              |             |     |              |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          | -           |       |               | SUE        | 3GR      | ADE         |             |        |       |          |        |
|----------|--------------|------------------|-----------|---------------|------------|----------|----------------|------------|----------|---|----------|--------------|----------|--------------|----------|---------|----|-------|---------------|------------------|------|-----------|---------|---------|----------|----------|----------|----|---------------|----------|--------------|-------------|-----|--------------|----------|---|------|---------|---|------|-----|----------|----|-----------------|---------|--------|-----------|----------|----------------|---------|------------|----------|-------------|-------|---------------|------------|----------|-------------|-------------|--------|-------|----------|--------|
| 6.6      |              |                  |           |               |            |          |                | <u></u> iþ | )        |   | ļ        |              |          |              |          |         |    |       | <u>.</u>      |                  |      |           |         |         |          |          |          |    |               |          |              | <u>.</u> 1þ |     |              |          |   |      |         |   | <br> | 266 | s        |    |                 |         |        |           |          |                |         |            |          | <u>1þ</u> . |       |               |            |          |             |             |        |       |          |        |
|          |              |                  |           |               |            |          |                |            |          |   |          |              |          |              |          |         |    | ••••• |               | 9<br>9<br>9<br>9 |      |           |         |         | 389      | ļ        |          |    | • • • • • • • |          |              |             |     | <u>ମ</u> ୍ଚ. |          |   | ļ    |         |   | <br> |     |          |    |                 |         | ···· A | N. R.     | w        | <b>.</b>       |         |            |          |             |       | :<br>}        |            |          |             |             |        |       |          | •••    |
| 6.4.     |              |                  | ···· ]    |               |            | ·        |                |            |          |   | ļ        |              |          |              |          |         |    |       |               | <u>.</u>         |      |           | ļ       |         | 263      |          |          | T  |               |          | 7            |             |     | 263          |          |   | 1    | ····    |   | <br> | 264 | ŀ        | 26 | <u>.</u> 4.     |         |        |           |          |                | ·       |            |          |             |       |               |            |          |             |             |        |       |          |        |
|          |              |                  |           |               | +          | ÷        | ÷              | +          | _        |   | <u>-</u> | +            |          | +            |          | ÷       | -  | ŧ     |               |                  |      | È         | 4       |         | :        | F        | Ę        |    |               |          | -            | ÷           | Ē   |              |          |   | +    | <u></u> |   | <br> |     | _        |    |                 |         |        | 1         |          |                | -       |            | -        |             |       |               |            | <u>-</u> | ÷           | +           | -      | _     |          | ī      |
|          |              |                  |           |               |            |          |                |            |          |   |          |              | ···.     | 58<br>51     | 0        |         |    | ••••  |               |                  |      |           |         |         |          |          |          |    |               |          |              |             |     | •••••        |          |   |      |         |   | <br> |     |          | 26 | 32.             |         |        |           |          |                |         |            |          |             |       |               |            |          | 3(          |             | 0      |       |          |        |
|          |              |                  |           |               | ·          |          |                |            |          |   |          | ·····        |          |              |          | ····;•  |    | 2     | k <b>.8</b> 4 | £Φ.C             | 000. |           |         | •••••   |          |          |          |    |               |          |              |             |     | ••••         |          |   | •••• |         |   | <br> |     |          |    |                 |         |        | · • • • • | ·        |                | ·       |            |          |             |       |               |            |          | 5           | · • 8 • • • | Ň      |       | •••••    | •••    |
|          |              |                  |           |               |            |          |                | ŧ          |          |   |          |              |          | ••••         | ····     |         |    | ••••  |               |                  |      |           |         |         |          |          |          |    | •••••         |          | <br>         |             |     |              |          |   |      | ····    |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               | ·          |          | . <u></u>   |             |        | •     |          | • •    |
| ~~       | ····         |                  | ••••      |               |            |          |                |            |          |   | ;<br>    |              |          |              |          |         |    | ••••• | <br>          |                  |      |           |         |         |          |          |          |    | ••            |          |              |             |     |              |          |   | •••• |         |   | <br> | 266 |          |    |                 |         |        |           |          |                |         |            |          |             | ····  |               |            |          |             |             | ···· ; |       |          | •      |
| 66       | _            |                  |           | 1             |            | -        | Í              | $\uparrow$ | _        |   |          |              |          | $\uparrow$   |          |         | -  |       |               | g                |      |           |         |         | 550      | ┼╴       |          |    |               | <u> </u> |              | +           |     | 311          |          | İ |      | -†      |   | <br> | 26  |          |    |                 |         |        |           |          |                |         | +          |          | +           |       |               |            |          |             | ╈           |        |       |          |        |
| 64       |              |                  |           |               | ··••···    | ··••··   |                |            |          |   | ÷        |              |          |              |          | ····i·  |    | ••••  |               | 91<br>M          |      |           |         |         | 5        |          | ····i·   |    |               |          |              | {           |     | м            | •••••    |   | •••• |         |   | <br> | 264 |          |    |                 |         |        | ก.ณ       | а∧м.     |                |         |            |          |             |       |               | •••••      |          |             |             |        | ••••• | ••••     | •••    |
| 0.4.     |              |                  |           |               | <u> </u>   |          |                | -          | <u>-</u> |   | <u></u>  | - <u>†</u> - |          |              |          |         |    | 3     |               | \$<br>           |      | y         | 3       |         | Ň        |          |          | 1  | 3             |          |              | 1           | 3   | 26           |          | 5 | -    |         |   | <br> | 204 | ŧ        |    | ). <del>1</del> |         |        |           | ·        |                |         |            |          |             |       |               |            |          | -           | -           |        |       |          |        |
|          |              |                  |           |               | 1          | Ì        |                |            |          |   | Î        |              |          |              | 0        |         |    |       |               |                  | i    | ))<br>    | ····.   |         | -        | Τ        |          |    |               |          |              |             |     | <del></del>  |          |   |      | ····    |   | <br> |     |          |    | 2               | <u></u> |        |           |          | <u></u>        |         |            |          |             |       |               | ······     | <u></u>  | · • • • • • |             |        |       |          | 7      |
|          |              | Ì                | Ţ         |               |            |          |                |            |          |   |          |              |          | 51           | ļ        |         |    |       |               |                  | 100  |           | Ì       |         |          |          |          |    | • • • • • •   |          |              |             |     |              |          |   |      |         |   |      |     | •••••    |    | /2              |         |        |           |          |                |         |            |          |             |       |               |            |          | 3           | 2           | 0      |       |          | 1      |
|          |              |                  |           |               | ŀ          |          |                |            |          |   |          |              |          |              |          |         |    |       |               |                  | I    |           | -       |         |          |          |          |    |               |          |              | T           |     |              |          | Ī |      | Ī       |   |      |     |          |    |                 |         |        |           |          |                | l       |            |          | T           | ļ     |               |            |          | 5           | 1           |        | ;     |          |        |
|          |              | Ĭ                |           |               |            |          |                |            |          |   | ĺ        |              |          |              |          |         |    |       |               |                  |      |           |         |         |          |          |          |    |               |          |              |             |     |              |          |   |      |         |   |      |     |          |    |                 |         |        |           |          |                |         |            | ]        |             |       |               |            |          |             |             |        |       |          |        |
| 266      |              |                  |           |               |            |          | Į.             |            |          |   | ļ        |              |          |              |          |         | ,  |       |               |                  |      |           |         |         |          |          |          |    |               |          |              |             |     |              |          |   |      |         |   |      | 260 | ŝ        | 26 | 56.             |         |        |           |          |                |         |            |          |             |       |               |            |          |             |             |        |       |          |        |
|          |              |                  |           | <u>.</u>      |            |          | Į.             |            |          |   |          | <u> </u>     | <u>.</u> |              |          |         |    |       |               | 995              |      |           |         |         | 67       |          |          |    |               |          |              |             |     | 473          |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          | ļ              |         |            |          |             |       |               |            |          |             |             |        |       |          |        |
| 264      |              |                  |           |               |            | _        |                |            |          |   |          |              |          |              |          |         | +  |       |               | <u>d</u>         |      | 3         |         |         | 263      |          |          | _/ | 3             |          |              |             | 3   | 63.          |          |   |      |         |   |      | 264 | Ł        | 26 | 34              |         |        |           |          |                |         |            |          |             | ļ     |               | <u>.</u>   |          |             |             |        |       |          |        |
|          |              |                  |           | _             |            |          |                |            |          |   | <u>.</u> | <u>.</u>     |          |              |          |         |    | Ē     |               |                  | ÷    |           |         | L       |          |          | <u> </u> |    | <u>.</u>      | <u>:</u> | <u>.</u>     | 1           | Ē   | _            | :        | 1 | 3    |         |   | <br> |     |          |    |                 |         |        | <u></u>   |          |                |         |            |          |             |       |               | <u>.</u>   |          |             |             |        |       |          | ſ      |
|          |              |                  |           |               |            |          |                | ]          |          |   | ļ        |              |          |              | 0        |         |    | ••••• | ļ             |                  |      |           |         |         |          |          |          |    |               | ļ        |              |             |     | •••••        |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                |         |            | <u> </u> |             |       |               | ;          |          |             |             |        |       |          | 1      |
|          |              | ļ.               |           |               |            |          |                |            |          |   | į        |              |          | 51           |          |         |    | 2     | 8480          | .dc              | 200. |           |         |         | ļ        |          |          |    |               | ļ        |              |             |     |              |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               |            |          |             | 8           | 0      |       | į        |        |
|          |              | į.               |           |               |            |          |                |            |          |   | ļ        |              |          |              |          |         |    | ••••  |               |                  |      |           |         |         |          |          |          |    |               |          |              |             |     | · • • • •    |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               | ļ          |          | 5           |             |        |       |          |        |
|          | _            |                  | _         | <u> </u>      | <u>.</u>   |          |                |            | _        |   | -        | 1            |          | +            |          |         |    |       | -             | _                |      |           |         |         | <u> </u> |          |          |    |               | <u> </u> |              | _           |     |              |          |   |      | _+      |   | <br> |     |          |    |                 |         |        |           |          |                |         | <u>.</u>   |          | _           |       |               | <u>-</u> - | -        |             | +           |        |       | <u></u>  |        |
| 266      |              |                  |           |               |            | <u>†</u> |                |            |          |   | ļ        |              |          |              |          |         |    |       |               | g                |      |           |         |         | ļ        |          |          | 28 |               | ļ        |              |             |     |              |          |   |      | ····    |   | <br> | 26  | 5        | 2  | 56.             |         |        |           |          | •<br>• • • • • |         |            |          |             |       |               |            |          |             |             |        |       |          |        |
| ·····    |              |                  |           |               |            |          | <u>.</u>       |            |          |   |          |              |          |              |          |         |    |       | 1             | -<br>            |      |           |         |         |          | <b> </b> |          | 5  |               |          |              |             |     | ي<br>۲       |          |   |      | ····[·  |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               | ļ          |          |             |             |        |       |          |        |
| 26.4.    |              | <u></u>          | <u></u>   | <u></u>       | <u>.</u>   | <u></u>  | <u></u>        |            | <u></u>  |   | <u></u>  |              |          |              |          | <u></u> |    | 3     |               | Å                |      |           | 3       |         |          | <u>.</u> |          | N  |               |          | 13.3         | <u>. 4</u>  | 3   | s            |          |   | 113  |         |   | <br> | 26  | ŧ        | 26 | 3.4.            |         |        |           |          |                | ·       |            |          |             |       |               |            |          |             |             |        |       |          |        |
| ·····    | <u>1</u><br> |                  | ···-      |               |            | <u>+</u> |                |            |          |   | <u> </u> | . <u>.</u>   |          | 54<br>51     | <u> </u> |         |    |       | -             |                  |      | 1         |         |         |          |          |          |    |               |          |              |             |     |              |          | 7 |      |         |   | <br> |     |          |    |                 |         |        |           |          | <u></u>        | <u></u> | <u></u>    | <u> </u> |             | ····· |               | <u></u>    | <u> </u> | 4           | 6           | 0      |       | <u></u>  |        |
|          |              |                  |           |               |            |          |                | $\dashv$   |          |   | -        |              |          | -            |          | +       |    | 7     | 2.78          | 30.0             | 200  |           | _       |         | <u>:</u> | ╀        |          |    |               |          | <u> </u><br> |             | _   |              | <u>.</u> |   |      |         | _ | <br> |     |          |    |                 |         |        |           |          |                | -       | ÷          | -        | +           |       |               | <u>.</u>   | -        | 5           |             | -      |       |          | •      |
| <u>i</u> |              | ····- <u>i</u> · |           | <u>-</u>      |            |          | <u>+</u>       |            | <u>i</u> |   |          | ·            | <u>+</u> |              |          | Ţ       |    | ••••  |               |                  |      |           |         |         |          |          | Ť        |    |               |          |              |             |     |              |          |   |      |         |   | <br> |     | ••••••   |    |                 |         |        |           |          |                | -       |            |          | ••••        |       |               |            |          |             |             |        |       |          |        |
|          |              |                  | ••••      |               | . <u>.</u> | <u>+</u> |                | ···· †     |          |   |          |              | 1        |              |          |         |    | ••••• |               |                  |      |           |         |         |          |          |          |    |               |          |              |             |     |              |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                | <br>    |            |          |             |       | •••••         |            |          |             |             |        |       |          | ,      |
| 8.8      | 879          | •••••            |           |               |            |          |                | ••••       |          |   |          |              |          | {.           |          |         |    |       |               | · • • • •        |      |           |         |         |          |          |          |    |               |          |              |             |     | •••••        |          |   |      |         |   | <br> | 200 |          |    | 56.             |         |        |           |          |                |         |            |          |             |       | •••••         | <br>:      |          |             |             |        |       |          |        |
| 266      |              |                  | ···· †··· | <u>÷</u><br>1 |            |          | <u>.</u>       |            | ·····    |   | 1        | - <u>-</u>   |          | ••••         |          |         |    | ***** |               | 88               |      |           |         | •••••   |          |          |          |    | 838           |          |              |             |     | 795          |          |   |      |         |   | <br> | 266 | <b>.</b> |    | 20.1.           |         |        | •••••     |          |                |         |            |          |             |       | ••••          |            |          |             |             |        |       |          |        |
| 26.4.    |              |                  | +         |               |            | 1        |                |            |          |   | Ì        | İ            | -        |              |          |         | 1  |       |               |                  |      | <u></u> 3 |         |         | -        | t,       | 13.      |    | 263           | <u>.</u> |              |             | р.  | 63.          |          |   |      | -{      |   |      | 264 |          | 20 | 34.             |         |        |           |          | <u>.</u>       |         | - <u>-</u> |          | $\uparrow$  |       |               | 1          | 1        |             | 1           |        |       |          | •      |
| 20.4.    |              | i                |           |               | <u></u>    | <u></u>  | <u>±.</u><br>; |            | <u></u>  |   | <u></u>  | <u></u>      |          | 78           | 0        | <u></u> |    | ŤE    |               | 1                |      | F         | <u></u> | <u></u> | <u></u>  | 14       | 5        |    |               |          | 3            | 1           | Ē   |              | ••••••   | 7 | 3    |         |   | <br> | 20  | <b>1</b> |    | 272.1.          |         |        |           |          |                |         |            |          | ,           |       |               |            |          |             |             |        |       | 1        |        |
|          | Ī            | •••••            |           | 1             |            | Ī        | Ì              | Ť          |          |   | Î        | Ť            | 1        | 02           | Ì        |         |    |       | 7.74          |                  | 200. |           |         |         |          |          |          |    |               |          |              |             |     | ••••         |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          | -              | 1       |            |          | T           |       |               |            |          | 5           |             | 0      |       |          |        |
|          | Ī            |                  | 1         |               | 1          | Ī        |                |            |          |   |          |              |          |              | į        |         |    |       |               |                  |      |           |         |         |          | -        | Î        |    |               |          |              |             |     |              |          |   | Ì    |         |   |      |     |          |    |                 |         |        | /         |          |                |         |            |          |             |       |               | 1          |          | 5           | 1           |        |       |          |        |
|          | Ĩ            | Î                | 1         | Ī             | 1          |          | Ĩ              |            |          |   | Ī        |              | T        | 1            |          | l       |    |       | 1             | 1                |      |           |         |         |          | -        |          |    |               |          |              |             |     |              |          |   |      |         |   |      |     |          |    |                 |         |        |           |          |                | 1       |            |          |             |       |               |            |          |             |             |        |       |          |        |
|          |              |                  |           | -             |            | !        |                |            |          |   |          | -            |          |              |          |         |    |       |               | T                |      |           |         |         |          |          | -        |    |               |          |              | 1           |     |              |          |   |      | Ī       |   |      |     |          |    |                 |         |        |           |          |                |         | 1          |          | Τ           |       |               | I          |          |             |             |        |       |          |        |
| 266      | P            | 1.R. A/          | ×         |               | Ì          |          | Ĩ              |            |          |   | Î        |              |          |              |          | -       |    |       | (             | ç                |      |           |         |         | l        |          |          |    | 88            |          |              |             |     | 5            |          |   |      |         |   |      | 26  | 5        | 2  | 36              |         |        |           |          |                |         |            |          |             |       |               |            |          |             |             |        |       |          |        |
|          |              |                  |           |               |            |          |                |            |          |   | -        |              |          |              |          |         |    |       |               | <b>v</b>         |      |           |         |         |          |          |          |    | 263.998       |          |              |             |     | 4,091        |          |   |      |         |   |      |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               | <u>.</u>   |          |             |             |        |       |          | •      |
| 264      |              | <u> </u>         |           |               |            |          |                |            |          |   | <u> </u> |              |          |              |          |         | 11 | 3     | 1             | Ň                |      | 11        | 3       |         |          | 1        | 13       |    | 26            |          | 1            | 1           | : 3 | 264          | :        | 1 | 13   |         |   | <br> | 26  | 1        |    | 34.             |         |        |           |          |                |         |            |          |             |       | • • • • • • • | ;          |          |             |             |        |       |          |        |
|          |              |                  |           |               |            |          |                |            |          |   |          |              |          |              | 0        |         |    |       | :             | Ē                |      |           |         |         |          |          |          |    |               | :        | 7            |             |     |              | ;        | 7 | -    |         |   | <br> |     |          |    |                 |         |        |           | L        | <u>.</u>       |         |            |          | 4           |       |               | :          | -        |             |             |        |       |          | ,<br>, |
|          |              |                  |           |               |            |          |                |            |          |   | <u>.</u> |              |          | 51           |          |         |    |       | 2.72          | 20.0             | 100. |           |         | ,       | <u>.</u> |          |          |    |               | ļ        |              |             |     |              |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               |            |          | 5           | 4           | 0      |       | ļ        |        |
|          |              |                  |           |               |            |          |                |            |          |   | ļ        |              |          |              |          |         |    |       |               | ļ                |      |           |         |         | ļ        |          |          |    |               | ļ        |              |             |     |              |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               | <u>.</u>   |          | 5           | 1           |        |       |          |        |
|          |              |                  |           |               |            |          |                | ]          |          |   | ļ        |              |          |              |          |         | ,  |       |               |                  |      |           |         |         |          |          |          |    |               | <u>.</u> |              | ]           |     |              |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               | ļ          |          |             |             |        |       |          | •      |
|          |              |                  |           |               |            |          |                |            |          |   | ļ        | <u> </u>     | ļ        |              |          |         | ,  |       | ļ             |                  |      |           | ,       |         | ļ        |          |          |    |               | ļ        |              |             |     |              |          |   |      |         |   | <br> |     |          |    |                 |         |        |           |          |                |         |            |          |             |       |               |            |          |             |             |        |       |          |        |
|          |              |                  |           |               | <u> </u>   | -        |                | $\square$  |          |   |          | _            | _        | $\downarrow$ |          |         |    |       |               |                  |      |           |         |         |          | 1        |          |    |               | <u> </u> |              |             |     |              |          |   | :    | _       |   | <br> |     |          |    | 4               |         |        |           | -        | <u>-</u>       |         |            |          |             |       |               | -          | -        |             | -           | _      |       | -        |        |
|          |              |                  | ļ         |               |            |          |                | ıþ         | )        |   | ļ        |              |          |              |          |         |    |       | ļ             |                  |      |           |         |         | ļ        |          |          | ;  |               | ļ        |              | <u>.1þ</u>  |     |              |          |   |      |         |   | <br> |     |          |    |                 |         |        |           | <b>.</b> |                |         |            |          | 10          |       |               | <u> </u>   |          |             |             | _      |       | <u>:</u> | •      |
| -        | :            |                  |           |               | 1          | 1        | 1              |            |          | , | ł        |              |          |              | ł        |         | 1  |       | 1             | 1                | 1    | Į         | 1       |         | 1        |          | ł        |    |               | -        |              |             | -   |              |          |   | 1    |         | 1 |      |     |          |    |                 |         |        |           | 1        | 1              |         | 1          | St       | ate         | ϶I    | Pro           | oj. I      | Nc       | ). 1        | 141         | 1-0    | 990   | ىر       | ſ      |

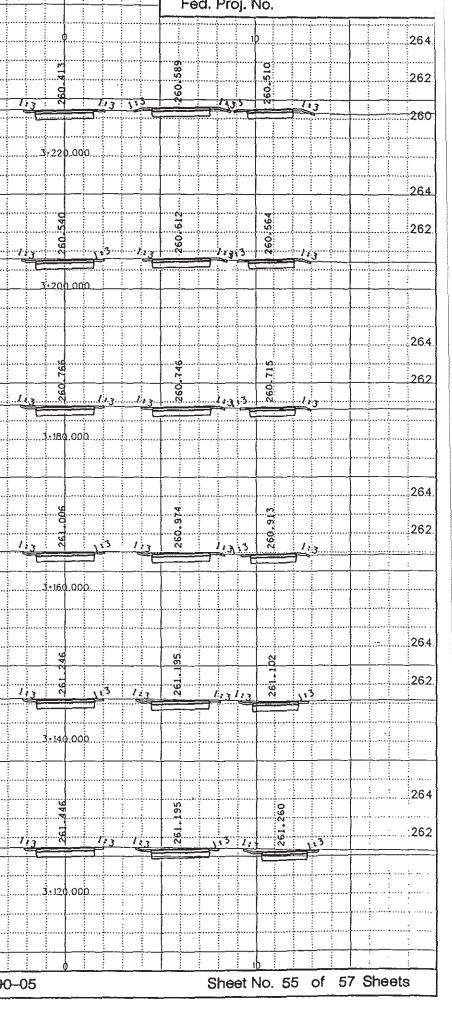


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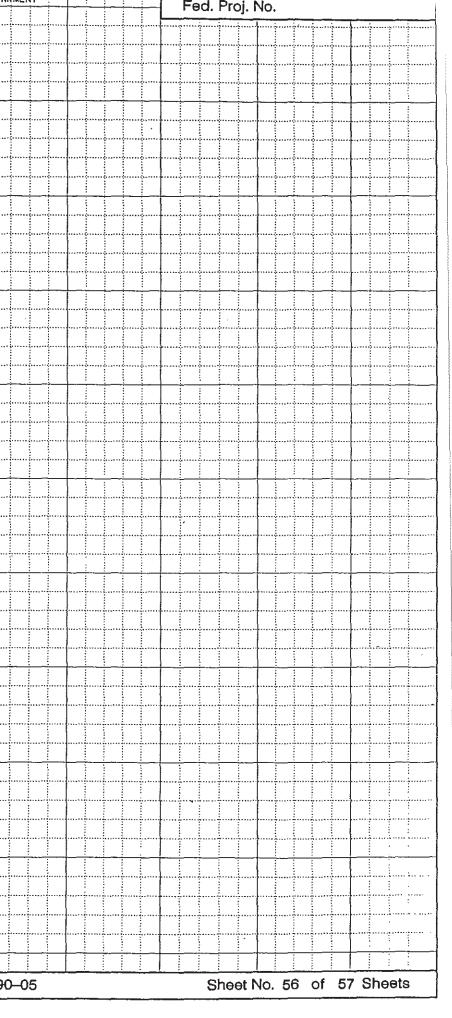
|                                       |                                       |                         |         |                         | SUBGR | RADE |          | · · · · · · · · · · · · · · · · · · · |         |          |           | ļ         |       |         |        |       |             |         |            |          |          |                                               |                                       | <br>                                           |                     |        |         |   |          |          |           |         | SUBG        | RADE |              |          |
|---------------------------------------|---------------------------------------|-------------------------|---------|-------------------------|-------|------|----------|---------------------------------------|---------|----------|-----------|-----------|-------|---------|--------|-------|-------------|---------|------------|----------|----------|-----------------------------------------------|---------------------------------------|------------------------------------------------|---------------------|--------|---------|---|----------|----------|-----------|---------|-------------|------|--------------|----------|
| 5.4                                   | A A: A? V                             |                         |         | <u></u>                 |       |      |          | ,                                     |         |          |           | ļ         |       |         |        |       |             | 1       | p          |          |          |                                               |                                       | <br>26.4                                       | 26.4.               |        |         |   |          |          | <u>1þ</u> |         |             |      |              |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       |         | 566      |           |           |       | ŧ       | ·····  |       |             |         |            | 382      |          |                                               |                                       | <br>                                           | R,                  | A.8/¥  |         |   |          |          |           |         |             |      |              |          |
| 62                                    |                                       |                         |         |                         |       |      |          |                                       |         | 261      |           | i<br>have | 75    |         | 10.    |       | · 5 · · · · |         |            | 261.     |          |                                               |                                       | <br>262                                        | 262.                |        |         |   |          |          |           |         |             |      |              |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       | Ę       |          | -         |           | - E   | <br>    |        | 3     |             |         | <b>S</b>   |          | =        |                                               |                                       | <br>                                           |                     |        |         |   |          |          | <u> </u>  |         |             |      | <u>  </u>    |          |
|                                       |                                       |                         |         |                         |       | 48   | 0        |                                       |         |          |           | ļ         |       |         |        |       |             |         |            |          |          |                                               |                                       | <br>                                           | 260.                |        |         |   |          |          |           |         |             |      | - <u> </u>   |          |
|                                       |                                       |                         |         |                         |       | 51   |          |                                       |         | 09.00    | ap        | ļ         | ļ     |         |        |       |             |         |            |          |          |                                               |                                       | <br>                                           |                     | ļ      |         |   |          |          |           |         |             | 2.   | ********     |          |
| ·····                                 |                                       |                         |         |                         |       |      |          |                                       |         |          |           |           |       |         |        |       |             |         | ļ          |          |          |                                               |                                       | <br>                                           |                     |        |         |   |          |          |           |         |             | 51   |              |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       |         |          |           |           |       |         |        |       |             |         |            |          |          |                                               |                                       | <br>                                           |                     | ļļ     |         |   |          |          |           |         | ļ           |      |              |          |
| 64                                    | 8.8.87                                | *                       |         |                         |       |      |          |                                       |         | <u>.</u> |           |           |       | _       | 8      |       |             |         |            |          |          |                                               |                                       | 264                                            | _264                |        |         |   |          |          | -+        |         |             |      |              |          |
|                                       |                                       |                         |         |                         |       |      |          | ·                                     | ,       | ġ        |           |           |       |         |        |       |             |         |            | 482      |          |                                               |                                       | <br>                                           |                     | A. AZV |         |   |          |          |           |         | ·····       |      |              | ·····    |
| 62                                    | <u></u>                               |                         |         |                         |       |      |          |                                       | 3       | 4<br>    | <u></u>   | 3         | .1.   | <u></u> | 56     |       | 3           |         | 173        | 261      |          | <del>.</del>                                  |                                       | <br>262                                        | 262.                | 21 2   |         |   |          |          |           |         |             |      | -            |          |
|                                       |                                       |                         |         |                         |       |      |          | ······                                |         |          |           |           |       | C       |        |       |             | -       |            | -        |          |                                               |                                       | <br>                                           |                     |        |         |   |          |          | <u></u>   |         |             |      |              | ·        |
|                                       |                                       |                         |         | - <b> </b>              |       | 47   | 0        |                                       |         |          |           |           |       |         |        |       |             |         |            |          | <u> </u> |                                               |                                       | <br>·····                                      | ļ                   | ļļ     |         |   | <u>-</u> |          |           |         |             | 32   | ••• {••••••• |          |
|                                       |                                       |                         |         |                         |       | 51   |          | +                                     |         | 180.0    | 00        | -         |       |         |        |       |             |         |            |          |          |                                               |                                       | <br>                                           |                     |        |         | + |          |          |           |         |             | 51   | +            |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       |         | ,        |           |           |       |         |        |       |             |         | ·[]        |          |          |                                               | ļ                                     | <br>                                           |                     |        |         |   |          |          |           |         |             |      |              |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       |         |          |           | ļ         |       |         |        |       |             |         | ·          |          |          |                                               |                                       | <br>                                           |                     |        |         |   |          |          | {         |         |             |      | · []         |          |
| 64                                    | R.Ř. R                                | /*                      |         |                         |       |      | <br>     | +                                     |         |          |           |           |       |         | ja y   |       |             |         |            | ç        | <u></u>  |                                               | ·                                     | 264                                            |                     | R. R/W |         |   |          |          |           |         |             |      |              |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       |         | 1        |           | ļ         |       |         |        | *     |             |         |            | 261.580  |          |                                               |                                       | <br>                                           |                     | i.li.  |         |   |          |          |           |         |             |      |              |          |
| 62                                    |                                       |                         |         | +                       |       |      |          |                                       | 3       | শ্       |           | <u>i</u>  |       |         |        | 2     | 4           | 3       | 10         | *        |          | 13                                            |                                       | <br>262                                        | 262                 |        |         |   |          |          |           |         |             |      |              |          |
|                                       |                                       |                         |         |                         |       |      | 0        |                                       |         |          | <br>      |           | ·     | F       |        |       | 7           |         |            |          |          | I                                             |                                       | <br>                                           |                     | Ť      |         |   |          |          | <u></u>   | <u></u> | <u> </u>    | 36   | 5 0          | <u></u>  |
|                                       |                                       |                         |         |                         |       | 102  | •••••••• |                                       |         |          |           | ļ         |       | •••••   |        |       |             |         |            |          |          |                                               |                                       | <br>                                           |                     |        |         |   |          |          |           |         |             | 51   |              |          |
| ·                                     |                                       |                         |         |                         |       | 102  |          |                                       | 3.0     | 0.43     | 00        | <u>.</u>  |       | }       |        |       |             |         |            |          |          |                                               |                                       | <br>                                           |                     |        |         |   |          |          |           |         |             |      |              |          |
|                                       |                                       |                         |         | -                       |       |      |          |                                       |         |          |           |           |       |         |        |       |             |         |            |          |          |                                               |                                       | <br>                                           |                     |        |         |   |          |          |           |         |             |      |              |          |
|                                       | R.R. R                                |                         |         |                         |       |      |          |                                       |         | +        |           |           |       |         |        |       |             |         |            |          |          |                                               |                                       | 264                                            |                     |        |         |   |          |          | -+        |         |             |      | +            |          |
| 26.4                                  | R.R. R                                | 4                       |         |                         |       |      |          |                                       |         | 683      | •••••     |           |       |         | 839    |       | ••••        |         |            | 780      |          |                                               |                                       | <br>264                                        | 264.<br>R.          | 9. R/¥ |         | · |          |          | ····-     |         |             |      |              |          |
|                                       |                                       |                         | <u></u> |                         |       |      |          |                                       |         | 261-     |           |           |       |         | 261.   |       |             |         | i          | 261.     |          |                                               |                                       | <br>                                           |                     |        |         |   |          |          |           |         |             |      |              |          |
| .6.2.                                 |                                       |                         |         |                         |       | 39   | 0        |                                       | 3       | <u></u>  |           | <u>(</u>  | 11.   | l       | N      |       | 3           | <u></u> | (k.3)<br>F | <u> </u> |          |                                               |                                       | <br>262                                        | 262.                | ·      |         |   |          |          |           |         |             |      |              |          |
|                                       | - <u></u>                             |                         |         | -                       |       | 51   |          |                                       |         |          |           |           |       |         |        |       |             |         |            |          |          |                                               |                                       | <br>                                           |                     |        |         |   |          | <u> </u> |           |         |             | 4    | 3 0          | <u> </u> |
|                                       |                                       |                         |         |                         |       |      |          |                                       |         | 20.0     | 00        | 1         |       |         |        |       |             |         |            | Ī        |          |                                               |                                       | <br>                                           |                     |        | <u></u> |   |          |          | -         |         | <del></del> | 51   | _            |          |
| ,                                     |                                       |                         |         | -                       |       |      | ļ        |                                       |         |          | -         | 1         |       | }       |        |       |             |         |            |          |          |                                               |                                       |                                                |                     |        |         |   |          |          |           |         |             |      |              |          |
|                                       | 1                                     |                         |         | 1                       |       |      |          |                                       |         |          |           |           |       |         |        |       |             | -       |            |          |          | ••••                                          |                                       | <br>                                           |                     |        |         |   |          |          |           |         |             | •••• | -            |          |
|                                       | R.R.R/                                | w i                     |         |                         |       |      |          |                                       |         |          |           |           |       |         |        |       |             |         |            |          |          |                                               |                                       | 264                                            | 064                 |        |         |   |          |          |           |         |             |      | -            |          |
| 6.4                                   |                                       |                         | 1       |                         |       |      |          |                                       |         |          |           | ·         |       | ځ       |        |       |             |         | ·          | - 902    |          | 1                                             | 1                                     | 20.4                                           | 264<br><sub>R</sub> | A. 874 |         |   |          |          |           |         |             |      | -            |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       | 5       | 26       |           |           | 13.   | -1      |        | 13    |             | 11      | Ţ          | 26       | 4        | <u>,                                     </u> |                                       | 262                                            | 262.                |        |         |   |          |          |           |         |             |      | +            |          |
| 62                                    |                                       |                         |         |                         |       | 37   | 0        | <u></u>                               |         |          | 5         |           | Ë     |         |        | 3     |             | -       | ìE         |          | 3        | L                                             | · · · · · · · · · · · · · · · · · · · | <br>202                                        |                     |        |         |   |          |          |           |         |             |      |              |          |
| ····                                  | i i i i i i i i i i i i i i i i i i i |                         | Î       |                         |       | 51   |          |                                       | 7.0     | 0.00     |           | 1         |       |         |        |       |             |         |            |          |          |                                               |                                       |                                                |                     |        |         |   |          |          |           |         |             | 31   | 1 0          |          |
| ···· <del>i</del>                     |                                       |                         |         |                         |       |      |          |                                       |         | 00.0     |           |           |       |         |        |       |             |         |            |          |          |                                               |                                       |                                                |                     |        |         |   |          |          |           |         |             | 35   | 5            |          |
|                                       | ŤŤ                                    |                         |         |                         |       |      |          |                                       |         |          |           | 1         |       |         |        |       |             |         | 1          |          |          |                                               |                                       |                                                |                     |        |         |   |          |          |           |         |             |      |              |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       |         |          |           |           |       |         |        |       |             |         |            |          |          |                                               |                                       |                                                |                     |        |         |   | 1        |          |           |         |             |      |              |          |
| 26.4                                  | R.R. A                                | ~                       |         |                         |       |      |          |                                       |         | ø        |           |           |       |         | 2      |       |             |         |            | n        |          |                                               |                                       | 264                                            |                     |        |         |   |          |          |           |         |             |      |              |          |
| 10.4                                  |                                       |                         |         |                         |       |      |          |                                       |         | 7        |           |           |       | Ì       | • E    |       |             |         |            | þ        |          |                                               |                                       | <b>6</b> • • • • • • • • • • • • • • • • • • • |                     | R.R.F  | /¥      |   |          |          |           |         |             |      |              |          |
| 262                                   |                                       |                         |         |                         |       |      |          |                                       | 3       | 262      | 1         | 131       | - 3   | i i     | 3<br>3 | 1,    | 3           | 1:      |            | CHO 797  | 1:3      |                                               |                                       | 262                                            |                     |        |         |   |          |          |           |         |             |      |              |          |
| .0.2                                  | 1                                     | -                       |         |                         |       | 33   | 0        |                                       |         | -i       |           |           | E     |         |        | 3     |             |         |            |          | 7        |                                               | 1                                     |                                                |                     |        |         |   |          |          |           |         |             |      |              |          |
|                                       |                                       |                         |         |                         |       | 51   |          |                                       | 2.0     | 180.0    | 00        | -         | -     |         |        |       |             |         |            |          |          |                                               |                                       |                                                |                     |        |         |   |          | 1        |           |         |             | 30   | 0 0          |          |
|                                       |                                       |                         |         |                         |       |      |          |                                       |         | 00.0     | 00        | 1         |       |         |        |       |             |         |            |          |          |                                               |                                       |                                                |                     |        |         |   |          |          |           |         |             | 35   | 5            |          |
|                                       |                                       |                         |         |                         | 1     |      |          |                                       |         |          |           |           |       |         |        |       |             | 1       |            |          |          |                                               |                                       |                                                |                     |        |         |   |          |          |           |         |             |      |              |          |
| i i i i i i i i i i i i i i i i i i i |                                       |                         |         |                         |       |      |          |                                       |         |          |           | Ì         |       |         |        |       |             |         |            |          |          |                                               |                                       |                                                |                     |        |         |   |          |          |           |         |             |      | 1            |          |
| 1                                     |                                       |                         |         |                         |       |      |          |                                       |         |          | -         | 1         |       |         |        |       |             |         |            |          |          |                                               |                                       |                                                |                     |        |         |   | ļ        |          |           |         |             |      |              |          |
| <u> </u>                              |                                       |                         |         | TD I                    |       |      |          | T                                     |         | -        |           |           |       |         |        |       |             | 1       | 10         |          |          |                                               |                                       |                                                |                     |        |         |   |          |          | 10        |         |             |      |              |          |
| 1                                     |                                       | أمدد محمد مجمع ويويق وي |         | ··· • ··· · • ··· • ··· | ****  |      |          |                                       | ******* |          | ···?····· | ·•••••    | ····· |         |        | ***** |             |         |            |          | *****    |                                               |                                       | <br>                                           |                     |        |         |   |          |          |           |         |             |      |              | 090      |

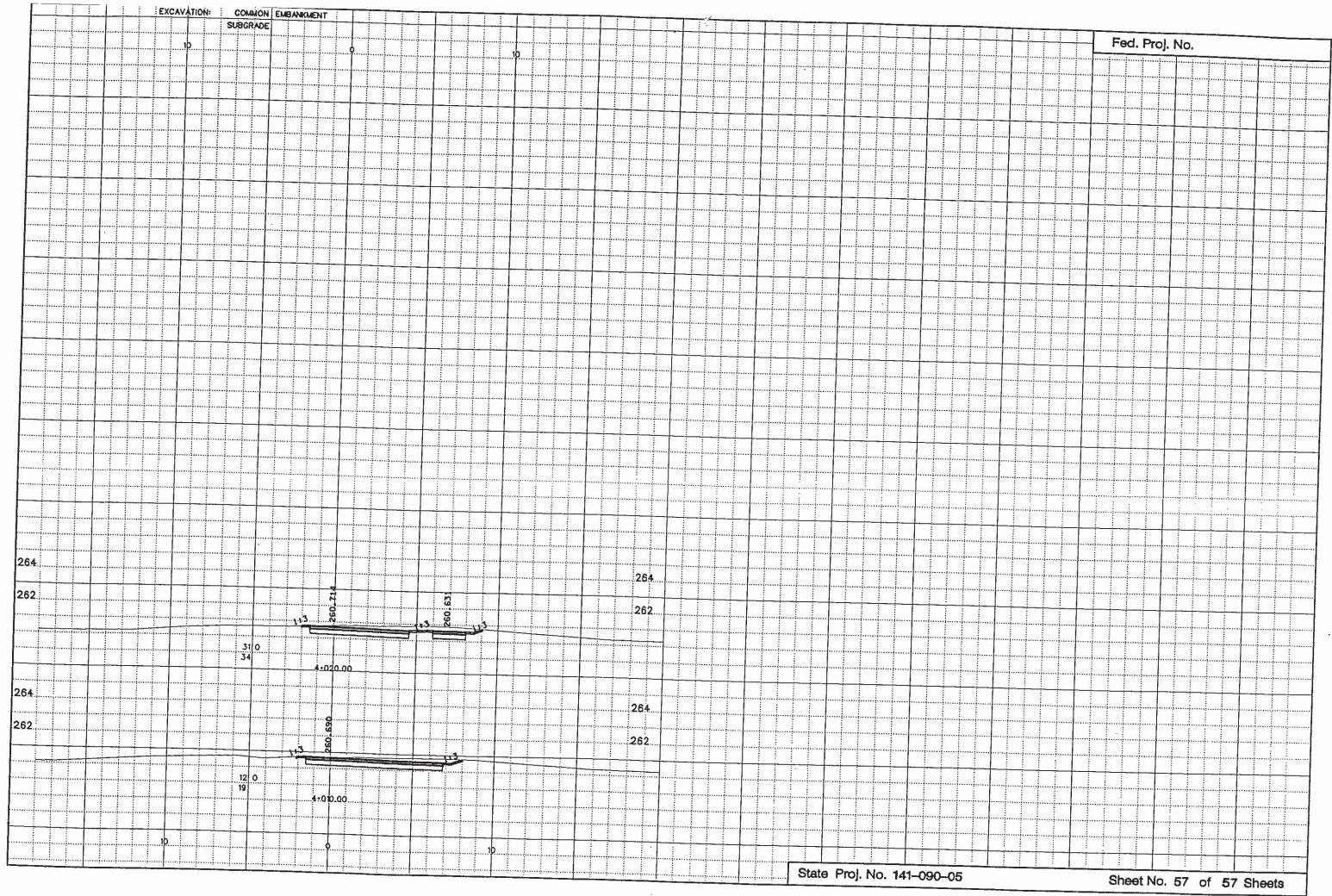


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|          |          | 1 1        |                                       |           |               | วกล่     | GRAUI | ΞĮ         |          |               | -      | f          |       |     | -        |          |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           | -           |          |          |         |          | SL       | JØGR.         | ADE                                   |               | -              |
|----------|----------|------------|---------------------------------------|-----------|---------------|----------|-------|------------|----------|---------------|--------|------------|-------|-----|----------|----------|----------|-----------|---------|----------|------------|---|----------|---------|----------|----------|--------|------------|-----------------------------------------|-------|-------|----------|-----------|-------------|----------|----------|---------|----------|----------|---------------|---------------------------------------|---------------|----------------|
|          |          |            |                                       | 10        |               |          |       |            |          |               |        | ····       |       |     |          |          |          |           |         |          | 10         |   |          |         |          | •••      |        | •••••      | ••••                                    |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
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|          |          |            | ····•                                 |           |               |          |       |            | •••••    |               |        | •••••      |       |     |          |          |          |           |         |          |            |   |          | ····    |          |          | ······ |            |                                         |       |       |          |           | · • • • • • | -        |          |         |          |          |               |                                       |               |                |
|          |          |            | ····                                  | ····      | 1             |          |       |            |          | ·             | ·····, |            |       |     |          |          | }        |           |         |          | •••        |   |          |         |          |          | ······ |            |                                         |       |       |          |           | ·           |          |          |         |          | ••••     |               |                                       |               |                |
|          |          |            |                                       |           |               |          |       |            |          |               |        |            |       |     | +        | :        |          |           | ;       |          |            |   | <u>;</u> |         |          |          |        |            |                                         |       |       | !        |           | +           | <u> </u> |          |         |          | <u> </u> | <u> </u>      |                                       |               |                |
|          |          |            | ····•                                 |           | ·             | ·····    | ····• |            |          |               |        | ····       | ····· |     |          |          | <b>}</b> | ····      |         |          |            |   | •••••    |         |          |          |        |            |                                         | ļ     |       |          |           |             |          |          |         |          |          |               |                                       | ļ             |                |
|          |          |            |                                       | ···· .    |               |          |       |            |          | ·             |        |            |       |     |          |          |          |           |         | <u>j</u> |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       |           |               |          |       | , <b>ļ</b> |          |               |        |            |       |     |          | ļ        | <b>]</b> |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       |           |               |          |       |            |          |               |        |            |       |     |          | ļ        |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       |           |               |          |       |            |          |               |        |            |       |     |          |          |          |           |         | <u> </u> |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          | ł        | -             |                                       |               |                |
|          |          |            |                                       |           |               |          |       |            | į        |               |        |            |       | -   | ł        |          |          |           | ļ       |          |            |   | 1        |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               | 1                                     | 1             |                |
|          |          |            |                                       |           |               |          |       |            |          |               |        | [          |       |     |          |          |          | Ĩ         |         |          |            |   |          |         |          |          |        |            | • • • • • • • • • • • • • • • • • • • • |       |       |          |           | 1           |          |          |         |          |          |               | ••••••                                |               |                |
|          |          | Î          |                                       | Ī         |               |          |       |            |          |               |        |            |       |     |          |          |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       | ····· |          |           | -           |          |          |         |          |          | •             |                                       |               |                |
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|          |          | Ì          |                                       |           | 1             | 1        |       |            |          |               |        |            |       |     | -        |          | -<br>    |           |         |          |            |   |          |         |          |          |        |            |                                         |       | ····· |          |           |             |          |          | {       |          |          |               |                                       |               |                |
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| 26.4     |          |            |                                       | ····-     |               |          |       |            |          |               |        | -          |       |     |          |          |          |           |         |          |            |   |          |         |          |          |        | 26.4       |                                         |       |       |          |           | ·           |          |          | ····{·· |          |          |               |                                       |               |                |
|          |          |            |                                       | ····-     | · · · · · ·   |          |       |            |          |               |        | - <u>F</u> |       |     | ·        |          |          |           |         |          |            |   |          |         | <u> </u> |          |        | 262<br>260 |                                         | ····· |       |          |           |             |          |          |         |          |          |               |                                       |               | (              |
| 262      |          |            |                                       |           |               |          |       |            |          |               |        | 1.497      |       |     |          |          |          |           | 0.1     |          |            |   |          |         | <u>ہ</u> |          |        | 262        |                                         | ļ     |       |          |           | . <b>.</b>  |          |          |         |          |          |               |                                       | ļļ            |                |
|          |          | - <b>-</b> |                                       |           |               |          |       |            |          |               |        | 260        |       |     |          |          |          | 1.1.g.    | ق<br>ای |          |            | 3 |          | <u></u> | 50       |          |        |            |                                         | ļ     |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
| 260      |          |            |                                       |           | +             |          |       | +          | <u> </u> |               |        |            |       |     |          |          |          | Ē         |         |          |            |   |          | E       |          |          |        | 260        |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       |           | ļļ            |          | 5     | *****      | 2        |               |        |            |       |     |          | <u>.</u> | ļ        |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               | 1                                     |               |                |
|          |          |            |                                       |           |               |          | 5     | 0          |          |               | 3.     | 34.0       | .000. |     |          |          |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       |           |               |          |       |            |          |               |        |            |       |     |          |          |          | ł         |         |          |            |   |          | -       |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
| 264      |          |            |                                       |           |               |          |       |            |          |               |        |            |       |     |          | -        |          |           |         |          |            |   |          |         |          |          |        | 264        |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
| 20.1     |          |            | Ī                                     | 1         |               |          | 1     |            |          |               |        |            |       |     |          | 1        |          |           | 2       |          |            |   |          | 60      |          |          |        | 204        |                                         |       |       |          | ••]••••   | -           |          |          |         |          |          |               |                                       |               |                |
| 000      |          |            |                                       |           |               |          |       | ╈          |          |               |        | 17         |       | Ť   |          |          |          |           | :032    | ;        |            |   | 1        | 6       | +        | 1        |        | 262        |                                         |       |       |          |           | <u>+</u>    |          |          | -+      | <u> </u> | <u> </u> |               | +                                     | $\vdash$      | <del>_</del> † |
| 262      |          |            | Î                                     |           | Ì             |          |       |            |          |               |        | 260.       |       | 1.7 |          | 1        |          | 3         |         |          | 1.3        |   |          | 60      |          |          | -      | 262        | ••••                                    |       |       |          | •••       | ·           |          |          |         |          |          | · • • • • • • | l                                     |               |                |
|          |          |            | <u> </u>                              |           | <u>.</u>      |          |       | 7 2        | 6        | 4             | 3      | 4          |       |     | ,<br>    | <u>.</u> |          | - <u></u> |         | ÷        |            |   |          | ~       |          | 113      |        |            |                                         |       | ····· |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       | ····      |               |          | 7     | 0          | <u> </u> |               |        | ····       | .000. |     |          |          |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           | ·           |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       |           | <u> </u>      |          |       | ···        |          |               | 3+     | 320        | 000   |     |          |          | ļ        |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       | ļ-            |                |
|          |          |            | _                                     |           |               | ;        |       | +          | <u> </u> |               |        |            |       |     | <u> </u> | <u> </u> |          |           |         | <u> </u> |            |   |          |         |          |          |        |            |                                         |       |       | <u> </u> |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       |           | <u> </u>      |          |       |            |          |               |        |            |       |     |          | ļ        |          | ļ.        |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       | []            |                |
| 26.4     |          | <u> </u>   | <u></u>                               |           | . <u>.</u>    |          |       |            |          |               |        |            | ····  |     |          | ļ        | ļ        |           |         |          |            |   |          |         |          |          |        | 264        |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
| B.B. 87W |          |            |                                       |           | <u> </u>      |          |       |            |          |               |        |            |       |     |          |          | 8        | ļ.        |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
| 26.2     |          | <u> </u>   |                                       |           |               |          |       |            |          |               |        | 285        |       |     |          | ļ        | 260,868  |           |         |          | . 75       |   |          |         |          |          |        | 262        |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       |           |               |          |       |            |          |               |        | 260        |       |     | 1        |          | 260      |           | 1.      | 3        | 260.751    |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
| 260      |          |            |                                       |           | + +           | <u> </u> | :     |            |          | 11            |        |            |       |     | 3        | Ē        |          |           |         | <u> </u> | -          |   | 113      |         | _        | <u> </u> |        | 260        |                                         |       |       |          | 1         |             |          |          |         |          |          | 1             |                                       | <u> </u>      | -              |
|          |          |            | Ī                                     |           |               |          | 1     | 5 3        | i1       |               |        | 1          |       |     |          | -        | [        |           |         |          |            |   |          |         |          |          |        | 2,200      | •••                                     |       |       |          | -         |             |          |          |         |          |          | -             | 1                                     |               |                |
|          |          |            | ļļ                                    |           |               |          | 6     |            |          |               | -      | 201        | .000. |     |          | -        |          |           |         | 1        |            |   |          |         |          | 1        |        |            |                                         | [     | ľ     |          |           | 1           |          |          |         |          |          |               |                                       |               |                |
|          | <b>-</b> | Î          | 1                                     |           | T             |          | ····  |            |          |               |        | 200        | .000. |     |          | 1        | 1        |           |         |          |            |   |          |         |          |          |        |            | • • •   • • • • • •                     |       |       |          | ·-        | ·           |          |          |         |          |          |               |                                       | <u>-</u>      |                |
|          | ·····    | 1          | <u> </u>                              | •••••     | 1             | T        |       |            |          |               |        | •••••      |       |     |          |          |          |           |         |          |            |   |          |         |          |          |        |            | •••                                     | ·     |       |          |           |             |          |          |         |          |          | ·             |                                       |               |                |
| 264      |          |            |                                       |           | $\frac{1}{1}$ |          |       | +          |          |               |        | -+         |       |     |          |          | $\vdash$ | :         |         | :        |            |   |          |         | +-       | :        |        | 264        |                                         |       |       | <u> </u> | +         |             |          | <u> </u> |         |          |          | <u> </u>      | ÷                                     | <u> </u>      |                |
| 8.8.87¥  |          |            |                                       |           |               |          |       |            |          |               |        |            |       |     |          |          | 65       |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               | <u> </u>                              |               |                |
| 262      | <u></u>  |            |                                       | ····      | <u></u>       |          |       |            |          |               |        | 400        |       |     |          |          | 260,669  |           | :<br>;  |          | 260.553    |   |          |         |          |          |        | 262        |                                         |       |       |          |           |             | ļ        |          |         |          | <u> </u> |               | <u> </u>                              | ļļ.           |                |
|          | ļļ       |            |                                       |           |               | ļ        |       |            |          | $\frac{1}{r}$ | 13     | 260        |       | 7   | - TY     |          | بة<br>بن |           |         |          | 3          |   | 13       |         |          |          |        |            |                                         |       |       | :<br>    |           |             |          |          |         |          |          |               |                                       | <u> </u>      |                |
| 260      |          |            |                                       |           | ÷             |          |       |            |          |               |        |            |       |     |          | E        |          |           | 3       | Ť        |            |   |          |         | <u></u>  |          |        | 260        |                                         |       |       |          |           |             |          |          |         |          |          | <u>.</u>      |                                       |               |                |
|          |          | <u> </u>   |                                       |           |               |          | 1     |            | •        |               |        |            |       | 1   | <u> </u> |          |          |           | :       | -        |            |   |          |         | 1        |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          | <u> </u> |            |                                       |           |               |          | 4     | 8          |          |               | 3.     | 230        | .999  |     |          |          |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         | -        |          |               |                                       |               |                |
|          |          |            |                                       |           |               |          |       |            |          |               |        |            |       |     |          |          |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           |             |          |          |         |          |          |               |                                       |               |                |
|          |          |            |                                       | T         |               |          |       |            |          |               |        |            |       | ĺ   |          |          |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           | 1           |          |          |         | ļ        |          | Î             |                                       |               |                |
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|          |          |            |                                       | ••••†···· | 1             |          | ····  | ···        | 1        |               |        |            | ····  |     |          |          |          |           |         | 1        |            |   |          |         |          | ,        |        |            |                                         |       |       |          | ·· ·····  |             |          | <u> </u> |         |          |          |               |                                       |               |                |
|          | +        |            |                                       |           |               |          |       |            | <u> </u> |               |        | +          |       |     |          | -        | $\vdash$ |           |         | <u>.</u> |            |   |          |         | +        |          |        | <u> </u>   |                                         |       |       |          | -         | <u>+</u>    |          |          |         |          |          | <u>+</u>      | +                                     | $\rightarrow$ | +              |
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|          |          |            |                                       | •••••     | ·             |          |       | ···        |          |               |        |            |       |     |          | <u></u>  | ļ        |           |         |          |            |   |          | <u></u> |          | <u>.</u> |        |            |                                         |       |       | ••••     |           |             |          | St       | ate     | Pr       | oj. I    | No.           | . 14                                  | 1~0           | 90-            |
|          |          |            |                                       |           |               |          |       |            |          |               | _      |            |       |     | _        | _        |          |           |         |          |            |   |          |         |          |          |        |            |                                         |       |       |          |           | _           |          |          |         |          |          |               |                                       | <u> </u>      |                |





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Midtown Greenway Phase I

The following resolution was offered by Commissioner Opat, seconded by Commissioner Tambornino:

36-HCRRA-95

RESOLUTION NO.

DIOWN (SREENWAY

WHEREAS, the Hennepin County Regional Railroad Authority (HCRRA) has invested in a transportation corridor paralleling Lake Street and lying between France Avenue and Hiawatha Avenue in the City of Minneapolis known as the 29th Street Rail Corridor (Corridor), principally for the purpose of implementing Light Rail Transit (LRT) and other permitted future transportation uses; and

WHEREAS, Hennepin County has identified this transportation corridor and its proposed transportation improvements as an integral part of a vision for long-range property value enhancements and business development known as Hennepin Community Works;

WHEREAS, the Minneapolis neighborhoods adjoining this corridor, together with the City of Minneapolis (City), Hennepin County and HCRRA have named this Community Works project, the "Midtown Greenway"; and

WHEREAS, the HCRRA, the City, and the neighborhoods are proposing to develop a master plan for the LRT and bicycle transportation improvements within the corridor owned by HCRRA; and

WHEREAS, the City and HCRRA desire to enter into an agreement to develop a master plan for the Corridor and engineering plans for the first stage of construction, and provide for a division of cost for planning and construction of the bicycle trail between France Avenue and I-35W as an integral part of the Hennepin Community Works initiative,

BE IT RESOLVED, that Agreement No. A09775 with the City of Minneapolis, providing for planning, engineering and bikeway construction in the 29th Street Rail Corridor, between France Avenue and Hiawatha Avenue in the City of Minneapolis, for an indefinite time period commencing with Board approval, at a Hennepin County Regional Railroad Authority (HCRRA) cost not to exceed \$304,200, be approved, and that the Chair be authorized to sign the Agreement on behalf of the Authority.

The question was on the adoption of the resolution and there were  $\_4$  YEAS and  $\_1$  NAYS as follows:

| BOARD OF COMMISSIONERS<br>HENNEPIN COUNTY REGIONAL<br>RAILROAD AUTHORITY | <u>YEA</u> | NAY       | <u>OTHER</u> |
|--------------------------------------------------------------------------|------------|-----------|--------------|
| Mike Opat                                                                | x          |           |              |
| Sandra Hilarv                                                            | Y          |           |              |
| Mark Andrew                                                              | <u> </u>   |           |              |
| Randy Johnson                                                            |            |           | ABSENT       |
| Mary Tambornino                                                          | -v         |           | ABSENT       |
| Penny Steele                                                             | <u>_A</u>  |           |              |
| Peter McLaughlin, Chair                                                  |            | <u>_X</u> |              |
|                                                                          | X          |           |              |

RESOLUTION ADOPTED SEPTEMBER 12, 1995

ATTEST: Mary Tambornino, Secretary

## MINTOWN GREENWAY - PHASE I FRANCE TO STY AUE.

#### SECOND AMENDMENT TO PERMIT AGREEMENT NO. A09775

THIS AGREEMENT, made and entered into by and between the HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY ("Permittor"), a Minnesota political subdivision, and the City of Minneapolis ("Permittee"), a Minnesota political subdivision;

#### WITNESSETH:

WHEREAS, Permittor and Permittee entered into a certain Permit Agreement bearing Agreement No. AO9775 and the First Amendment to Permit Agreement No. AO9775, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Rail Authority "29<sup>th</sup> Street Rail Corridor", said Permit and First Amendment being set forth *in Exhibit "B"*, attached hereto and made a part hereof by reference;

WHEREAS, Permittor and Permittee desire to amend the Permit in certain particulars;

NOW, THEREFORE, the parties mutually agree as follows:

Clause 5. "Premises" of the Permit is hereby amended by substituting the following therefor:

#### 5. Premises

HCRRA hereby agrees to grant certain rights and benefits to the City hereinafter described with regard to that certain real property described as follows:

follows: That part of HCRRA's right of way, located in the City of Minneapolis, between France Ave. So. and 5th Ave. So., the northerly limits being the northerly HCRRA property line and the southerly limits being the southerly construction limits shown on the construction plans for the 29<sup>th</sup> St. Midtown Greenway – Phase I, attached hereto as, Exhibit "A1"

The said real estate shall be hereinafter described as the "Premises."

The effective date of this First Amendment to Permit Agreement No. A09775 is June 1, 2003.

Except as herein above amended, the terms, conditions and provisions of Permit Agreement No.AO9775, shall apply to and govern the provisions of this Agreement.

#### PLAN SYMBOLS

| STATE LINE                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| TOWNSHIP OR RANGE LINE                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| SECTION LINE                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CUARTER LINE                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| SIXTEENTH LINE                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| AICHT-OF-VAT LINE                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| PRESENT RIGHT-OF-WAY LINE                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| COMPONATE ON CITY LIMITS                                                                                                  | ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| TAUNE HIGHNAT CENTER LINE                                                                                                 | 2 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| RETAINING WALL                                                                                                            | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| RAILFOAD                                                                                                                  | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| RAILFOND FIGHT-OF-VAT LINE                                                                                                | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| RIVER OR CREEK                                                                                                            | - There are                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| NARSH                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| NARSH                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| POVER POLE LINE                     |         |
|-------------------------------------|---------|
| TELEPHONE OR TELEGRAPH              |         |
| ON POVER POLES                      | -00     |
| ON TELEPHONE POLES                  | -00     |
| ANCHOR                              | 4       |
| STEEL TOWER                         | Δ       |
| STREET LICHT                        | <b></b> |
| PEDESTAL ITELEPHONE CABLE TERMINALD | ъ.      |
| CAS HAIN                            | GG      |
| WATER HAIN                          |         |
| CONOLET                             |         |
| TELEPHONE CABLE IN CONOUST          | -1      |
| ELECTRIC CABLE IN CONCULT           |         |
| TELEPHONE HANHOLE                   |         |
| ELECTRIC MANICLE                    | 23      |
| BUSTED TELEPHONE CASLE              |         |
| BUFIED ELECTRIC CABLE               |         |
| ACRIAL TELEPICHE CABLE              |         |
| SEVER, ISANITARY                    |         |
| SEVER, ISTORNI                      |         |
| SEVER HANNOLE                       |         |
| HANDHOLE                            | Gн      |

## MINNESOTA DEPARTMENT OF TRANSPORTATION MINNEAPOLIS DEPT. OF PUBLIC WORKS 1.91.97

### CONSTRUCTION PLAN FOR

TRAIL AND GRADING IMPROVEMENTS

29TH STREET MIDTOWN GREENWAY - PHASE I

MPLS. DEPARTMENT OF PUBLIC WORKS 141-090-03 STATE PROJ. NO.

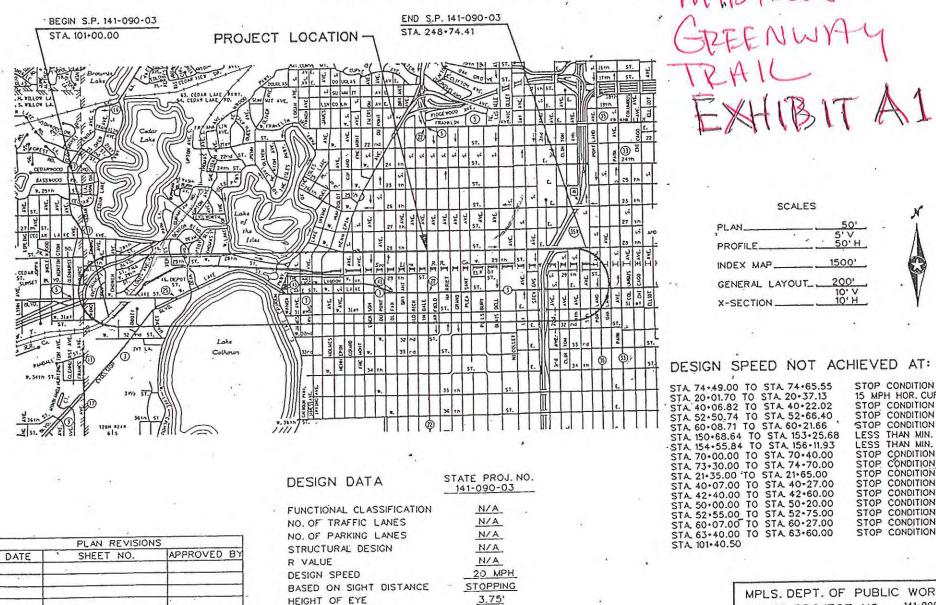
BETWEEN INTERSECTION OF CHOWEN AND 29TH STREET RAILROAD CORRIDOR AND 5TH AVE. AVE. AND 31ST STREET

| GROSS LENGTH      | 14.774.41 | FEET _ | 2.798 MILES |  |
|-------------------|-----------|--------|-------------|--|
| BRIDGES-LENGTH    |           | FEET - | MILES       |  |
| EXCEPTIONS-LENGTH | 14,774.41 |        | 2.798 MILES |  |

FROM A POINT 270 FEET SOUTH AND 1210 FEET EAST OF THE NORTHWEST CORNER OF SECTION 5. TOWNSHIP 28. RANGE 24. HENNEPIN COUNTY, MINNESOTA

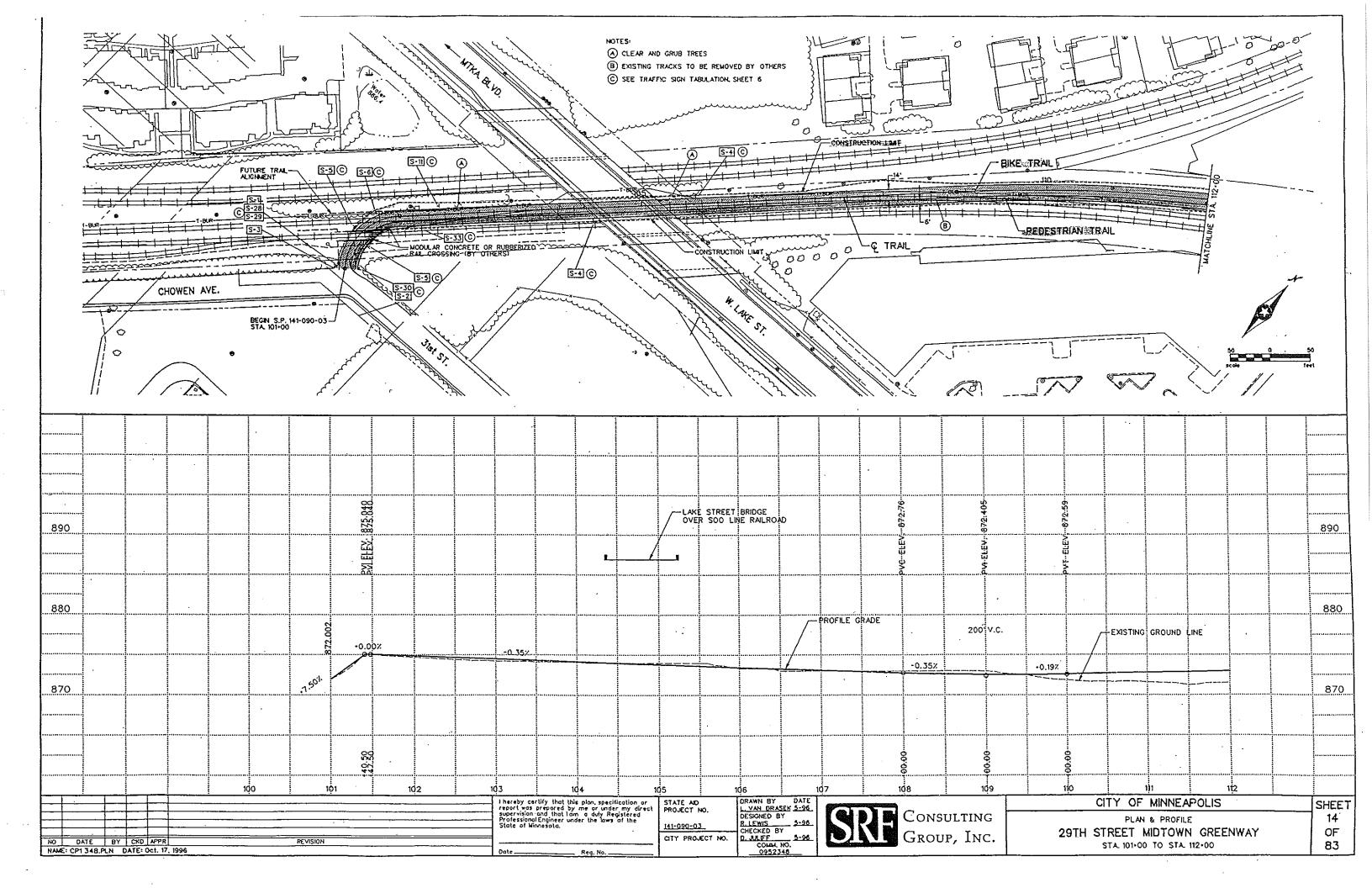
TO A POINT 700 FEET NORTH AND 300 FEET WEST OF THE SOUTHEAST CORNER OF SECTION 34, TOWNSHIP 29, RANGE 24, HENNEPIN COUNTY, MINNESOTA

0.0'

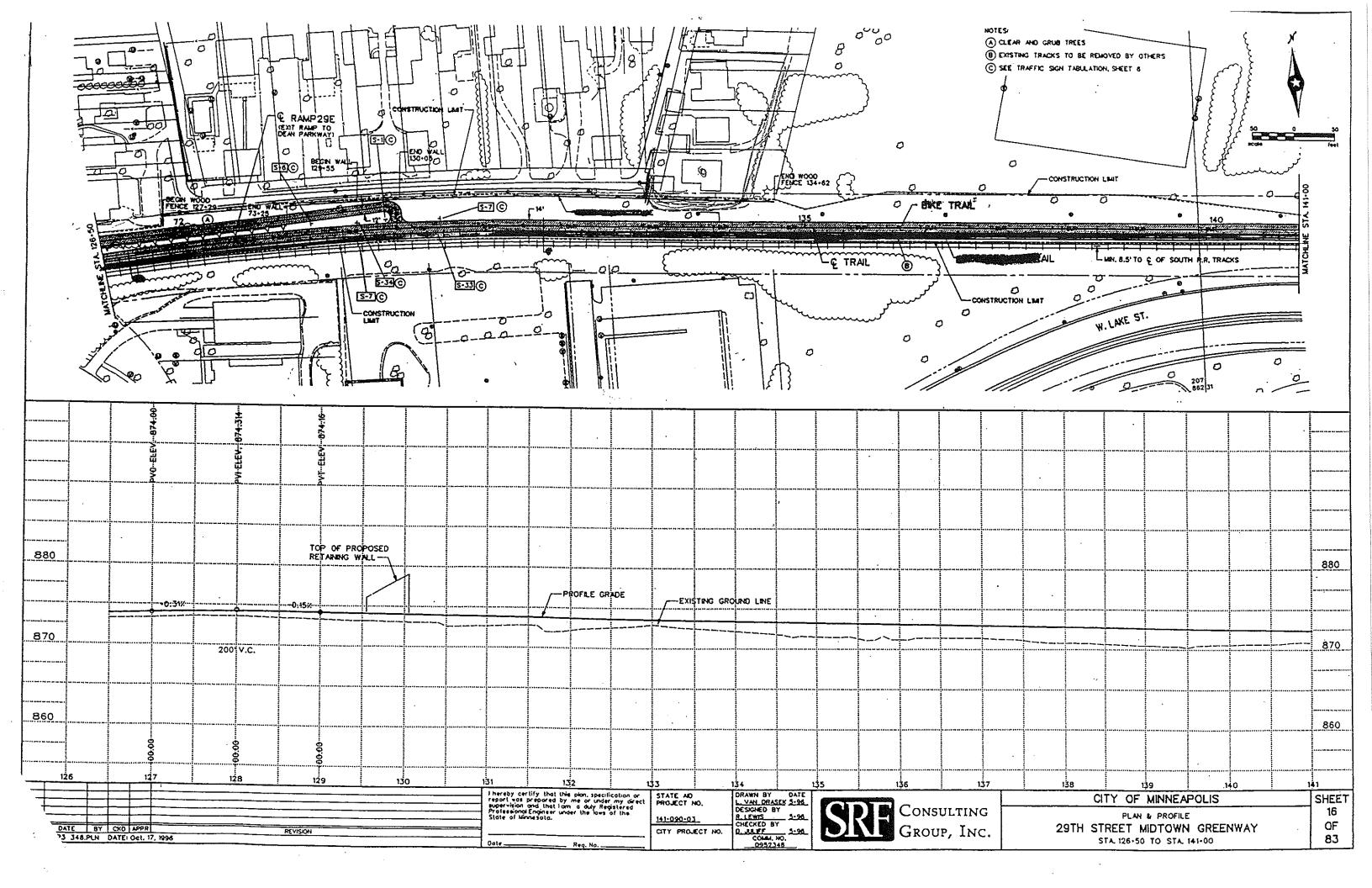


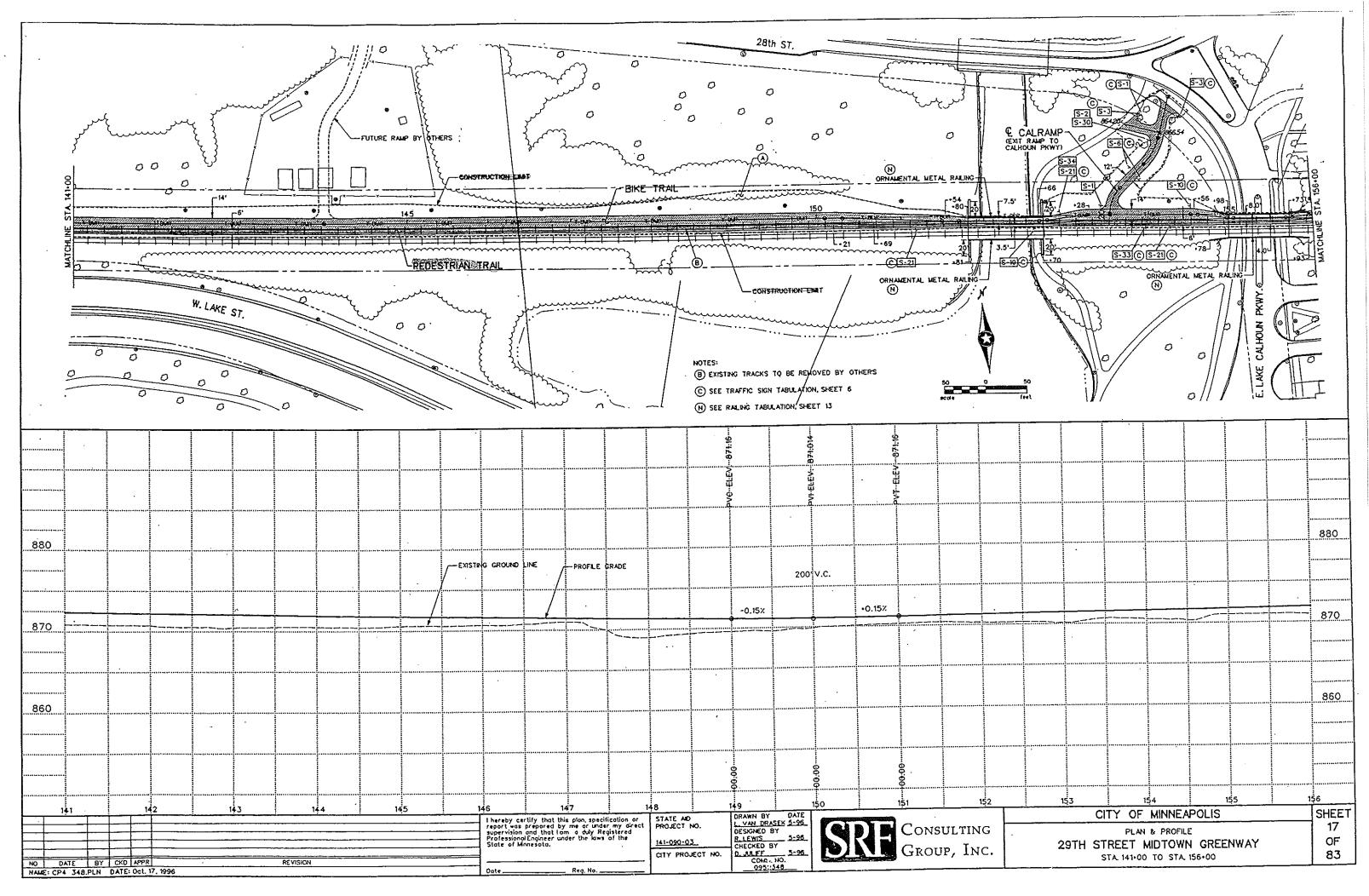
HEIGHT OF OBJECT

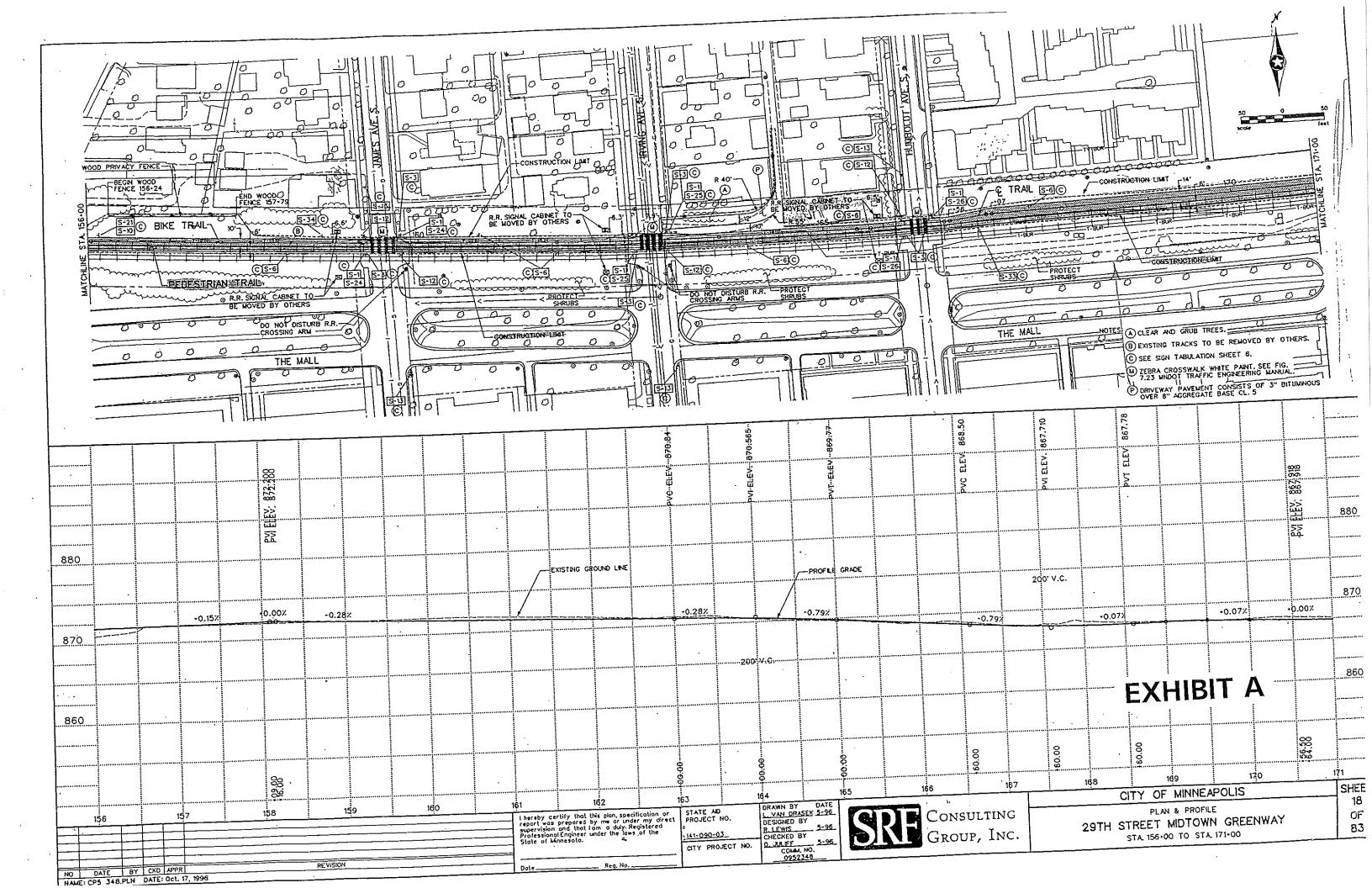
| ATION                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                          | MINNESOTA PROJECT NO. STP 2796 (069)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| S                                                                                                                                                                                                                                                                                                                                                                                                               | 1                                                                                                                                                                        | GOVERNING SPECIFICATIONS<br>THE 1988 EDITION OF THE MINESOTA DEPARTMENT OF TRANSPORTATION<br>STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS AMENDED BY THE<br>JANUARY 02, 1991 SUPPLEMENTAL SPECIFICATION SHALL GOVERN.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 1,9,9<br>:<br>:                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                          | SHEET       NO.       SHEET DESCRIPTION         1       TITLE SHEET         2       STATEMENT OF ESTIMATED QUANTITIES         3       GENERAL LAYOUT         4       CONSTRUCTION/SOILS NOTES. STANDARD         PLATES, AND EARTHWORK SUMMARY         5-6       SIGNING & STRIPING DETAILS         7       RETAINING WALL DETAILS         6       SIGNING & STRIPING DETAILS         7       RETAINING WALL DETAILS         9       TYPICAL SECTIONS         10-12       ALIGNMENT PLAN AND TABULATION         13       TABULATIONS         14-24       CONSTRUCTION PLANS AND PROFILES         25       RAMP PROFILES         26-31       ELECTRICAL LIGHTING PLAN         32       ELECTRICAL LIGHTING DETAILS         33-37       EROSION CONTROL DETAILS         38-83       CROSS SECTIONS |
| rown                                                                                                                                                                                                                                                                                                                                                                                                            | -                                                                                                                                                                        | THIS PLAN CONTAINS SHEETS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| NWM                                                                                                                                                                                                                                                                                                                                                                                                             | 1                                                                                                                                                                        | I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR<br>UNDER MY DRECT SUPERVISION AND THAT I AM A DULY RECISTERED<br>PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| IL                                                                                                                                                                                                                                                                                                                                                                                                              | 1                                                                                                                                                                        | ENGR<br>Date Reg. No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| HIBIT                                                                                                                                                                                                                                                                                                                                                                                                           | A1                                                                                                                                                                       | L. ARCH Reg. No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| SCALES<br>50'<br>5' V<br>50' H                                                                                                                                                                                                                                                                                                                                                                                  | X ···                                                                                                                                                                    | SRE CONSULTING GROUP, INC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| L LAYOUT_ 200'<br>10' V<br>0N 10' H                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                          | I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY WE OR<br>UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED<br>PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                 | ť                                                                                                                                                                        | E. ENGR<br>Date Reg. No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ED NOT ACHIE<br>STA 74+65.55 ST<br>STA 20+37.13 15<br>STA 40+22.02 ST                                                                                                                                                                                                                                                                                                                                           | OP CONDITION                                                                                                                                                             | CAIN OUSE ASSOCIATES<br>CONSULTING ENGINEERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| STA 52*66.40         ST           STA 60*21.66         ST           STA 153*25.68         LE           STA 156*11.93         LE           STA 70*40.00         ST           STA 74*70.00         ST           STA 21*65.00         ST           STA 40*27.00         ST           STA 50*20.00         ST           STA 50*20.00         ST           STA 52*75.00         ST           STA 60*27.00         ST | OP CONDITION<br>OP CONDITION<br>SS THAN MIN. WIDTH<br>SS THAN MIN. WIDTH<br>OP CONDITION<br>OP CONDITION<br>OP CONDITION<br>OP CONDITION<br>OP CONDITION<br>OP CONDITION | Recommended for Approval MINNEAPOLIS DEPT. OF PUBLIC WORKS 19<br>Recommended for Approval NETRO-ASSISTANT DIVISION 19<br>Recommended for Approval FOR STATE AND DIVISION 19<br>Approved 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

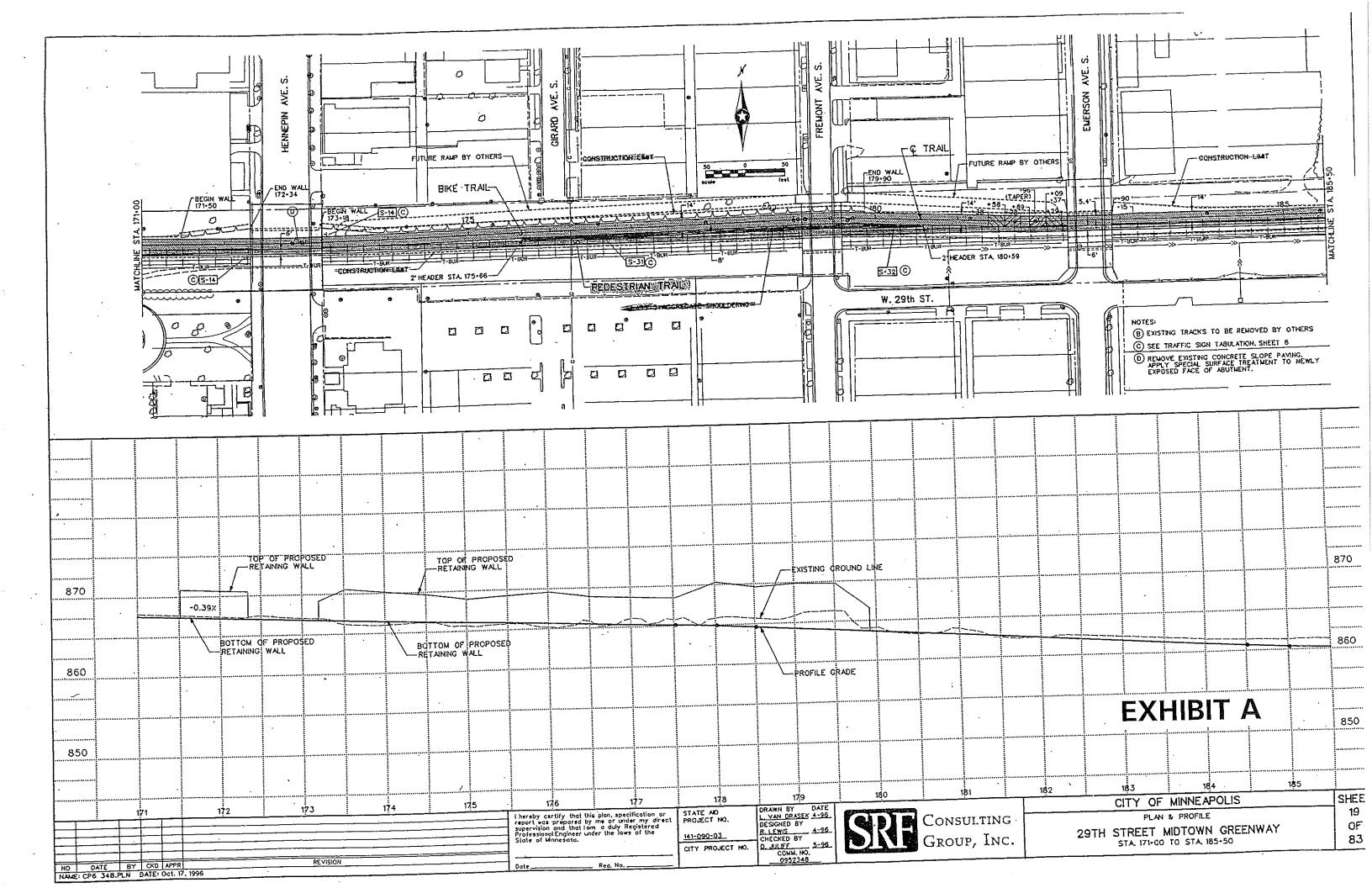


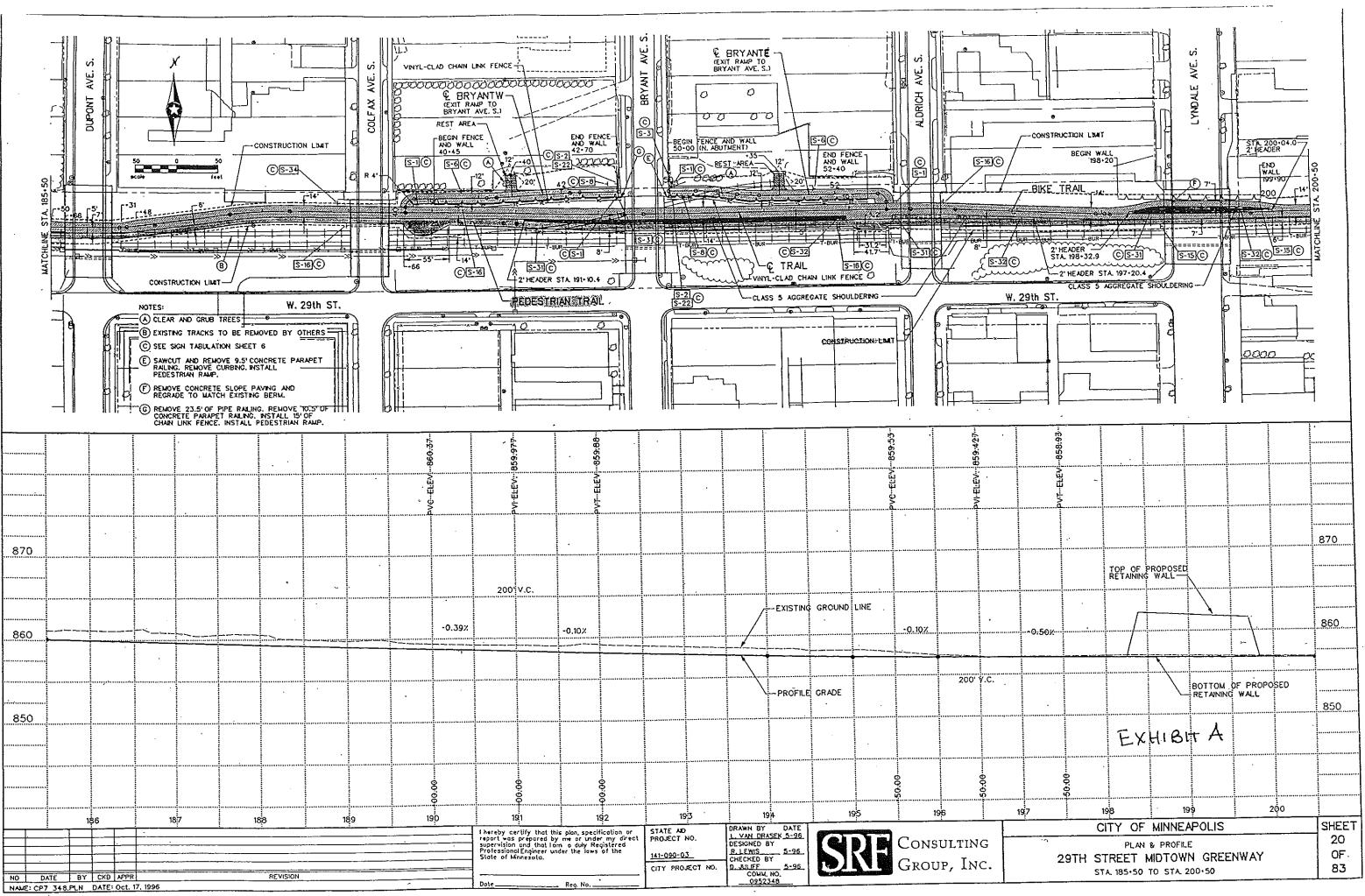
0 87. 8 G Ο Ø 1N CONSTRUCTION LIM Ol 00 O 0 0 <u>BIKE</u> TRAIL<sup>®</sup> 100 Ō 0 Ο O 50000 tion MIDTOWN GREENWAY 80 Ο  $\sim$ 0 Lizez ler 10 V-BUR-<u>a</u>. 120 00 55' Ø, L+92.5 0 2 CONNECTOR 5-6C TRAIL CE TRAIL TRACKS REMOVED BY OTHERS STA 117-62.6-1 PEDESTRIAN TRAL C[2-31] Æ <u>িচ্নি</u> 3 LOO BETWEEN THANENTAL METAL RALING ø 0 OUSTRUCT CHI LLOT 2" HEADER STA 121-33.3 15-24  $\mathcal{O}_{\ell}$ Ø Ø 0 ترجيبي 0 00  $\sim$ 0 420] \\O 0 OC. NOTES: CLEAR AND GRUB TREES B EXISTING TRACKS TO BE REMOVED BY OTHERS 3220 LAKE Q C SEE TRAFFIC SIGN TABULATION, SHEET 6 D, 0 Ø STREET (N) SEE RAALING TABULATION, SHEET 13  $\overline{Q}$ Ъ (CALHOUN COMMONS) 873:38-9.7.3..38. 30-4-75 873.374 13-384 33.38 874.07 375:40 873,18 õ 375. El El 1.5.1 ELEX ELEV ELEV. ÷ ы Ш ű ŝ Ş Ž 2 3 -EXISTING GROUND LINE 880 ÷ ---- PROFILE GRADE 880 2001V.C. 200 V.C. 200 V.C. 200' V.C. •0.70% -0.68% •0.31% \*0:00% -0.58% +0.00% <u> ---</u> ····0:70% +0.197 870 .870 • 860 860 • . ŝ 10.00 8 8 . ğ ġ 126 125 123 124 122 1Ż1 120 117 119 116 113 115 CITY OF MINNEAPOLIS 112 114 SHEET hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that fam o duy Registered Professional Engineer under the laws of the State of Monesoto. STATE AD PROJECT NO. SRE CONSULTING GROUP, INC. 15 PLAN & PROFILE OF 29TH STREET MIDTOWN GREENWAY 141-090-03 GROUP, INC. CITY PROJECT NO. 83 STA 112+00 TO STA 126+50 NO DATE BY CKO APPR REVISION Reg. No. NAME: CP2 348.PLN DATE: Oct. 17, 1996 Dale

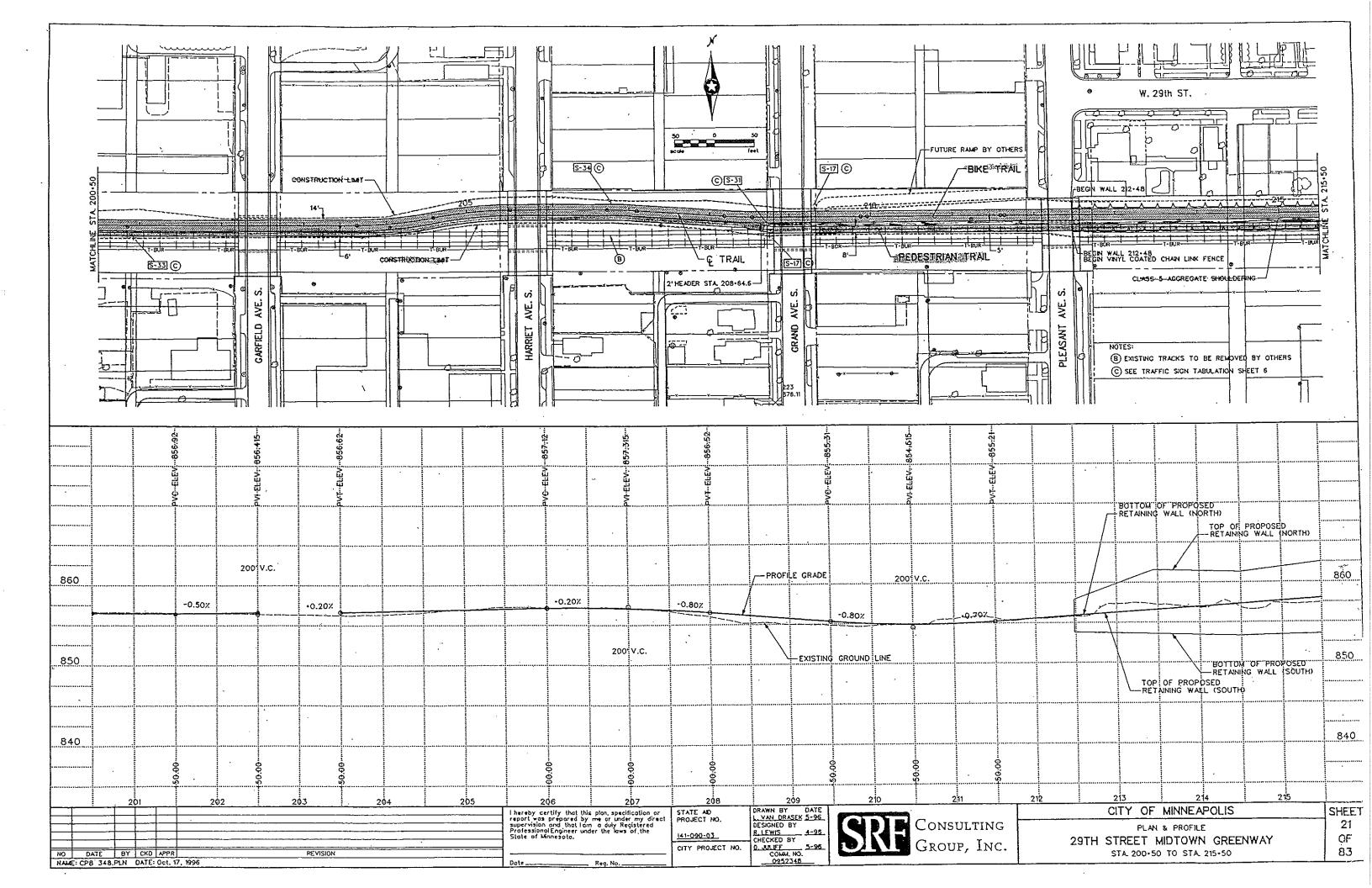


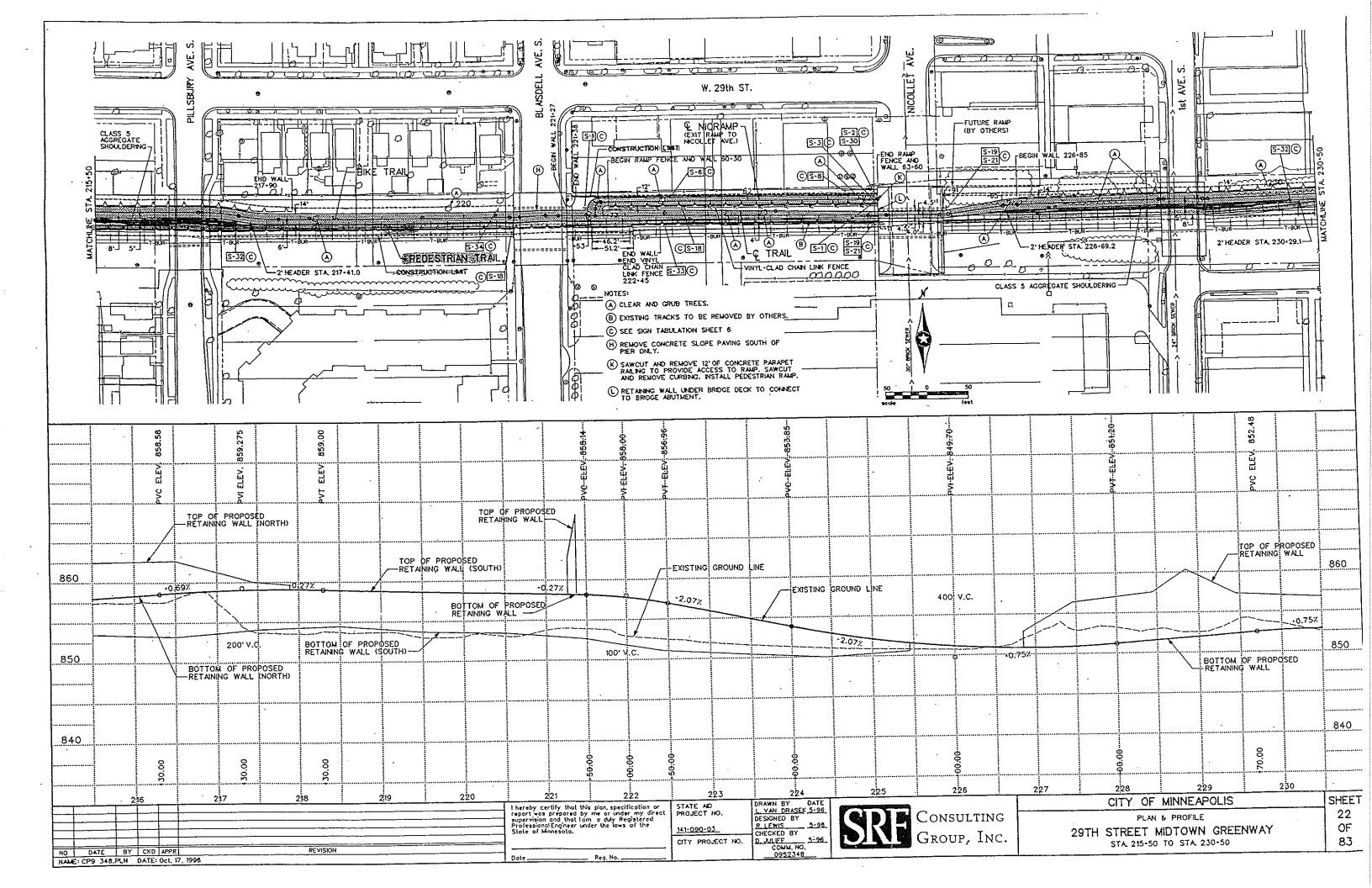




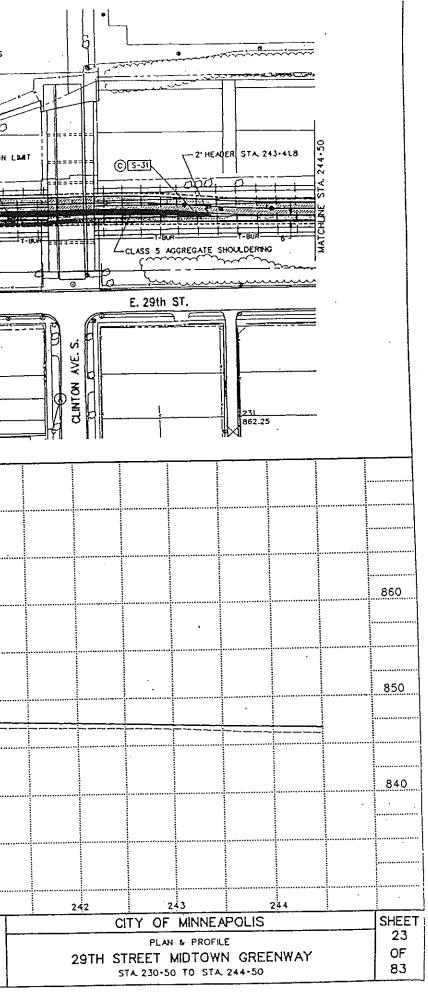


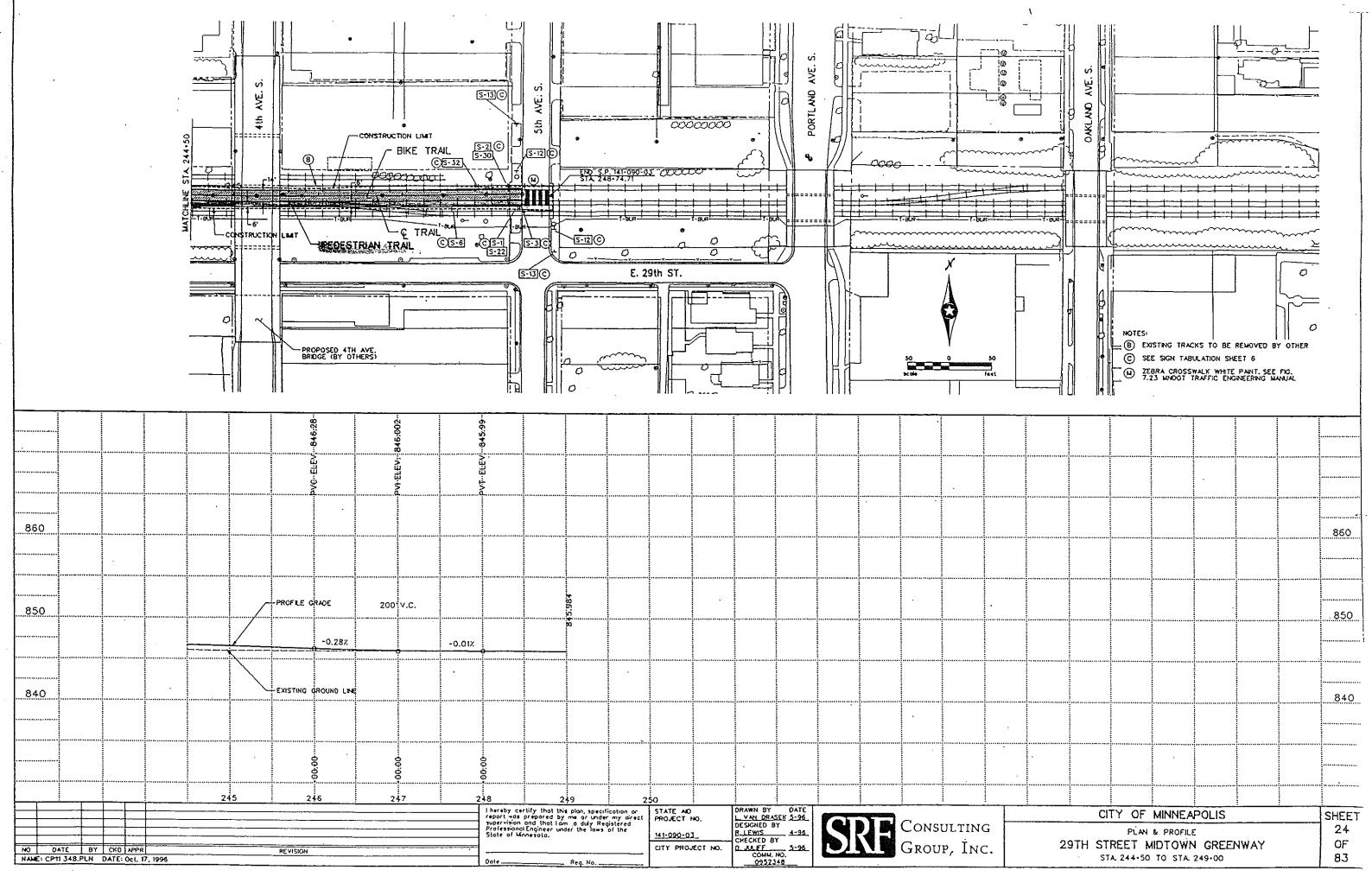






|         | STA 230-50                |                         | ONSTRUCTION LIMIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SOO BETWEEN                                                                                                 | MSE BN                                                                                                             |                                                                                                        | 1 m                                                       |                                                  |                                                                                                             | NOTES:<br>(A) CLEAR AND GRUB<br>(B) EXISTING TRACKS<br>(C) SEE TRAFFIC SIC<br>(C)<br>(C)<br>(C)<br>(C)<br>(C)<br>(C)<br>(C)<br>(C | A TREES<br>TO BE REMOVED BY OTHER<br>IN TABLATION, SHEET 6<br>O<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION<br>CONSTRUCTION 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| NO DATE | 231<br>231<br>BY CXD APPR | 00<br>07<br>232         | 233<br>REVISION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 234                                                                                                         | 235<br>L hereby certify th<br>report was prepart<br>supervision and th<br>Professional Engine<br>State of Monesota | 236<br>bit this plon, specificat<br>d by me or under m<br>tit com a duly Regist<br>r under the laws of | 237<br>ton or ST<br>y dir sct<br>ered<br>the<br>III<br>C1 | ATE AD<br>DJECT NO.<br>-090:03_<br>Y PROJECT NO. | 238<br>DRAWN BY DATE<br>DESIGNED BY<br>R.LEWIS 5-96<br>CHECKED BY<br>D.AILFF 5-96<br>COMM. NO.<br>-0922348- | 239<br>SRF                                                                                                                        | 240 241<br>Consulting<br>Group, Inc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |





APPROVE CITY COUNCIL JUL S

City Clark

Permit Agreement No. A09775

#### **First Amendment**

TO HCRRA PERMIT AGREEMENT A09775 AND BETWEEN THE HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY (Authority) AND THE CITY OF MINNEAPOLIS (City).

#### WITNESSETH:

WHEREAS, the Hennepin County Regional Railroad Authority (HCRRA) has invested in a transportation corridor paralleling Lake Street and lying between France Avenue and Hiawatha Avenue in the City of Minneapolis known as the 29th Street Rail Corridor (Corridor), principally for the purpose of implementing Light Rail Transit (LRT) and other permitted future transportation uses; and

WHEREAS, Hennepin County has identified this transportation corridor and its proposed transportation improvements as an integral part of a vision for long-range property value enhancements and business development known as Hennepin Community Works; and

WHEREAS, the Minneapolis neighborhoods adjoining this corridor, together with the City of Minneapolis (City), Hennepin County and HCRRA have named this Community Works project, the "Midtown Greenway"; and

WHEREAS, resolution 36-HCRRA-95 approved Agreement No. A09775 with the City of Minneapolis, providing for planning, engineering and bikeway construction in the 29th Street Rail Corridor, between France Avenue and Hiawatha Avenue in the City of Minneapolis, for an indefinite time period, at a Hennepin County Regional Railroad Authority (HCRRA) cost not to exceed \$304,200; and

WHEREAS, additional costs to construct retaining walls were found necessary to complete the design and construction of the bikeway; and

WHEREAS, \$45,800.00 of the additional costs of the retaining walls was found to be justified as necessary expense for the construction of a future Light Rail line in the corridor,

In consideration of the covenants by and between the parties, it is hereby agreed:

1. Authority hereby agrees to payment of \$45,800.00 as additional costs for

construction of retaining walls, bringing its total not to exceed for Agreement A09775 to

\$350,000.00 as shown in revised Exhibit A1 attached hereto.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement as of \_\_\_\_\_

, 1998.

Hennepin County Regional Railroad Authority

Upon proper execution, this agreement Will be legally valid and binding.

Assistant County Attorney Date:

to marinis

Chair, Board of Commissioners Date:

Executive Director Date: 10 %

**City of Minneapolis** 

Minneapolis City Attorney

Date:

Approved as to execution:

Assistant County Attorney 

Aller the 10/20190 Assi- Finance OFFicer

Minneapolis City Attorney Date:

ACTING/Jayor

Date:

PM Assistant/City Clerk

Date:

# Midtown Greenway Cost Estimate and Division of Cost:

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY, HENNEPIN COUNTY AND CITY OF MINNEAPOLIS

|                                                       | HCRRA     | Hennepin<br>County |     | ITY OF  |    | ISTEA      |
|-------------------------------------------------------|-----------|--------------------|-----|---------|----|------------|
| TEM<br>Vlaster Plan: France-Hiawatha                  |           |                    |     |         |    | о          |
| (Includes PE to I-35W)                                | \$ 50,000 |                    | \$  | 100,000 | \$ |            |
| Final Design/Construction Specs.<br>(France to I-35W) | 0         |                    |     | 190,000 |    | 0          |
| SUB-TOTAL                                             | \$ 50,000 |                    | \$  | 290,000 | \$ | 0          |
| Construction of Bikeway<br>ISTEA Project No.          |           |                    | \$  | 0       |    | \$ 3,000   |
| Clear and Grub                                        | \$ 0      | <u> </u>           |     | C       |    | 87,720     |
| Pedestrian Trail                                      | 0         | ļ                  |     | (       | +- | 176,000    |
| Bike Trail                                            | . 0       |                    | •   |         | 5  | 7,750      |
| Access                                                | - 5,000   |                    |     |         | 5  | 50,000     |
| Fine Grading                                          | C         |                    | _   |         | 0  | 35,500     |
| Retaining Walls                                       | 245,000   |                    |     |         | 0  | 69,000     |
| Fence                                                 |           |                    |     |         | 0  | 23,800     |
| Sign/Maps                                             |           | )                  |     |         | 0  | 317,000    |
| Lighting                                              |           | <u> </u>           | _+_ |         | 0  | 20,000     |
| Site Furnishing                                       |           | 0                  | _+- |         | 0  | 15,00      |
| Erosion Control                                       |           | 0                  |     |         | 0  | 200,00     |
| Landscape                                             | ,50,00    |                    | 00  |         | 0  | \$1,016,70 |
| SUB-TOTAL                                             | \$ 300,00 |                    |     | \$290,0 |    | \$1,016,70 |
| Total                                                 | \$350,00  | JU \$ 902,50       |     |         |    |            |

## Midtown Greenway Cost Estimate and Division of Cost: Hennepin County Regional Railroad Authority and City of Minneapolis

| Item                                                   | H  | CRRA    | City of<br>nneapolis | ]  | ISTEA       |
|--------------------------------------------------------|----|---------|----------------------|----|-------------|
| Master Plan: France-Hiawatha<br>(Includes PE to I-35W) | \$ | 50,000  | \$<br>100,000        | \$ | 0           |
| Final Design/Construction Spec's.<br>(France to I-35W) |    | 0       | <br>190,000          |    | 0           |
| SUB-TOTAL                                              | \$ | 50,000  | \$<br>290,000        | \$ | 0           |
| Construction of Bikeway<br>ISTEA Project No            | -  |         |                      | •  | , <u></u> , |
| Clear and Grub                                         | \$ | 0       | \$<br>0              | \$ | 3,000       |
| Pedestrian Trail                                       |    | 0       | 0                    |    | 87,720      |
| Bike Trail                                             |    | 0       | 0                    |    | 176,000     |
| Access                                                 |    | 5,000   | 0                    |    | 7,750       |
| Fine Grading                                           |    | 0       | 0                    |    | 50,000      |
| Retaining Walls                                        |    | 199,200 | 0                    |    | 35,500      |
| Fence                                                  |    | 0       | 0                    |    | 69,000      |
| Sign/Maps                                              |    | 0       | 0                    |    | 23,800      |
| Lighting                                               |    | 0       | 0                    |    | 317,000     |
| Site Furnishing                                        |    | 0       | 0                    |    | 20,000      |
| Erosion Control                                        |    | 0       | 0                    |    | 15,000      |
| Landscape                                              |    | 50,000  | 0                    |    | 200,000     |
| SUB-TOTAL                                              | \$ | 254,200 | \$<br>0              | \$ | 1,016,700   |
| Total                                                  | \$ | 304,200 | \$<br>290,000        | \$ | 1,016,700   |

|          |                  | APPROVED | BY   | CITY | COUNCIL |
|----------|------------------|----------|------|------|---------|
| 13.51603 |                  | 130      | 199  | 5    |         |
| 10       | Permit Agreement | Contrac  | t No | )    | A09775  |

This Permit Agreement made and entered into by and between the HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY, a Minnesota political subdivision, Southwest Street Level, Government Center, 300 South Sixth Street, Minneapolis, Minnesota 55487-0016, hereinafter referred to as the "Authority," and the CITY OF MINNEAPOLIS, a Minnesota political subdivision, City Hall, 350 South Fifth Street, Minneapolis, Minnesota 55415, hereinafter referred to as the "City."

#### WITNESSETH:

WHEREAS, the Hennepin County Regional Railroad Authority (HCRRA) has invested in a transportation corridor paralleling Lake Street and lying between France Avenue and Hiawatha Avenue in the City of Minneapolis known as the 29th Street Rail Corridor (Corridor), principally for the purpose of implementing Light Rail Transit (LRT) and other permitted future transportation uses; and

WHEREAS, Hennepin County has identified this transportation corridor and its proposed transportation improvements as an integral part of a vision for long-range property value enhancements and business development known as Hennepin Community Works; and

WHEREAS, the Minneapolis neighborhoods adjoining this corridor, together with the City of Minneapolis (City), Hennepin County and HCRRA have named this Community Works project, the "Midtown Greenway"; and

WHEREAS, the HCRRA, the City, and the neighborhoods are proposing to develop a master plan for the LRT and bicycle transportation improvements within the corridor owned by HCRRA; and

WHEREAS, the City has applied and received approval for an ISTEA grant for construction of a bicycle trail within the HCRRA Corridor between France Avenue and I-35W; and

WHEREAS, the City and HCRRA desire to enter into an agreement to develop a master plan for the Corridor and engineering plans for the first stage of construction, and provide for a division of cost for planning and construction of the bicycle trail between France Avenue and I-35W as an integral part of the Hennepin Community Works initiative.

In consideration of the covenants by and between the parties, it is hereby agreed:

#### 1. Master Plan

City shall develop a master plan for the 29th Street Rail Corridor from France Avenue to Hiawatha Avenue. Such plan shall include, but not be limited to, locations for LRT, LRT stations, and the conceptual bikeway and its amenities.

The Authority shall participate in discussion, review, and comment regarding LRT, LRT station location and design, bikeway, and other facilities and/or amenities, and their location within the corridor. Authority reserves the right to reject any plans proposed by the City on the grounds, in Authority's sole discretion, that said plans are inappropriate or incompatible with its future use of the Premises or with the operations of any railroad operating on the right of way adjacent to the Premises.

#### 2. <u>Preliminary Engineering Plans</u>

City shall complete preliminary engineering plans for the bicycle trail (ISTEA Project No. <u>S.P. 141-090-03</u>) within the Corridor between France Avenue and Fifth Avenue South. Authority agrees to cooperate with City in the development of such plans.

#### 3. <u>Final Design and Construction</u>

City shall complete final design plans, contract for and supervise construction of the bicycle trail (ISTEA Project No. <u>S.P. 141-090-03</u>) between France Avenue and Fifth Avenue South.

#### 4. <u>Payment</u>

Payment for the master plan, preliminary engineering, final design, and construction will be made by the parties as shown on the Division of Cost, Exhibit A, attached hereto and made a part of this agreement by this reference.

#### 5. <u>Premises</u>

Authority hereby agrees to grant certain rights and benefits to City hereinafter described with regard to that certain real property described as follows:

That part of the Hennepin County Regional Railroad Authority (HCRRA) right of way in the City of Minneapolis, generally consisting of the northerly 35 feet between France Avenue and Fifth Avenue South, all as delineated and colored green on HCRRA Property Maps numbered and attached hereto as Exhibit B.

The description of the Premises as determined by the parties will provide exceptions for future LRT station areas at Abbott Avenue, Hennepin Avenue, Lyndale Avenue, Nicollet Avenue, and any other potential LRT station area all as determined by Authority.

A more complete legal description will be prepared upon the completion of construction of the bike trail, and will replace and supersede the above description. The said real estate shall be hereinafter described as the "Premises."

6. <u>Use of Premises</u>

The Premises shall be for the temporary use of City, its agents, officers, employees, assignees and invitees for trail purposes. Authority reserves the right to limit, reject or refuse to permit the use of the Premises by City or any assignees for any purpose which Authority, in its sole discretion, deems inappropriate or incompatible with its future use of the Premises or the operations of any railroad operating on the right of way adjacent to the Premises. City

shall submit any proposed development or other physical alterations to the Premises to Authority to determine its acceptability to Authority prior to contracting any obligations or commitments in connection therewith.

7. Term

The term of this Permit Agreement shall be for an indefinite period, commencing on execution by the Chair of the Hennepin County Regional Railroad Authority until termination in accordance with Paragraph 8.

#### 8. <u>Termination</u>

Either party may, at any time and for any reason, terminate this Permit by giving one hundred eighty (180) days' written notice of its intention to do so. Such notice may be served upon the Hennepin County Regional Railroad Authority by delivering a copy thereof to the Executive Director at the principal office in the Hennepin County Government Center, Minneapolis, Minnesota, 55487, or by depositing the same in the United States Post Office directed to the Executive Director at the principal office. Such notice may be served on the City of Minneapolis by delivering a copy thereof to City Engineer, Room 203, City Hall, 350 South Fifth Street, Minneapolis, Minnesota 55415. Except as provided herein, this Agreement may not be terminated or revoked by either party hereto.

#### 9. <u>Rights Upon Termination</u>

On the expiration of one hundred eighty (180) days after such service of said notice, this Permit, and all rights hereunder, shall thereupon terminate and be at an end, saving and excepting such rights as may have accrued to either party hereunder prior to such termination. City shall, without further notice or demand, deliver possession of the Premises to the Authority at the expiration of said one hundred eighty (180) days and shall, before the

expiration of said one hundred eighty (180) days, remove all buildings and property placed upon the Premises which it may desire and have the right to remove. If it shall fail to remove buildings and property, its right shall, at the option of the Authority, cease and City's interest thereto shall be forfeited and at the same time shall belong to Authority or, in such case, if the Authority shall elect, it may, at any time after the expiration of said period of one hundred eighty (180) days, tear down and/or remove any or all such buildings and property at the expense of City without any liability for damages thereof in any respect whatsoever and City shall thereupon promptly reimburse Authority for all expenses incurred by it in doing so.

#### 10. Joint Use of Corridor

City acknowledges that the Premises was acquired by Authority specifically and solely for the purpose of constructing a light rail transit system or other permitted transportation uses and its associated facilities and that it is Authority's intention to allow City to use the Premises only until it is needed for that purpose. Nothing in this Permit shall be deemed to evidence any change by Authority of its intended use of the Premises for light rail transit purposes or other permitted transportation uses. Rather, Authority has agreed to the terms of this Permit to provide a temporary use for the Premises during the time required for further planning and development of the light rail transit system or other permitted transportation uses, including, without limitation of the foregoing, mainline and station locations, all as determined by the Authority.

#### 11. <u>Rent</u>

Upon any such termination of this Permit, rent shall be paid by the City to the date of termination fixed by said notice at the rate of \$1.00 per year.

#### 12. <u>Subpermits</u>

City may grant permits to assignees only upon written agreement of Authority. Any subpermit shall be on the same terms and conditions and for the same uses as are contained in this Permit.

#### 13. <u>Signage</u>

City shall provide, install and maintain signage, including kiosks, on the Premises identifying that the Premises are being used by the City of Minneapolis by permission of the owner, the Hennepin County Regional Railroad Authority, until the Premises are used for light rail transit or other future transportation uses. Any such signage shall also identify the improvement as part of Hennepin Community Works.

#### 14. <u>Nuisance, Waste</u>

City shall not permit the existence of any nuisance on said Premises. City, at all times, shall keep said Premises clean and shall comply with all laws, ordinances and regulations respecting City's business and use and occupation of said Premises. City, at its sole cost, shall make any and all improvements, alterations, repairs and additions, and install all appliances required on said Premises by or under any such regulations, ordinances or laws. No bills, posters or advertising matter of any kind shall be posted on said Premises; provided, however, that City may post on appropriate structures, informational materials relating to the permitted uses. City shall use all reasonable precautions to prevent any waste, injury, death or property damage and shall modify, repair or replace any railings, pathways or other improvements on the Premises when necessary.

#### 15. Utilities, Title, Existing Rights of Others

City accepts said Premises subject to the rights of any person, firm or corporation, including the Authority in and to any existing telephone, telegraph and/or other wires, poles and facilities of any kind whatsoever, whether or not of record, and should it, at any time, become necessary because of City's use of the Premises to relocate any of said poles, wires or facilities by reason of this Permit, City shall bear and pay the cost of so doing.

City also accepts said Premises subject to any want or failure at any time of Authority's title to said Premises or any part thereof and City shall assume any damages sustained by City in connection therewith. City also accepts such Premises subject to rights of any party, including Authority, in and to any roadways, easements, leases and permits, whether granted, at Authority's sole discretion, either prior to or after the date of this Permit Agreement. City agrees to provide to Authority or other tenants of Authority access over and through the Premises on these roadways and easements should such access be deemed necessary by Authority. City accepts said Premises subject to the right of Authority, its employees, agents, permittees, lessees, and contractors when reasonably necessary to walk upon said Premises to repair adjacent property and the right of Authority, its employees, agents, permittees, lessees, and contractors to temporarily place equipment upon the property when reasonably necessary for the purpose of maintaining, repairing, inspecting or constructing upon Authority's property.

#### 16. Indemnification

City shall defend, indemnify and hold harmless Authority, its Commissioners, officers, agents, and employees from any liability, claims, demands, personal injury, costs, judgments, or expenses, including reasonable attorney's fees, resulting directly or indirectly from an act

or omission of City, its agents, employees, customers, invitees, assignees, permittees, lessees or others on the Premises.

Authority shall not be liable to City or those claiming by, through, or under City for any injury, death or property damage occurring in, on or about the Premises based upon the design, construction, operation or maintenance of the Premises by City or any assignees, nor for the loss or damage by reason of the present or future condition of repair of the Premises, or for the loss or damage arising from the acts or omissions of City, its agents, employees, customers, invitees, assignees, permittees, lessees, or others on the Premises.

#### 17. Insurance

City further agrees that if in any case the release and indemnity provided in this section shall not be valid, Authority shall have the full benefit of any insurance effected by the City upon the property injured, destroyed or damaged and/or against the hazard involved; and City agrees that any and all such insurance shall be so written that the insurer shall have no claim or recourse of any kind whatsoever against Authority in connection therewith.

#### 18. <u>Covenant</u>

City, in consideration of the permitting of the said Premises, as herein provided, hereby covenants and agrees to pay the rent therefor promptly, as above provided, and fully to abide by and perform all and singular the conditions, covenants and agreements herein contained and to be observed and performed by said City and to yield up said Premises unto the Authority at the expiration or termination of the Permit Agreement in as good condition as when entered upon.

#### 19. <u>Ouiet Enjoyment</u>

Authority has the right and authority to enter into this Agreement and if City pays the rent required hereby and otherwise performs the terms hereof to be performed by City, City shall, during the term hereof, be entitled to quiet enjoyment and possession of the Premises subject to the termination provisions hereof. Notwithstanding the foregoing, City acknowledges that the rights provided to it by virtue of the Permit are subject to the provisions of Paragraph 15.

#### 20. <u>Waiver</u>

No receipt of money by Authority from City after any default by City or after the expiration of this Permit or after the service of any notice or after the commencement of any suit or after final judgment for possession of said Premises, shall waive such default or reinstate, continue or extend the term of this Permit or affect any such notice or suit, as the case may be. No waiver of any default of City shall be implied from omission by Authority to take any action on account of such default, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated.

#### 21. Breach

It is further agreed between the parties hereto, that if the said City shall breach or make default in any of the conditions, covenants or agreements of this Permit, which breach or default shall continue for fifteen (15) days after City's receipt of written notice thereof from Authority, then it shall be lawful for the Authority, then or at any time thereafter, to declare this Permit ended, and to re-enter said Premises and take possession thereof, with or without process of law, and to use any reasonable or necessary lawful force for regaining possession; whereupon the rights and obligations of the parties shall be the same as above specified in the case of termination pursuant to Paragraph 8; and it is hereby further agreed and provided that any waiver at any time of a breach of any condition, covenant or agreement of this Permit shall extend only to the particular breach so waived and shall, in no manner, impair or affect the existence of such condition, covenant or agreements, or the right of Authority thereafter to avail itself of same and any subsequent breach thereof. In the event Authority has to take action for repossession of said property, City, its assigns or heirs shall be liable for reasonable attorney's fees incurred by Authority.

#### 22. Assignment

The benefits and obligations of this Permit shall extend to and shall bind the heirs, administrators, executors, leases, successors or assigns of the parties hereto, but no interest in this Permit shall be assigned, nor said Premises or any part thereof shall be subpermitted, used or occupied by any party other than the City unless specifically stated herein. Authority reserves the right to review and revise the rental rate applicable to this Permit upon any change in the status of the Permit, the City or person occupying the Premises during the term of this Permit or any renewal thereof.

#### 23. Improvements, Maintenance

City shall be responsible for the construction of all improvements necessary to its use of the Premises and shall be responsible for the maintenance of said Premises. City shall also be responsible for the construction of all bridges and crossings deemed necessary for City to provide for any trails on the Premises or to otherwise use the Premises. Construction plans shall be submitted to the Authority for review and comment. Authority reserves the right to reject any plans for construction proposed by City on the grounds, in Authority's sole

discretion, that said plans are inappropriate or incompatible with its future use of the Premises or with the operations of any railroad operating on the right of way adjacent to the Premises.

#### 24. Environmental Concerns

City shall not create or permit any condition on the Premises that could present a threat to human health or to the environment. City shall bear the expense of all practices or work, preventative, investigative or remedial, which may be required because of any conditions of the Premises introduced by City, assignees or invitees during City's period of use, including conditions introduced by City, assignees, or invitees which affect other lands. City expressly agrees that the obligations it hereby assumes shall survive cancellation of this Permit. City agrees that statutory limitation periods on actions to enforce these obligations shall not be deemed to commence until Authority discovers any such health or environmental impairment, and City hereby knowingly and voluntarily waives the benefits of any shorter limitation period.

Authority shall have the right, but not the duty, to enter upon the Premises from time to time as set forth below to inspect the Premises for environmental contamination and in the course thereof to conduct soil and groundwater testing and to perform environmental investigation, remediation or mitigation. Authority may enter the Premises during regular business hours of City without prior notice, and may enter the Premises during periods other than regular business hours either with prior written consent of City or without if Authority reasonably believes that an emergency exists on the Premises. Authority shall conduct any such inspections or testing so as to minimize interference with City's operations. Authority's

entry on to the Premises pursuant to this paragraph shall not relieve the City's obligation to pay rent under this Permit.

In addition to the foregoing provisions of this Paragraph 24, and in exchange for the rights and privileges granted in this Permit Agreement, City hereby agrees to bear the expense of all practices or work, preventative, investigative or remedial necessary to comply with all federal, state, local and other governmental statutes, rules and regulations necessary for City's use of the Premises for trail and park purposes regarding any hazardous waste, pollutant, contaminant or petroleum related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. Further, City agrees to defend, indemnify and hold harmless Authority, its Commissioners, officers, agents and employees from any liability, claims, demands, personal injury, costs, judgments, or expenses, including reasonable attorney's fees arising from exercise of the rights granted by this Permit Agreement and resulting from the presence of any hazardous waste, pollutant, contaminant or petroleum related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. City expressly agrees that the obligations it hereby assumes shall survive the cancellation of this Permit.

Notwithstanding the foregoing, the Authority agrees to assert its rights against the Soo Line Railroad Company for environmental work on the site pursuant to Paragraph 17 of the Purchase Agreement dated December 23, 1992, between the Authority and the Soo Line Railroad Company. The City agrees to immediately notify the Authority of any environmental concerns which arise during the construction of the bicycle trail so that the Authority may inform and confer with the Soo Line with respect to management of any

required remediation. The City's obligation to the Authority pursuant to this paragraph 24 is limited to that which is not covered by the Soo Line Railroad agreement with the Authority.

# 25. Compliance with Laws, Ordinances and Rules

City agrees to comply with all laws, ordinances and regulations of federal, state, municipal and local government agencies as they apply to use of the Premises. City agrees to comply with rules as may be promulgated from time to time by Authority.

# 26. <u>Condition of Premises Inspection</u>

City accepts the Premises in an "AS IS" condition with no express or implied representations or warranties by Authority as to the physical condition or fitness or suitability for any particular purpose, express or implied. City is responsible for and has had ample opportunity to inspect the Premises, is familiar with the same, and has determined to its satisfaction the fitness of the Premises for its intended use.

City acknowledges and assumes all risks associated with the location of the Premises and its proximity to the railroad right of way adjacent to the Premises and to any railroad operations by any railroad company thereon.

# 27. <u>Liens and Encumbrances</u>

City shall not permit any liens or encumbrances to be established or remain against the Premises, including but not limited to, encumbrances with respect to work performed or equipment or materials furnished in connection with use of the Premises by City, its agents, employees, customers, invitees, assignees, lessees or other occupiers of the Premises pursuant to this Permit.

13

IN WITNESS WHEREOF, the parties hereto have signed this Agreement as of

, 1995.

Upon proper execution, this agreement will be legally valid and binding.

Assistant County Attorney Date: J

Minneapolis Date:

Approved as to execution:

Assistant County Attorney C; Date:

Minneapolis City Attorney Date: Hennepin County Regional Railroad Authority

Chair, Board of Commissioners Date:

Executive Date:

**City of Minneapolis** 

Mayor 8-29-95

Date:

unter ASST. 95

Date:

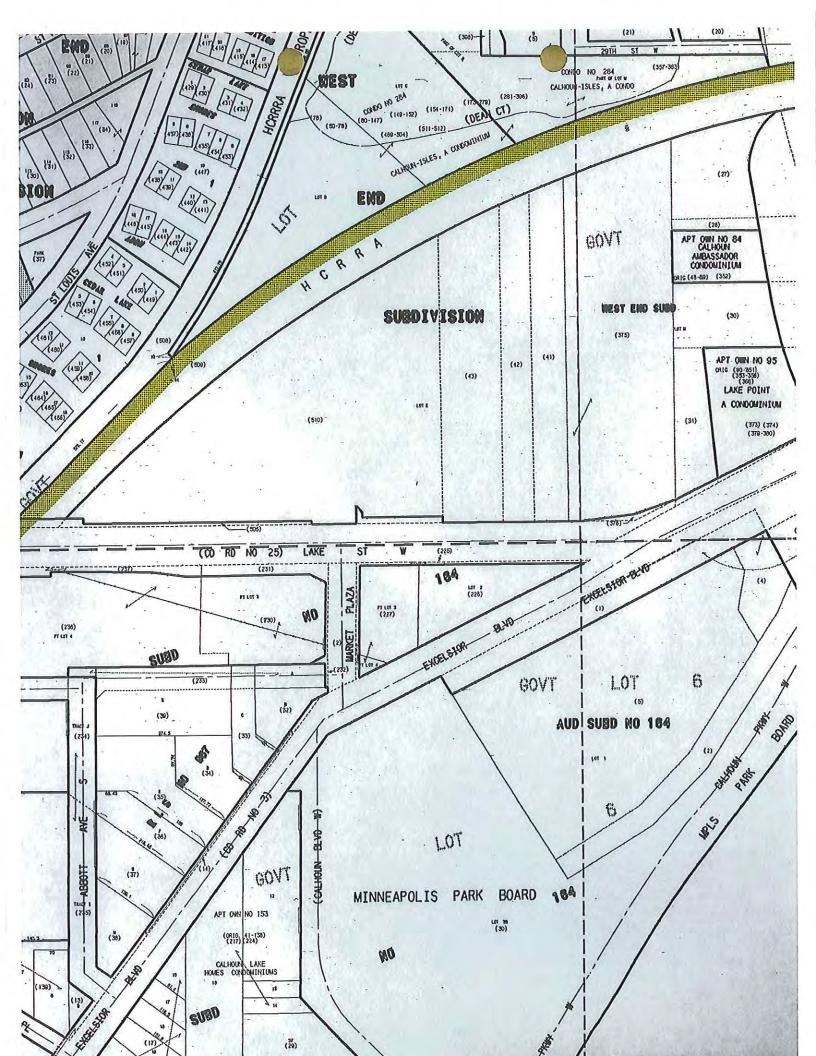
ASSISTANT FINANCE OFFICER

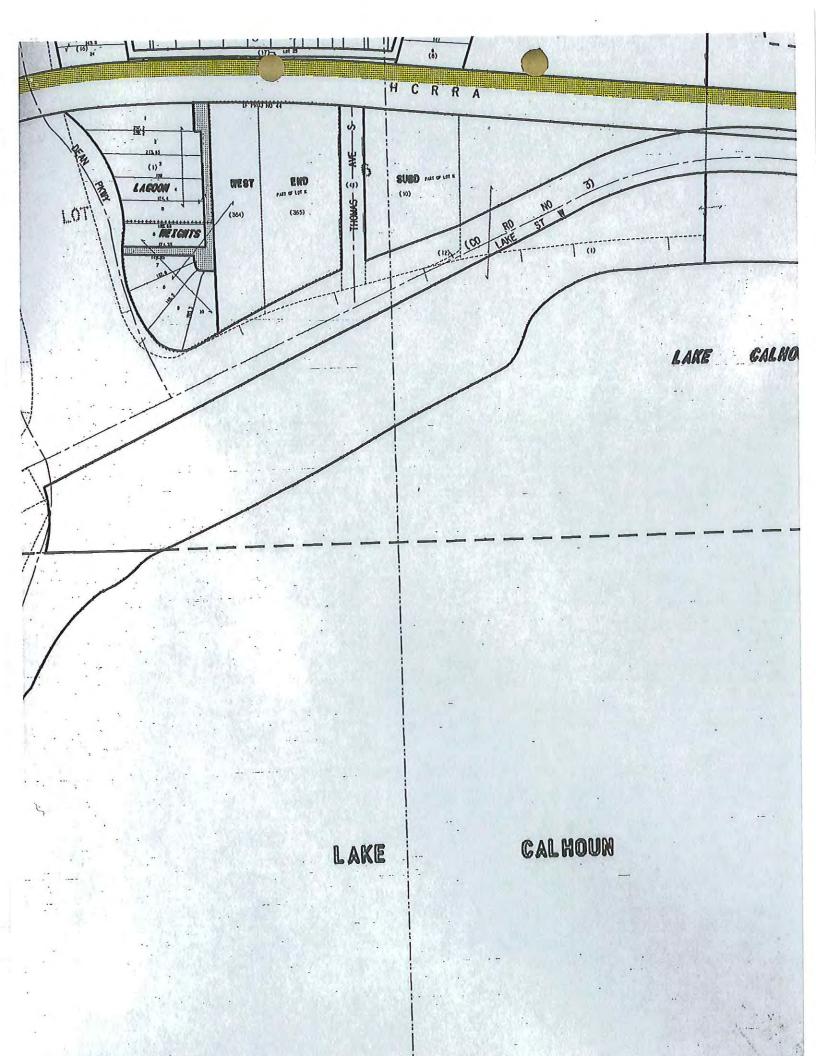
# Contract No. A09775 EXHIBIT A

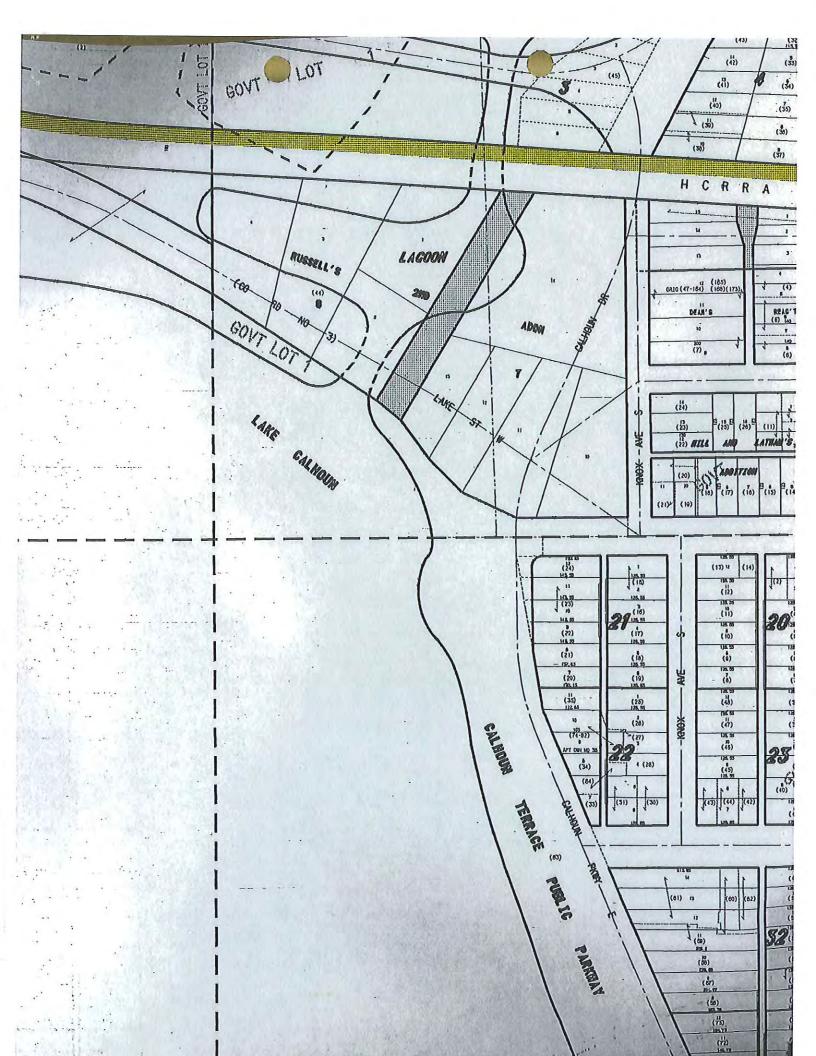
Midtown Greenway Cost Estimate and Division of Cost: HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY AND CITY OF MINNEAPOLIS

| Item                                                   | Ĥ  | CRRA    | M  | City of<br>inneapolis | ISTEA           |
|--------------------------------------------------------|----|---------|----|-----------------------|-----------------|
| Master Plan: France-Hiawatha<br>(Includes PE to I-35W) | \$ | 50,000  | \$ | 100,000               | \$<br>0         |
| Final Design/Construction Spec's.<br>(France to I-35W) |    | 0       |    | 190,000               | 0               |
| SUB-TOTAL                                              | \$ | 50,000  | \$ | 290,000               | \$<br>0         |
| Construction of Bikeway<br>ISTEA_Project No            |    | ·····   |    |                       |                 |
| Clear and Grub                                         | \$ | 0       | \$ | 0                     | \$<br>3,000     |
| Pedestrian Trail                                       |    | 0       |    | 0                     | <br>87,720      |
| Bike Trail                                             |    | 0       |    | . 0                   | 176,000         |
| Access                                                 |    | 5,000   |    | 0                     | <br>7,750       |
| Fine Grading                                           |    | 0       |    | . 0                   | 50,000          |
| Retaining Walls                                        |    | 199,200 |    | 0                     | 35,500          |
| Fence                                                  |    | 0       |    | 0                     | 69,000          |
| Sign/Maps                                              |    | 0       |    | 0                     | 23,800          |
| Lighting                                               |    | 0       |    | . 0                   | 317,000         |
| Site Furnishing                                        |    | 0       |    | 0                     | 20,000          |
| Erosion Control                                        |    | 0       | ÷  | 0                     | 15,000          |
| Landscape                                              |    | 50,000  |    | 0                     | 200,000         |
| SUB-TOTAL                                              | \$ | 254,200 | \$ | 0                     | \$<br>1,016,700 |
| Total                                                  | \$ | 304,200 | \$ | 290,000               | \$<br>1,016,700 |









| (73)         (11)           (17)         (13)           (17)         (13)           (10)         (13)           (10)         (13)           (10)         (13)           (10)         (10)           (10)         (10)           (11)         (11)           (11)         (11)           (11)         (11)           (11)         (11)           (11)         (11)           (12)         (11)           (12)         (12)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13)         (13)           (13) <th></th> <th>KENNIQOO 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                                                                                                    | CONDOMINIUM NO 292<br>INTOIN ON LAKE<br>(0816: 139-191)<br>(282) (281-329)<br>CONDOMINIUM NO 293<br>COMMERCE AT INTOIN ON LAKE<br>(135-138)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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# Memorandum of Understanding Between The City of Minneapolis, Department of Public Works And Hennepin County

The City of Minneapolis wishes to complete the Midtown Greenway Trail Phase I project from the west city limits to Fifth Avenue South. This will require cost sharing from the City of Minneapolis, Department of Public Works (City), Hennepin County Community Works (Community Works) and Hennepin County Regional Railroad Authority (HCRRA). The City and HCRRA shared in the cost of the Master Plan (2/3 and 1/3 costs split respectively). The City has paid for final design and construction specifications. The City will pay for construction engineering.

The purpose of this Memorandum of Understanding is to identify the cost sharing between the City and Hennepin County for construction of Midtown Greenway Phase I project.

The construction bid for the project is \$2,857,330. The City has secured \$1,016,376 from ISTEA for the project. Hennepin County will be responsible for \$962,500 (not to exceed this amount). Subject to a separate Memorandum of Understanding, the Hennepin County Regional Railroad Authority is requested to consider providing up to \$350,000 for this project. Minnesota Department of Transportation will request these funds when the contract is awarded.

This Memorandum is a summary and represents the cost sharing agreed to between the parties. All agreements and legal issues are subject to the necessary City Council approvals and Hennepin County Commissioners' approvals.

David J. Sonnenberg City Engineer-Director of Public Works

Hennepin County Administrator

APPROVED AS TO FORM. County Attorney

ZATHSTREE OUITCLAIM DEED TO HIAWATHA GREENWAY MIDTOWN KECORDED IN Abstract 8-5-93 OC #61288 (reserved for recording data) (reserved for valuation and tax data) 1993 Date: July 20,

For valuable consideration, Soo Line Railroad Company ("Grantor" or "Seller"), a corporation under the laws of the State of Minnesota, hereby conveys and quitclaims to Hennepin County Regional Railroad Authority ("Grantee"), a political subdivision and local government unit under the laws of the State of Minnesota, real property in Hennepin County, State of Minnesota, described below, together with all hereditaments and appurtenances thereto. The real property is described as follows:

See attached Exhibit A

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SOO LINE RAILROAD COMPANY By: Its: President and

# 9211-MPLS-HCRRA-2 (REVISED)

STATE OF MINNESOTA )SS COUNTY OF HENNEPIN

The foregoing quitclaim deed was acknowledged before me this <u>JO</u> day of <u>Julu</u>, 1993 by Edwin V. Dodge, the President and CEO of Soo Line Railroad Company, a corporation under the laws of the State of Minnesota, on behalf of the corporation.

Notarv Publi

Tax statements for the property should be sent to Grantee at: <u>HennepinCounty Resional Raiload Authority</u> <u>GovernmentCenter, Mpls, MN 55487-0016</u> <u>Attn: Deputy Exercutive Director</u>

\*\*\*\*\* Î nota, RENN tons d ammission Expires Apr. 2, 1993

This instrument was drafted by: John P. Nail Soo Line Railroad Company P.O. Box 530 Minneapolis, MN 55440

Mtge Code 763

9211-MPLS-HCRRA-2 (REVISED)

All that part of the Soo Line Railroad Company right of way passing through the Northwest Quarter of the Southwest Quarter, the Southwest Quarter of the Southwest Quarter, and the Southeast Quarter of the Southwest Quarter, all in Section 36, Township 29, Range 24; all of which lies westerly of the easterly right of way line of Hiawatha Avenue.

also:

All that part of the Soo Line Railroad Company right of way passing through the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 35, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 33, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southeast Quarter and the South Half of the Southeast Quarter, Section 32, Township 29, Range 24; and the North Half of the Northwest Quarter of Section 5, Township 28, Range 24.

(Abstract Property)

All that part of the North Half of the Southeast Quarter of the Southwest Quarter of Section 35, Township 29, Range 24, lying South of the South line of Block 3, "Avery's Chicago Avenue Addition to Minneapolis", and between the extensions South of the East and West lines of said Block 3.

According to the recorded plats thereof and according to the Government Survey thereof, as evidenced by Certificate of Title No. 371889.

(Torrens Property)

#### QUITCLAIM BILL OF SALE

# KNOW ALL PERSONS BY THESE PRESENTS:

Soo Line Railroad Company ("Seller"), in consideration of the sum of \$1.00 and other valuable consideration to it paid, receipt of which is hereby acknowledged, hereby conveys and quitclaims to Hennepin County Regional Railroad Authority ("Buyer") the following property: all personal property to be conveyed by Seller to Buyer pursuant to that certain Purchase Agreement dated December 23, 1992 between Seller and Buyer.

This conveyance is made strictly on an "as is, where is" basis, and Seller makes no express or implied representation or warranty whatsoever concerning said property (including, without limitation, express or implied representations or warranties of title, merchantability, or fitness for a particular purpose).

SOO LINE RAILROAD\_COMPANY By: Its:

Date: July 30, 1993

29th St. MINTOWN GREENWAY

PURCHASE AGREEMENT BETWEEN SOO LINE RAILROAD COMPANY AND HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

THIS AGREEMENT, made and entered into this 23 day of <u>December</u>, 1992, by and between the Soo Line Railroad Company, a Minnesota corporation, hereinafter sometimes called "Soo", and the Hennepin County Regional Railroad Authority, a political subdivision and local government unit of the State of Minnesota, hereinafter sometimes called the "Authority".

#### RECITALS

Soo presently owns and operates a line of railroad parallel with the approximate alignment of 29th Street South in the City of Minneapolis, County of Hennepin, State of Minnesota between Hiawatha Avenue and France Avenue sometimes referred to as the 29th Street Corridor.

The State of Minnesota Department of Transportation and the City of Minneapolis propose to reconstruct Hiawatha Avenue between Lake Street and 24th Street South in the City of Minneapolis and desire to eliminate all Soo rail crossings of Hiawatha Avenue within this segment.

Soo is willing to alter its operations in and through the City of Minneapolis to accommodate the Hiawatha Avenue improvements and is willing to sever its rail line across Hiawatha Avenue, providing alternate rail routes are provided for Soo and other railroads presently using the Soo crossings of Hiawatha Avenue under trackage

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rights agreements. Soo also expects to be compensated for any increased operating expense resulting from use of alternate routes.

Elimination of rail links across Hiawatha between Lake Street and 24th Street will save substantial sums of money for all governmental agencies involved in funding the Hiawatha Avenue reconstruction.

The Authority desires to acquire by purchase the 29th Street Corridor from Hiawatha Avenue west to France Avenue for future use for public transportation purposes. Acquisition and utilization of said corridor will sever the rail links across Hiawatha substantially accommodating the Hiawatha Avenue reconstruction.

NOW THEREFORE, in consideration of the foregoing, the parties agree as follows:

### SECTION 1 - DEFINITIONS

A. "Agreement" shall mean this Agreement dated  $\frac{2-23}{2-2-3}$ , 1992. All references in this document to Exhibits are to those attached to, and made a part of, this Agreement.

B. "Property" is defined in Section 2A and shown on Exhibit
 A and Exhibit B to this Agreement.

C. "Railroad Easement" shall mean the easement created by this Agreement and legally described in Exhibit C, providing for the continuation of Soo's present operation of common carrier freight railroad service for a limited period of time and the use of the Property to be acquired by the Authority as a result of this Agreement as may be necessary for said railroad operations.

D. "Loss or Damage" includes any and all claims, liabilities, damages, costs, judgments, and expenses (including reasonable attorneys' fees and expenses) of every character incident to loss or destruction of or damage to Property and injury to or death of persons, arising upon or as a result of any operations conducted under the terms of this Agreement.

E. "Sole Employees" and "Sole Property" shall mean employees, agents, contractors, passengers, invitees, railroad and motor vehicle equipment, including lading, and other equipment of each of the parties or their agents or contractors while engaged in, or about to engage in, maintaining, using, operating, constructing, repairing, renewing, replacing and improving the trackage in the Railroad Easement, or in switching or handling railroad cars of the respective parties hereto.

F. "Taxes" shall mean lawfully imposed real estate taxes and assessments including, but not limited to, special assessments.

G. "Trackage" shall mean all rail, cross ties, related track appliances such as spikes and tie plates (sometimes known as other track material), ballast, all grade crossing signals and other signal and communication equipment located upon the Property, and including trackage laid in and across public streets and highways.

H. "Environmental Site" shall mean the physical location from which emanates any claims, damages, liabilities, costs, including costs and expenses of response, removal, remediation or disposal expenses (including reasonable experts' and attorneys' fees), suits or obligations of any and every nature resulting from

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the generation, treatment, use, handling, storage, transportation, manufacture, release, discharge or disposal of any toxic or hazardous substances or wastes, pollutants, or contaminants (including, without limitation, asbestos, urea formaldehyde, the group of organic compounds known as polychlorinated biphenyls, petroleum products including gasoline, fuel oil, crude oil and various constituents of such products) on or from the Property.

# SECTION 2 - PROPERTY TO BE ACQUIRED

A. Soo agrees to sell and the Authority agrees to buy all of Soo's interest in the railroad right-of-way presently owned and operated by Soo along the approximate alignment of 29th Street South in the City of Minneapolis between the east right-of-way line of Hiawatha Avenue and the westerly city limits of the City of Minneapolis all as shown and described in Exhibits A and B attached (the Property). Included in the Property to be sold are the following:

- (1) Soo's interest in all lines of railroad between Cedar Avenue and Hiawatha Avenue, some of which cross Hiawatha Avenue in the vicinity of 28th Street and the other crossing Hiawatha Avenue in the vicinity of 26th Street.
- (2) Soo's interest in any industrial spurs or other spur track rights of way appurtenant to the right-of-way.
- (3) Soo's interest in any bridges, retaining walls, and other similar structures upon, over, under, across, or appurtement to the right-of-way, but excluding grade

crossing protection signals and other signal and communication equipment.

- (4) Soo's interest in any permits, licenses, ordinances, easements, or other rights permitting the occupation of the right-of-way and the operation of a railroad over the Property including (but not limited to) rights to cross, traverse, or operate in or upon public streets and rights of way, but excluding Soo's rights and obligations to provide common carrier freight rail service on the Property:
- (5) Soo's interest in the railroad right-of-way located in public streets and other public rights of way.
- Valuation maps, plats, deeds of conveyance, and other (6) similar records relating to Soo's ownership of the rightof-way. Except as provided herein, the originals of such records shall be delivered to the Authority within a mutually convenient and reasonable time following the closing. A copy may be delivered in lieu of the original under the following circumstances: (i) the original is unavailable, (ii) the record also pertains to Soo property other than the 29th Street Corridor, or (iii) the original record is reasonably required by Soo during the term of the Railroad Easement (as defined in this in which event the original shall be Agreement), delivered to the Authority promptly after the termination of the Railroad Easement.

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B. Trackage is excluded from the property to be sold, except as otherwise provided by Section 12.

C. Notwithstanding acquisition of the Property by the Authority, the Authority grants use of a portion of the Property for purposes of the Railroad Easement and limited access to other portions of the Property solely for maintaining and performing Railroad operations upon the Railroad Easement, under the terms set forth in this Agreement. The Authority reserves the right to enter, and make alterations upon, the Railroad Easement, provided that such entry and alterations do not unreasonably interfere with Soo railroad operations and are in accord with other provisions of this Agreement.

#### SECTION 3 - CONVEYANCE AND CLOSING

A. The property will be conveyed at the closing by quit claim deed and bill of sale in a form consistent with Exhibits D and E and such other documents or evidence as the Authority or its counsel may reasonably request or as required by applicable law.

B. The Railroad Easement will be conveyed in a form consistent with Exhibit C which provides that the Railroad Easement is governed by the terms of this Agreement and shall be delivered at the closing .

C. The closing of this transaction shall occur on or before June 1, 1993, at 10:00 a.m. at the office of the Authority, Southwest Street Level Government Center, Minneapolis, Minnesota or at such other time or place as may be mutually agreed upon by the parties.

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D. The Authority will purchase, affix, and cancel any and all documentary stamps in the amount prescribed by statute, and will pay any and all deed taxes, transfer taxes, excise taxes, sales taxes, use taxes, and fees incidental to the transfer of the Property or the recordation or filing of the deed or deeds.

## SECTION 4 - PAYMENT

A. The Authority agrees to pay funds in the following amounts to Soo for the Property in accordance with the terms and conditions of this Section and in accordance with other terms of this Agreement. All amounts are net to Soo and shall be paid by immediately negotiable warrant. The funds so paid will constitute full and final payment by the Authority to Soo for each of the following defined items:

- (1) \$9,000,000 for all of the Property described in Section2 and Exhibits A and B.
- (2) As full and final compensation for all increased operating costs and trackage rights:
  - \$688,000 for trackage rights incurred by Soo and (a) its railroad tenants in transporting rail traffic via alternate routes that now originates or Property, or traverses theterminates on the as such traffic continues, Property, so long subject to adjustment as a result of audit accepted by the Minnesota Department of Transportation or designee before payment. The Authority its

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anticipates the audit will be completed by closing and will use its best efforts to achieve that goal.

- (b) \$158,000 for increased operating costs incurred by Soo to continue to serve customers originating or terminating traffic on the Property after Soo's present line of railroad is severed at Hiawatha Avenue, all subject to adjustment as a result of audit accepted by the Minnesota Department of Transportation or its designee before payment. The Authority anticipates the audit will be completed by closing and will use its best efforts to achieve that goal.
- Payment for increased operating costs and trackage (c) rights will be adjusted in accordance with audit and paid at the later of closing, completion of the audit or at such time as the existing Soo rail connections across Hiawatha Avenue are severed. Said payments for increased operating costs and trackage rights may be made directly by the Authority to Soo or, in lieu thereof, by the governmental agencies participating in the Hiawatha Avenue reconstruction project. Provided, however, that the obligation to make such payments to Soo, or to cause said payments to be made to Soo by others, shall be and remain the obligation of the Authority.

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B. The payments described in 4A will be paid in the amounts and at the times set forth as follows:

(1) \$8,250,000 at closing.

(2) \$ 750,000 after termination of the Railroad Easement in accordance with Section 12 of this Agreement. Said sum will be deposited as the Railroad Easement Escrow in an interest bearing escrow account or certificate of deposit with interest earned to be reinvested in the escrow account. The entire balance of the Railroad Easement Escrow account including accrued interest, less the costs associated with said account, will be disbursed to Soo upon the written authorization of the Authority, which shall be given upon termination of the Railroad Easement in accordance with Section 12.

C. The payments described in 4A(2) for increased operating costs and trackage rights will be adjusted in accordance with audit and paid at the later of closing, completion of the audit or at such time as the existing Soo rail connections across Hiawatha Avenue are severed. Said payments for increased operating costs and trackage rights may be made directly by the Authority to Soo or, in lieu thereof, by the governmental agencies participating in the Hiawatha Avenue reconstruction project. Provided, however, that the obligation to make such payments to Soo, or to cause said payments to be made to Soo by others, shall be and remain the obligation of the Authority.

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#### SECTION 5 - CONDITIONS PRECEDENT TO CLOSING

A. <u>General Conditions</u>. The obligations of the Authority to consummate the transaction contemplated by this Agreement will be subject to fulfillment on or before the closing date of all of the following conditions, any of which may only be waived by the Authority in writing.

- Closing of this transaction is contingent upon obtaining of any required regulatory and other governmental approvals.
- (2) Closing of this transaction is contingent upon the Authority obtaining commitments satisfactory to it to pay all of the increased operating costs and trackage rights set forth in Section 4A(2) of this Agreement.
- Provision by Soo of any and all documents to comply with (3) the terms of this Agreement and execution of any and all instruments, documents and consents as necessary, including quit claim deeds, releases executed by any secured parties and in a form acceptable to insurers of title as to any and all security interests, mortgages or other encumbrances on the Property. Within 90 days after the closing, Soo shall cause to be recorded partial releases or satisfactions of any mortgages or deeds of trust of Soo which may appear of record as a lien against the Property, and Soo shall indemnify the Authority, and the Authority's title insurer, for any loss or expense sustained by either of them as a result of Soo's failure

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to have such lien so released or satisfied. The existence of any such lien will not afford a basis for objecting to the marketability of Soo's title.

- (4) Any judgment against Soo which may appear of record as a lien against the Property shall be settled and satisfied by Soo within 30 days after it becomes final and unappealable, and Soo shall indemnify the Authority, and the Authority's title insurer, for any loss sustained by either of them as a result of Soo's failure to have such lien so settled and satisfied. The existence of any such lien will not afford a basis for objecting to the marketability of Soo's title.
- (5) Soo shall provide agreements by present tenants of the Property to vacate or terminate trackage rights presently in effect, to take effect no later than such time as the Railroad Easement is terminated.
- (6) The Property will be conveyed subject to facts which would be disclosed by a comprehensive survey, rights and claims of parties in possession, rights of the public, and those easements, leases, licenses and permits listed in Exhibit F. The Authority may object to the marketability of Soo's title on the basis of such matters. Soo is under no obligation to cure title defects. If a title defect is not cured, the Authority at its option may terminate this Agreement at any time prior to closing.

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(7) The Property shall be conveyed subject to the rights of CMC Real Estate Corporation or its successors or assigns to the location of certain billboards on the Property shown by arrows on Exhibit G and which shall not afford a basis for objecting to the marketability of Soo's title.

B. <u>Environmental Conditions</u>. The obligations of the Authority and Soo to consummate the transaction contemplated by this Agreement are subject to the fulfillment on or before the closing date of all of the following environmental conditions, any of which may only be waived by the other party in writing:

- (1) All of the environmental representations and warranties of the Soo contained in this Agreement shall be true and correct on and as of the closing date.
- (2) Soo shall have completed a Phase II environmental investigation of the Property and a supplemental Phase I environmental investigation and shall have shared all final reports and recommendations of such investigations with the Authority within 30 days from the execution of this Agreement.
- (3) The Authority shall have performed an environmental investigation of the Property supplemental to the Phase II, the scope of which shall be in the sole discretion of the Authority.

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- (4) If the highest estimated cost to remediate the Property to federal, state and local environmental regulatory standards for use as a transportation corridor exceeds \$2 million, either party may terminate this Agreement by written notice to the other prior to the closing and thereupon neither party shall have any further rights or obligations under this Agreement. The estimate of remediation cost shall be based upon remediation techniques that reasonably accommodate the Authority's time needs in using the Property as a transportation corridor.
- (5) Soo shall have sealed or caused to have been sealed in accordance with the requirements of Minnesota law any existing wells known to Soo and shall have delivered the required Sealed Well Certification to the Minnesota Department of Health except for the two monitoring wells which are the subject of a right of entry in an agreement between the Soo and the Minneapolis Community Development Agency (designated in said agreement as MW304 and MW306), for which a partial assignment shall be made to the Authority.

C. <u>Corporate Authority Conditions</u>. The obligations of the Authority to consummate the transaction contemplated by this Agreement are subject to delivery by Soo to the Authority of a certificate or certificates dated as of the closing date and signed

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on behalf of Soo by its Secretary or Assistant Secretary to the effect that:

- The copy of Soo's restated Certificate of Incorporation or Articles of Incorporation attached to the certificate are true, correct and complete;
- (2) No amendment to said Articles or Certificate has occurred since the date of the last amendment annexed;
- (3) A true and correct copy of the By-Laws of Soo as in effect on the date thereof and at all times since the adoption of the resolutions referred to in the following paragraph is annexed to such certificate;
- (4) The resolutions by the Board of Directors of Soo authorizing the actions taken in connection with the sale of the Property including the execution and delivery of this Agreement and any related agreements, were duly adopted and continue in force and effect (a copy of such resolutions to be annexed to such certificate).
- (5) The officers of Soo executing this Agreement and any other related agreements executed and delivered pursuant to or in connection with this Agreement are incumbent officers of Soo and that their signatures as shown on such certificate or certificates are genuine.
- (6) Soo is a corporation in good standing in the State of Minnesota.

D. <u>Municipal Corporate Authority Conditions</u>. The obligation of Soo to consummate the transaction contemplated by this Agreement is subject to the provision by the Authority to Soo of a certified copy of the resolution of the Board of the Authority certifying its approval of the transaction pursuant to the authority of Minnesota Statutes § 398A.04.

E. <u>Opinion of Counsel to Soo</u>. The obligations of the Authority to consummate the transaction contemplated by this Agreement are subject to delivery by Soo to the Authority of an opinion of Counsel to Soo, which may be house Counsel, that:

- (1) To Soo's knowledge, no proceeding is pending, nor is there a substantial threat of such a proceeding, before any court or governmental agency in which it is sought to restrain or prohibit, or to obtain labor or environmental protection, conditions or provisions or damages or to obtain other relief in connection with, this Agreement or any other agreement to be executed in connection with this Agreement or the consummation of the transactions contemplated hereby or which, if adversely decided, would materially affect or impair either party's right or ability to perform its obligations hereunder or to obtain the benefits hereof, and no investigation that might eventuate in any such suit, action or proceeding is pending or threatened; and
- (2) To Soo's knowledge, there are no labor disputes in progress or threatened with respect to Soo or the transaction contemplated by this Agreement.

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F. <u>Opinion of Counsel to Authority</u>. The obligation of Soo to consummate the transaction contemplated by this Agreement will be subject to delivery by the Authority to Soo of an opinion of counsel as follows:

(1) All actions, proceedings, resolutions, instruments and documents required to carry out this Agreement and all other related legal matters shall have been approved on or before the closing date by the Hennepin County Attorney or the law firm of Felhaber, Larson, Fenlon & Vogt, P.A., counsel to the Authority in the exercise of its or their reasonable judgment, and the Authority or its counsel shall have been furnished with copies, satisfactory in form and substance to counsel to the Authority in the exercise of its or their reasonable judgment, of all of such required material corporate records and related proceedings of Soo authorizing its execution, delivery and performance of this Agreement as the Authority or its counsel shall reasonably require.

G. <u>Alternate Routing Conditions</u>. The obligation of the parties to consummate the transaction contemplated by this Agreement is subject to fulfillment on or before the closing date of the following condition, which may only be waived by either party in writing. The Authority agrees to cooperate and assist Soo in obtaining the agreements contemplated by this condition :

Soo shall have obtained agreements satisfactory to Soo with Chicago and North Western Transportation Company, Burlington Northern Railroad, and other railroads affording Soo and Twin Cities and Western Railroad

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Company alternate routing for rail traffic that is currently routed via the 29th Street Corridor.

# SECTION 6 - ENVIRONMENTAL INVESTIGATION

The Authority may enter the Property and, to the extent necessary, Soo's land in the vicinity of the Property (jointly referred to as the Site in this Section 6) for the purpose of surveying and conducting the supplemental environmental investigation referred to in Section 5 of this Agreement, including, but not limited to, soil borings, water samplings and other environmental inspections and tests the Authority in its sole discretion deems necessary subject to the following conditions:

- (1) The Authority shall give Soo advance notice of the date and time of each entry and the nature of the activities to be conducted on the Site at each such date and time.
- (2) Soo may elect to be present during the conduct of such activities and to monitor same. Such monitoring shall not relieve the Authority of any liability under this Section.
- (3) Prior to entering the Property, the Authority shall secure the permission of any tenant then in possession of same.
- (4) Upon the completion of its activities, the Authority shall remove any debris resulting from such activities and shall restore the Site to the condition it was in prior to the commencement of such activities.

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- Only to the extent permitted by law, including but not (5) limited to Minnesota Statutes Chapter 466, as amended, and only to the extent of the Authority's fault or negligence, the Authority shall indemnify Indemnitees against all claims, demands, actions, suits, judgments, losses, damages (including, but not limited to, actual, compensatory, direct, consequential, punitive, and exemplary damages), expenses, penalties, fines, sanctions, court costs, litigation costs, environmental - response and remediation costs, and reasonable attorneys' fees (collectively, Claims) arising out of or relating to any loss of (or damage to) any property or business or any injury to (or death of) any persons, where such loss, damage, injury, or death actually or allegedly arises (whether directly or indirectly, wholly or in part) from: any action or omission of the Authority (or its (a)
  - employees, agents, or contractors) while on the Site pursuant to this Section; or
  - (b) the exercise by Authority (or its employees, agents, or contractors) of the permission granted by this Section; or
  - (c) the escape or release of any pollutant, contaminant, or hazardous substance resulting (directly or indirectly, wholly or in part) from any action or omission of Authority (or its

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employees, agents, or contractors) while on the Site pursuant to this Section.

Indemnitees means the following companies and their officers, directors, employees, and agents: Soo Line Corporation, Soo Line Railroad Company, Tri-State Land Company, Tri-State Management Company, The Milwaukee Motor Transportation Company, Hiawatha Transfer Company, Canadian Pacific Limited, and CP Rail, and their respective parent companies, subsidiaries, and affiliated companies.

- (6) The Authority (and its employees, agents, and contractors) shall comply with all applicable laws while on the Site.
- (7) The Authority will provide Soo with complete copies of the test data and test reports as soon as they are available to the Authority.
- (8) The cost of any test or survey will be borne solely by the Authority.
- (9) Unless reasonably necessary to complete the Authority's environmental investigation, test holes shall be located no closer than 10 feet from the nearest rail of any railroad track located on or adjacent to the Site and drilling equipment and related equipment shall not be placed closer than 10 feet from the nearest rail of any such track. Before the Authority proceeds with test holes or placement of drilling equipment in such manner

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Soo must have given written permission to do so which shall not be unreasonably withheld.

- (10) While on the Site, the Authority (and its employees, agents, and contractors) shall comply with Soo's safety rules, including any requirement regarding the use of flagmen. All costs associated with compliance with such rules shall be borne by the Authority. If Soo shall incur any costs in connection therewith, the Authority shall reimburse Soo within 30 days after receipt of Soo's invoice.
- (11) Unless disclosure is required by court order or applicable law, the Authority shall maintain, and shall cause its employees, agents, and contractors to maintain, the confidentiality of all information pertaining to any environmental test performed on the Site.
- (12) If any mechanics' or materialmen's lien, or similar lien, is asserted against the Site, the Property, or any other property of Soo or Indemnitees as a result of the exercise of the permission granted in this Section, the Authority shall immediately satisfy and/or obtain the release of such lien, all at the Authority's expense, and the Authority shall indemnify and defend Soo from and against all Claims arising out of or connected with such lien.
- (13) Notwithstanding the foregoing, the terms of this Agreement are not to be construed as nor operate as

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waivers of the Authority's statutory or common law immunities or limitations on liability, including but not limited to Minn. Ch. 466. Further, the Authority's obligations set forth in this Section and otherwise in this Agreement are expressly limited and governed by the provisions of Minn. Stat. Ch. 466, Minn. Stat. Ch. 604, and any other applicable law or regulation.

## SECTION 7 - ASSIGNMENTS OF CONTRACTS, LEASES AND RELATED INSTRUMENTS

A. Soo will assign to and the Authority or its designee will accept, all right, title, interest and obligations held by the Soo, to the extent transferrable and/or assignable, and relating to the interests in the Property to be transferred to the Authority, under leases, contracts, permits, licenses and other instruments which, to the extent discovered by Soo after diligent search of its files and records, have been listed and described in Exhibit F, attached hereto and hereby made a part of this Agreement.

B. Soo will also assign all other interests of any nature of the Soo, to the extent transferrable and/or assignable, and relating to the interests in the Property to be transferred to the Authority, including rights in and to general intangibles and contract rights in addition to those identified or described in Exhibit F, including franchises, governmental and contractual operating rights and other contracts, leases, licenses, permits and privileges, except to the extent such rights relate to Soo's rights

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and obligations to provide common carrier freight rail service on the Property.

C. Soo reserves to itself all prepaid rentals attributable to any lease, license or easement whereby a third party has been granted the right to install and maintain a fiberoptic transmission line. Payments for rentals due under said instruments after closing shall be prorated between Soo and the Authority based upon their respective ownership of the affected areas. Otherwise, there shall be no proration of lease rentals.

#### SECTION 8 - PAYMENTS FOR TAXES

to pay promptly to taxing Authority agrees Α. The authorities when due all Taxes, if any, duly levied on the Property with respect to the Authority's ownership, leases, air rights development, and/or operations. Soo agrees to pay promptly to taxing authorities when due all Taxes, if any, with respect to its use or operations duly levied, to the extent Soo's property right has been separately assessed by the appropriate assessing authority to Soo while conducting operations over the Railroad Easement. To the extent Soo's property right is not so separately assessed to Soo, but the underlying fee in the Railroad Easement is assessed as railroad operating property and would be exempt except for Soo's use in operations, then Soo agrees to pay all such taxes duly levied while conducting operations over the Railroad Easement. Soo reserves the right to protest to a taxing authority any such Taxes it deems to be unfair or excessive and may in good faith

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litigate and settle with the taxing authority any such protested amount.

B. The Authority shall pay without reimbursement from Soo all Taxes, if any, attributable to any passenger transportation system installed by or at the direction of the Authority.

## SECTION 9 - GRANT OF RAILROAD EASEMENT

A. Subject to all of the terms and conditions of this Agreement, the Authority hereby agrees to grant to Soo at closing a Railroad Easement to continue its present railroad operations and to continue to meet its common carrier obligations at Soo's sole cost and obligation subject to the terms of this Agreement, on its solely owned Trackage located upon said Railroad Easement as described in Exhibit C, including the right to:

- (1) Exclusively provide freight railroad service to any industry, team, or house track existing in the 29th Street Corridor on the date of this Agreement or as otherwise may be required by law.
- (2) Permit current third party users for bridge rights only or admit a third party only for emergency detour purposes to use all or any portion of said Trackage.
- (3) Construct or modify tracks connecting to or crossing said Trackage, including track connections with the Chicago and North Western owned trackage located on Authority owned right-of-way West of France Avenue, subject to provisions of this Agreement, and the prior written approval by the Authority, which approval shall not be

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unreasonably withheld and shall be deemed given if required by law.

- (4) Use the existing roadbed, bridges, and other existing railroad facilities, if any, acquired by the Authority as a result of this Agreement.
- (5) Admit a third party operator as assignee of Soo's common carrier freight service obligation subject to the consent of the Authority which shall not be unreasonably withheld.

#### SECTION 10 - RAILROAD EASEMENT RENTAL

A. Until termination of the Railroad Easement in accordance with Section 12 of this Agreement, Soo will pay an annual rental of \$40,000 to the Authority for the Property utilized by the Railroad Easement. The first payment of \$40,000 shall be due one month after the closing date and shall thereafter be paid annually by the same date.

- (1) In the event of termination of the Railroad Easement upon other than the anniversary of the closing date, remaining rental due shall be prorated accordingly.
- (2) The rental amount may be adjusted upward by the Authority each five (5) years, but each upward adjustment shall be no greater than ten percent of the previous rate.

B. At such time as the Railroad Easement is terminated, Soo shall have no further obligation to pay rental to the Authority and shall have no claim against the Authority for any payment of any

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kind except as may have arisen prior to such termination or by reason of other provisions of this Agreement.

#### SECTION 11 - RAIL CAR STORAGE

Effective no later than six (6) months after closing, Soo and its tenants shall cease storing or parking railroad cars at any location on the Property except such cars as are actually used to service rail users located on or adjacent to the Property. Any rail cars required to be stored for the use of such rail users shall be parked in the vicinity of the loading or unloading tracks of said users.

#### SECTION 12 - TERMINATION OF RAILROAD EASEMENT

A. As provided in this Section 12, the Railroad Easement and the rental obligation under Section 10 will terminate, and the Railroad Easement Escrow account referred to in Section 4B(2) including accrued interest will be paid to Soo, no later than 90 days (unless winter conditions have prevented removal of Soo Trackage, then 180 days) after the effective date of an abandonment authorization order issued by the Interstate Commerce Commission ("ICC") or an ICC Notice of Exemption, and upon the occurrence of the events in (1) and either (2) or (3) below (unless otherwise provided by this Agreement):

- (1) (a) Written notice of termination by either party to the other party;
  - (b) Soo delivers a release of Railroad Easement suitable for recordation;
  - (c) The Authority accepts relinquishment of the Railroad Easement in writing which shall be given

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when Soo satisfies the conditions in either (2) or (3).

Upon notification by Soo in writing to the Authority that (2) Soo intends to remove the Trackage, and Soo completes salvage of the Trackage and removal of rails located in and across public streets and highways and restores paving (or has reimbursed the Authority for the cost of doing the same). All such removal and repaying shall be completed in a workmanlike manner and shall include removal of all debris and waste materials including scrap If Soo has not completed salvage, and removal of ties. rails and restoration of paving in and across public streets and highways, within ninety days after the effective date of the abandonment authorization (unless winter conditions have prevented removal of Soo Trackage, then within 180 days), the Trackage not salvaged shall be abandoned in place without compensation from the Authority and Soo shall reimburse the Authority for the cost of completing any removal and repaving which may be deducted from the Railroad Easement Escrow payment.

However, the Authority may, at its sole option, declare that the Trackage is to be left in place and pay to Soo within 90 days of the effective date of the abandonment order the market value of the track materials, less the cost of removal and the value of any additions or betterments previously provided at the

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expense of the Authority. In such event, Soo shall have no obligation to restore street and highway crossings.

(3) Upon notification by Soo in writing to the Authority that Soo does not intend to remove the Trackage from the Property and Soo completes the removal of rails located in and across public streets and highways and the restoration of paving (or Soo reimburses the Authority for the cost of doing the same) no later than ninety days after the effective date of the abandonment authorization . (unless winter conditions have prevented removal of Soo Trackage, then within 180 days). All such removal and repaving shall be completed in a workmanlike manner and shall include removal of all debris and waste materials including scrap ties. The Trackage not salvaged shall be deemed abandoned in place without compensation from the Authority. If Soo has not completed removal of rails and restoration of paving in and across public streets and highways within ninety days after the effective date of the abandonment authority (unless winter conditions have prevented removal of Soo Trackage, then within 180 days). Soo shall reimburse the Authority for the cost of completing any remaining removal and repaving, which may be deducted from the Railroad Easement Escrow payment.

B. Both Soo and the Authority shall have the right to terminate the Railroad Easement at any time in accordance with the provisions of this Agreement. Any such termination must be

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initiated by written notice to the other party of its desire to terminate the Railroad Easement. Notwithstanding any other provisions of this Agreement, the Railroad Easement will terminate no later than 15 years following the date of closing, at which time the provisions of Section 12, paragraph E will apply. At that time, Soo agrees to transfer its railroad freight service common carrier obligation to the Authority or the Authority's designee.

C. If Soo desires to terminate the Railroad Easement, Soo shall have the obligation to seek to obtain, by Notice of Exemption, abandonment application, or such other filing as may be appropriate, any necessary ICC and other regulatory approval to terminate common carrier railroad freight service. In such event, Soo shall have no right to any payment for lost freight revenue. The Authority agrees to cooperate in seeking regulatory approval.

D. In the event of cessation of local rail freight traffic for a period of one year or more, or in the event the last user of rail freight service along the Railroad Easement ceases operations or otherwise makes clear that it has no further need for rail service, Soo shall have the obligation to seek to obtain, by Notice of Exemption, abandonment application, or such other filing as may be appropriate, any necessary ICC and other regulatory authority to terminate common carrier railroad freight service. Soo agrees to make filing of any such request for abandonment authority within six months after the last user ceases operations or after a year in which no local railroad traffic has originated or terminated on the Railroad Easement. Soo further agrees to use its best efforts to

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obtain any necessary regulatory abandonment approval for itself and any other users within one year of said filing.

- (1) The Authority agrees to cooperate in any such effort. In the event more than one year elapses before necessary regulatory approval is obtained by Soo, or earlier at Soo's request, the Authority may, at its option, proceed in the name of the Soo to prosecute and complete any necessary regulatory procedure to obtain authorization for such cessation, including cessation of operations by users.
- (2) In the event regulatory approval to cease rail operations is not received within one year of said filing, or is denied in whole or in part, Soo agrees to transfer its railroad freight service common carrier obligations to the Authority or the Authority's designee, if requested by the Authority, in which case Section 12E(2) will apply.
- (3) Soo shall not be entitled to any payment for lost freight revenue, except as provided in paragraph (2) above.
- (4) Soo shall have no obligation to appeal an adverse regulatory decision, but shall be obligated to refile for abandonment approval no later than one year after any such denial. In any event, Soo shall have no obligation to refile for abandonment approval subsequent to a denial more than twice.

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(5) The Authority shall have the right at any time to require Soo to divulge its most recent two years freight traffic and revenues generated on the Railroad Easement.

E. In the event the Authority requests termination of the Railroad Easement, the Authority shall have the obligation to obtain regulatory approval at its expense. Soo agrees to cooperate in any such effort at its expense, including preparation of necessary traffic, accounting and financial data in form suitable for ICC or other regulatory application. Soo also agrees that the Authority may proceed in the name of the Soo to prosecute and complete any such procedure. Soo agrees to provide any requested data for regulatory filing within ninety days of request by the Authority.

- (1) In the event regulatory approval to cease rail operations is not received within one year of said filing, or is denied in whole or in part, Soo agrees to transfer its railroad freight service common carrier obligations to the Authority or the Authority's designee, if requested by the Authority, in which case, Sec. 12E(2) will apply.
- (2) In the event the Authority requests termination of the Railroad Easement prior to cessation of active rail freight shipping via the Easement, the Authority will make an additional payment at the time termination takes place for lost net revenue calculated in accordance with the provisions of Exhibit H based on average freight revenues for the most recent two years prior to the

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request by the Authority and based upon the assumption that revenue will continue for a maximum term of 20 years from the date of closing and further based on the cost of capital as determined by the Interstate Commerce Commission on the date of the request by the Authority to terminate the freight railroad easement. Revenues used in the projection shall be adjusted to reflect those revenues reasonably expected to continue. No payment for lost revenue will be made under any other circumstances.

F. In the event the Authority shall cause, contribute to, or assist in the relocation of any customer facility located adjacent to the Railroad Easement and currently used for rail shipping, the Authority shall:

- 1. Give Soo advance notice of the proposed relocation.
- 2. Keep Soo advised as to the particulars of the proposed relocation.

In the event such facility is relocated with the financial assistance of the Authority on a line of railroad not served by Soo, CP Rail or their affiliates, successors or assigns, the provisions of Section 12E(2) will apply.

#### SECTION 13 - OBLIGATIONS FOLLOWING TERMINATION

Upon termination of the Railroad Easement, the parties hereto are relieved from any and all obligations relating thereto, except for any obligations which may have accrued or which may have been incurred prior to the date of such termination or in accordance with the terms of this Agreement.

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## SECTION 14 - RAILROAD EASEMENT MAINTENANCE, OPERATIONS, CONTROL AND ENTRY

A. Until termination of the Railroad Easement, Soo shall have the exclusive direction and control of the Trackage upon said Easement, at its sole cost and expense, subject to the rights of the Authority as set forth in this Agreement. Soo shall perform all construction, derailment or wreck clearing, maintenance, repair and renewal of the Trackage, including any additions thereto it may deem necessary or desirable for the safe and efficient operation of all trains. Soo's obligation for maintenance and repairs shall include any repairs to overhead bridges necessitated by reason of interference with freight railroad operations, which repairs are not required for any other purpose.

B. The management and operation of the Railroad Easement shall be under the direction and control of Soo. Soo shall have the power to change its operations, management and operating practices on or over the Railroad Easement as in its judgment may be necessary, expedient or proper for the operations herein intended, consistent with the provisions of this Agreement.

C. Soo shall have the right to operate trains, engines and cars over the Railroad Easement for its sole benefit, and shall not, except as otherwise provided in this Agreement without prior written permission by the Authority, which permission shall not unreasonably be withheld, permit any third party to operate trains, engines or cars over the Railroad Easement except as already provided in existing trackage rights agreements or as a temporary emergency detour.

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D. Soo shall, at its sole cost and expense, determine all means and employ all persons necessary to operate, maintain, repair and renew the Trackage, as well as crossings, crossing signals, ditches, roadbeds, bridges, and communication lines within the Railroad Easement which may be necessary for its use of the Trackage.

E. Soo shall have a right of access over other portions of the Property for the sole purpose of maintaining and performing freight railroad operations over the Railroad Easement. Such access shall not unreasonably interfere with activities of the Authority or other users permitted by the Authority upon Property not part of the Railroad Easement.

F. The Authority shall not pay the expenses of any public crossing of the Railroad Easement which may be opened or improved, including all expenses of crossing protection, unless such crossings are requested or opened by the Authority. The Authority shall not be responsible for any expenses incurred by Soo as a result of activities of third parties not authorized by the Authority occupying or otherwise interfering with the Railroad Easement.

G. The Authority may enter upon, and make alterations to, the Railroad Easement subject to the following conditions:

(1) The Authority shall give Soo at least three working days advance notice of the date, time, and location of each entry upon the Railroad Easement and the precise nature

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of the activities to be conducted on the Railroad Easement at each such date, time and location.

- (2) The Authority and its contractors shall not interfere with the operations of any trains or railroad facilities upon the Railroad Easement except with the consent of Soo which consent shall not be unreasonably withheld.
- (3) The Authority shall take (and shall cause its contractors to take) such actions as are required to afford Soo the benefit of any applicable insurance held by the Authority or its contractors. In any case where the circumstances would cause a prudent railroad to require the Authority or its contractors to do so, the Authority or its contractors shall procure and maintain in effect railroad protective liability insurance (occurrence form), in Soo's name and issued by an insurer and in a form acceptable to Soo, with limits of \$2,000,000 per occurrence and \$6,000,000 aggregate for bodily injury (including death) and property damage.
- (4) While on the Railroad Easement, the Authority and its contractors shall comply with all applicable laws and with Soo's safety rules, all at no expense to Soo.
- (5) No work shall be done or obstruction placed over any track or within the Railroad Easement until the Authority or its contractors shall have arranged for Soo to furnish, at the Authority's or its contractors' expense, such flagging as Soo deems necessary for the protection

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of railroad operations. Such flagging shall not relieve the Authority or its contractors from any liability.

- (6) Construction equipment and related equipment shall not be placed closer than 10 feet from the nearest rail of any track.
- (7) If the Authority desires to construct facilities upon the Railroad Easement, such construction shall be effected in strict accordance with plans which have been approved in advance by Soo. The Authority shall submit the plans to Soo no less than forty-five (45) days prior to the commencement of construction. Soo may require the Authority to make changes in the plans if, in Soo's judgment, the planned construction would create a safety hazard with respect to, or interfere with, railroad operations. Soo assumes no responsibility for, and shall not under any circumstances be held liable for, any error, omission, defect, or deficiency in the plans.
- (8) The Authority shall not construct any facility over any track where the vertical distance between the top of the rail and any part of the facility is less than 23 feet.

#### SECTION 15 - LIABILITY

A. While conducting operations over the Railroad Easement, Soo agrees to defend, indemnify, and hold harmless the Authority, its Commissioners, officers, agents, and employees from any liability, claims, damages, costs, judgments, or expenses resulting directly or indirectly from the act or omission of Soo, its agents,

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employees, customers, tenants, or invitees, occurring on or from the Property (including, without limitation, reasonable attorney's fees and compensation for harm resulting from the handling, storage or release of toxic or hazardous substances or wastes, pollutants or contaminants including, without limitation, asbestos, urea formaldehyde, the group of organic compounds known as polychlorinated biphenyls, petroleum products including gasoline, fuel oil, crude oil and various constituents of such products).

B. Notwithstanding anything in this Agreement to the contrary, in case of collision occurring on the Property involving railroad cars, locomotives, rail passenger cars, motor vehicles, other vehicles or equipment operated by the respective parties which causes Loss or Damage involving the Sole Property or Sole Employees of each of the parties hereto, the party whose Sole Employees are alone at fault shall be solely responsible for and shall settle for and pay the entire Loss and Damage caused thereby, or, if caused by the fault of the Sole Employees of both parties hereto, each party hereto shall bear and pay for all Loss or Damage which its Sole Employees and Sole Property may have suffered as a result thereof, and each party shall bear the percentage of Loss or Damage for which it is legally responsible to third parties.

C. Each party hereto shall pay all Loss or Damage for which such party shall be liable under the provisions of this Agreement, and shall defend, indemnify and save harmless the other party against such Loss or Damage, including any such damages in any court action. Each party hereto shall have the right to settle, or

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cause to be settled for it, all claims for Loss or Damage for which such party shall be liable under the provisions of this Agreement, and to defend or cause to be defended all suits for the recovery of any such Loss or Damage.

D. Each party shall give the other prompt written notice of any and all claims or suits arising from operations on or about the Railroad Easement.

E. Notwithstanding the foregoing, the terms of this Agreement are not to be construed as nor operate as waivers of the Authority's statutory or common law immunities or limitations on liability, including but not limited to Minn. Stat. Ch. 466. Further, the Authority's obligations set forth in this Section 15 and otherwise in this Agreement are expressly limited and governed by the provisions of Minn. Stat. Ch. 466, Minn. Stat. Ch. 604, and any other applicable law or regulation.

#### SECTION 16 - ENVIRONMENTAL REPRESENTATIONS AND WARRANTIES

A. Soo hereby represents and warrants as follows to the Authority, such representations and warranties to be true and correct on the closing date, that:

(1) Soo has provided to the Authority within 30 days of the execution of this Agreement all relevant and material environmental information with respect to the Property which is in Soo's possession. Soo may provide such information in summary fashion, but warrants that any summary so provided is fully representative of the environmental conditions of the Property known to Soo and

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that Soo has promptly provided all other relevant documents, data, test results, reports and recommendations requested by the Authority as it pertains information. said summarized The summarized to information will be set forth in Soo's Environmental Disclosure schedule which shall be identified as Exhibit I to this Agreement.

Except as disclosed in any documentation provided by Soo (2)to the Authority pursuant to this Section 16 hereof and except as disclosed on Exhibit I (which is to be provided to the Authority within 30 days after the date of this Agreement), Soo has not generated, treated, stored, released or disposed of, or otherwise placed, deposited in or located any toxic or hazardous substances or wastes, pollutants or contaminants (including, without limitation, asbestos, urea formaldehyde, the group of organic compounds known as polychlorinated biphenyls, petroleum products including gasoline, fuel oil, crude oil and various constituents of such products, and any hazardous substance as defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), 42 U.S.C. Section 9601-9647, as amended) on the Property, nor has Soo undertaken any activity on the Property which has caused, or, to Soo's knowledge, would contribute to:

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- (i) the Property being or becoming a treatment, storage or disposal facility within the meaning of the Resource Conservation and Recovery Act of 1976 ("RCRA"), 42 U.S.C. Section 6901 <u>et seq.</u>, or any similar state law or local ordinance,
- (ii) a release or threatened release of toxic or hazardous wastes or substances, pollutants or contaminants from the Property within the meaning of CERCLA or any similar state law or local ordinance,
- (iii) the discharge from the Property of pollutants or effluent into any water source or system, the dredging or filling of any waters or the discharge into the air of any emissions, that would require a permit under the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 <u>et seq.</u>, or the Clean Air Act, 42 U.S.C. Section 7401 <u>et seq</u>., or any similar law or local ordinance.
- (3) Except as disclosed in Exhibit I, to Soo's knowledge, there is no existing claim or cause of action and there is no pending claim or cause of action against the Property under RCRA, CERCLA or any federal, state or local environmental statutes, regulations, ordinances or other environmental regulatory requirements, including without limitation, the Minnesota Environmental Response and Liability Act, Minn. Stat. § 115B ("MERLA") and the

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Minnesota Petroleum Tank Release Cleanup Act, Minn. Stat. § 115C.

(4) Except as disclosed on Exhibit I, no above ground or underground tanks (i) have been located on the Property by Soo, or (ii) have been located on the Property by Soo and subsequently removed or filled. There are no known wells within the meaning of Minn. Stat. § 103I.005 on the Property except as described on Exhibit I.

# SECTION 17 - ENVIRONMENTAL INDEMNIFICATION

A. Except as limited by this Section 17, Soo shall defend, indemnify and hold the Authority harmless from and against all claims, damages, liabilities, costs, including costs and expenses of response, removal, remediation or disposal expenses (including reasonable experts' and attorneys' fees), suits or obligations of any and every nature whatsoever to the extent that they (i) result from or arise out of Soo's breach of any of the representations and warranties in Section 16 of this Agreement, or (ii) result from or arise as a result of the generation, treatment, use, handling, storage, transportation, manufacture, release, discharge or disposal of any toxic or hazardous substances or wastes, pollutants or contaminants (including, without limitation, asbestos, urea organic compounds known as of formaldehyde, the group polychlorinated biphenyls, petroleum products including gasoline, fuel oil, crude oil and various constituents of such products) on or from the Property to the extent that same occurred prior to transfer of ownership of the Property to the Authority.

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B. Soo's obligation to the Authority for responding to, removing, remediating or disposing of any pollutant, contaminant, toxic or hazardous substance or waste is restricted to that where the response, removal, remediation or disposal is ordered or required by any federal, state or local government agency with jurisdiction over the same; however, response, removal, remediation or disposal shall be based upon techniques that reasonably accommodate the time needs of the Authority in using the Property as a transportation corridor.

C. Soo's obligation to the Authority for responding to, removing, remediating or disposing of any pollutant, contaminant, toxic or hazardous substance or waste is further limited to that necessary for the Authority's use of the Property as a transportation corridor, including, but not limited to, use as a railroad right-of-way, roadway, bike, pedestrian or other trailway and necessary facilities, including without limitation, station sites, maintenance facilities and other buildings incidental to use as a transportation corridor.

D. The Authority is responsible for the first \$50,000 attributable to each Environmental Site up to an aggregate total of \$250,000 for all Environmental Sites.

E. Soo is obligated to defend, indemnify and hold the Authority harmless for amounts over \$50,000 attributable to each Environmental Site and for amounts in excess of the Authority's aggregate amount of \$250,000.

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F. Notwithstanding anything else to the contrary in this Section 17, Soo's obligation to defend and indemnify the Authority with respect to Environmental Sites shall be limited to an aggregate amount of \$2,000,000.00 for any and all Environmental Sites.

G. Soo is not responsible for defending or indemnifying the Authority for Environmental Sites discovered after termination, pursuant to Section 12, of the Railroad Easement.

H. Each Party agrees to inform the other of notices and investigations of Environmental Sites and the Parties further agree to confer with respect to management of remediation.

I. All the terms, covenants, and conditions of this Agreement shall be binding upon, and inure to the benefit of and be enforceable by the parties hereto and their respective successors, heirs, executors and assigns.

#### SECTION 18 - SURVIVAL

All of the terms of this Agreement, including all warranties, representations, and indemnification given by each party in this Agreement, all of which are relied upon by the each party shall survive and be enforceable after the closing date and any subsequent transfer of title of the Property.

#### SECTION 19 - LAWS GOVERNING

This Agreement shall be governed, and the parties agree to be bound, by the laws of the State of Minnesota; and the parties agree

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to comply with or abide by all laws relevant to this Agreement governing their respective operations in the State of Minnesota.

#### SECTION 20 - LABOR RELATIONS

Soo and the Authority each shall be responsible for conducting their own labor relations with any labor organization either representing or seeking representation among either's employees, and each shall regulate or seek to adjust all disputes that may arise with respect to their employees without involving the other party. Either party may freely enter into any contract with any labor organization representing or seeking representation among its own employees. Neither party shall obligate the other party to its employees or to any union representing its employees. Each party shall give written notice to the other of any labor dispute that prevents or threatens to prevent timely performance under this Agreement, including all relevant information concerning the dispute that may impact upon this Agreement.

#### SECTION 21 - INDEPENDENCE OF PARTIES

Soo and the Authority hereby declare that they are acting independently, and agree that in the performance of this Agreement their actions are as independent contractors and not as an employee of the other; nor are any of their respective employees considered at any time an employee of the other. Soo has and hereby retains full control of its business in the performance of this Agreement and full control of all the employment, compensation and discharge of all employees of Soo assisting in its performance hereunder.

-43-

Soo and the Authority each shall be fully responsible for all matters relating to payment of their employees, including compliance with Social Security, Railroad Retirement, withholding taxes and all other laws and regulations governing such matters. Soo and the Authority each shall be responsible for their own acts and those of their agents, officers, employees, lessees, and contractors during the term of this Agreement.

**SECTION 22 - REMEDIES FOR BREACH.** If the Authority fails to perform any of the terms or conditions of this Agreement within the specified time limits, Soo may declare this Agreement terminated or may have this Agreement specifically enforced. Likewise, if Soo fails to perform any of the terms or conditions of this Agreement within the specified time limits, the Authority may declare this Agreement terminated or may have this Agreement specifically enforced. The rights and remedies granted to the parties in this Section 22 are intended to be cumulative to all other rights and remedies available to the parties (whether under this Agreement, at law, in equity, or otherwise); accordingly, the exercise by either party of any such right or remedy shall not preclude it from exercising any other such right or remedy.

<u>SECTION 23 - ENTIRE AGREEMENT</u>. This Agreement constitutes the entire Agreement between the parties with respect to the sale and purchase of the Property. Neither party has relied on any statements or representations by the other party except as are set forth in this Agreement.

-44-

SECTION 24 - ASSIGNMENT; BINDING EFFECT. The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, including without limitation any entities into or by which either of the parties is merged, combined, reorganized or acquired.

<u>SECTION 25 - NOTICES</u>. Unless explicitly stated to the contrary elsewhere in this Agreement, all notices and other communications required or contemplated by this Agreement must be in writing and shall be deemed given when delivered in legible form to the business address of the party to whom addressed. If delivered at the closing, a notice shall be deemed given when hand-delivered to the party's representative at the closing. The business addresses of the parties are as follows:

soo

| mailing address:  | P. O. Box 530<br>Minneapolis, Minnesota 55440<br>Attn: Director - Real Estate                                  |
|-------------------|----------------------------------------------------------------------------------------------------------------|
| delivery address: | 1380 Soo Line Building<br>105 South 5th Street<br>Minneapolis, Minnesota 55402<br>Attn: Director - Real Estate |
| telecopier:       | (612) 347-8170<br>Attn: Director - Real Estate                                                                 |

THE AUTHORITY

mailing address: Hennepin County Regional Railroad Authority Southwest Street Level Government Center Minneapolis, MN 55487-0016 Attn: Director - Light Rail Transit

-45-

| delivery address: | Hennepin County Regional Railroad<br>Authority       |
|-------------------|------------------------------------------------------|
|                   | Southwest Street Level                               |
|                   | Government Center                                    |
|                   | Minneapolis, MN 55487-0016                           |
|                   | Attn: Principal Right-of-way Agent                   |
| telecopier:       | (612) 348-9710<br>Attn: Principal Right-of-way Agent |
|                   | Attn: Principal Right-bi-way Agent                   |

Notices not given in the manner or within the time limits set forth in this Agreement are of no effect and may be disregarded by the party to whom they are directed. Either party may change its business address, for notice purposes, by giving notice of the change to the other party.

ATTEST:

eres Assistant

SOO LINE "RAILROAD COMPANY By G E PRESIDENT Its

ATTEST:

yller Judson

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

B nairman

ve Direc Execut forl

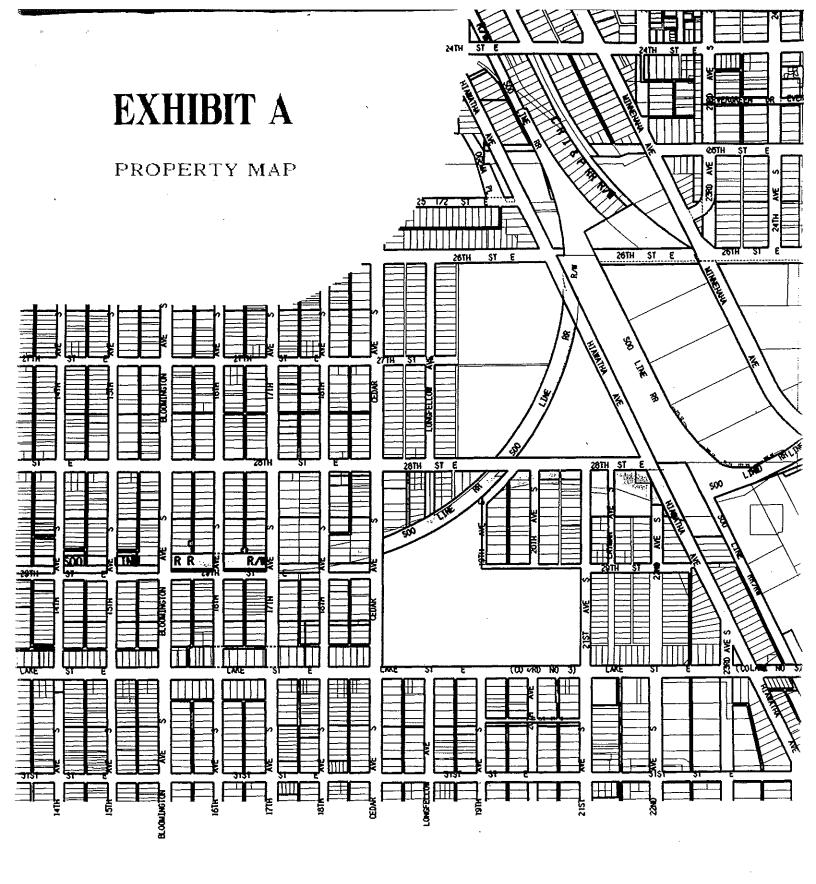
Approved as to execution:

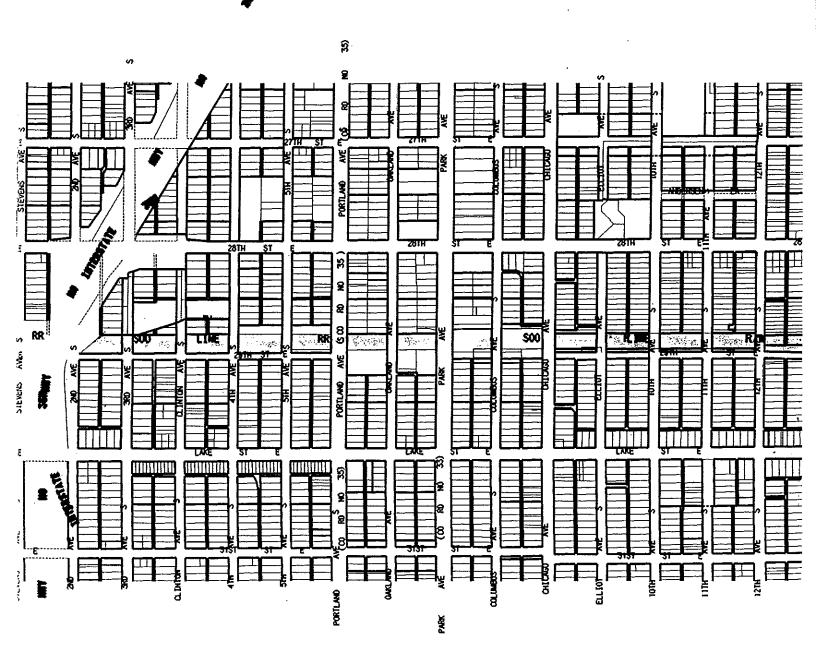
Assistant bounty Attorney

Dated: 1-5-93

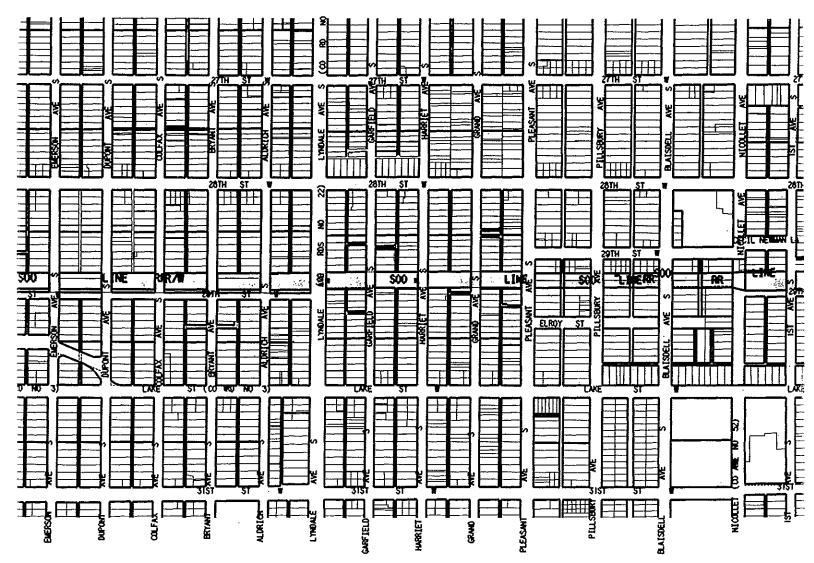
Approved as to legality:

Dated: 12-23-9-2\_\_\_\_



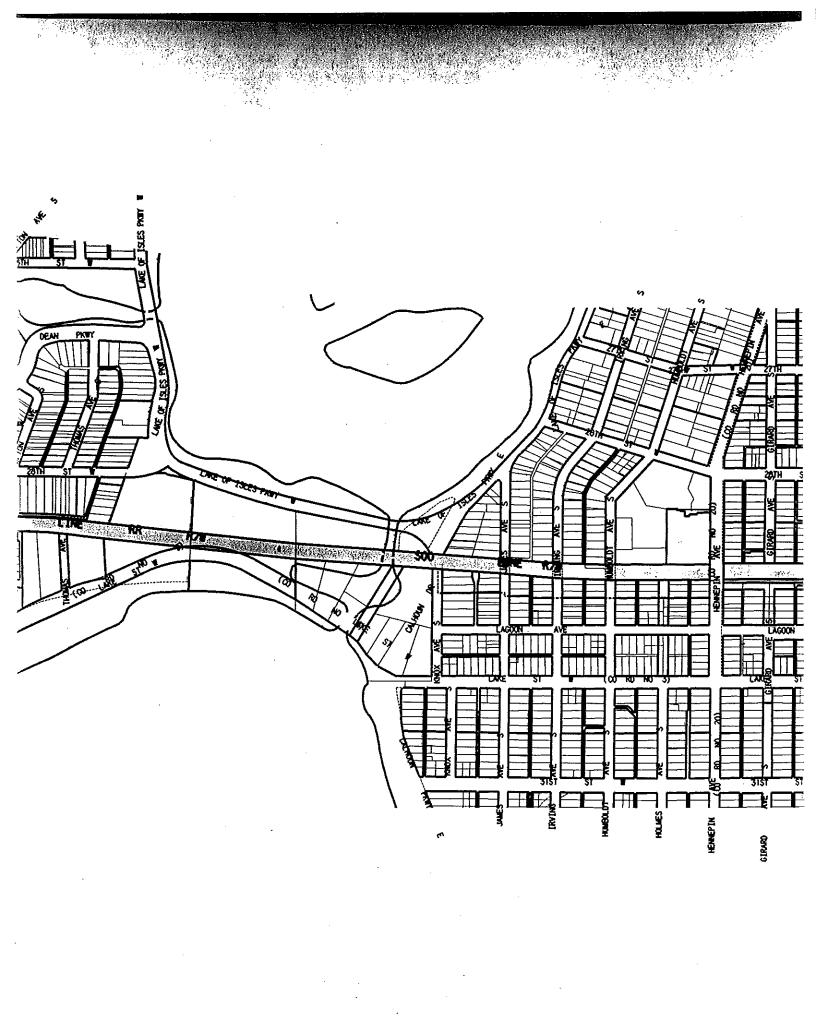


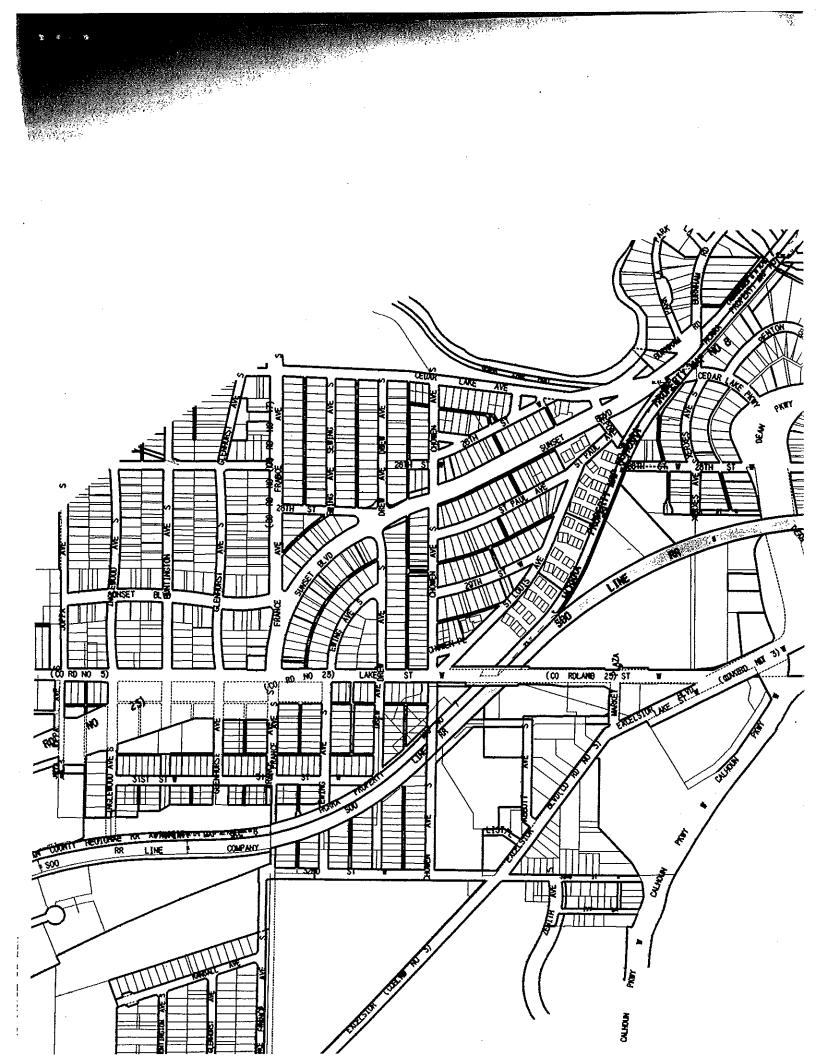
DIFFERENCE



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# EXHIBIT B

## Legal Description of Property

All that part of the Soo Line Railroad Company right of way passing through the Northwest Quarter of the Southwest Quarter, the Southwest Quarter of the Southwest Quarter, and the Southeast Quarter of the Southwest Quarter, all in Section 36, Township 29, Range 24; all of which lies westerly of the easterly right of way line of Hiawatha Avenue.

also:

All that part of the Soo Line Railroad Company right of way passing through the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 35, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 33, Township 29, Range 24; the South Half of the Southeast Quarter of the Southeast Quarter and the Southeast Quarter and the Southeast Quarter of the Southeast Quarter, Section 32, Township 29, Range 24; and the North Half of the Northwest Quarter of Section 5, Township 28, Range 24.

(Abstract Property)

All that part of the North Half of the Southeast Quarter of the Southwest Quarter of Section 35, Township 29, Range 24, lying South of the South line of Block 3, "Avery's Chicago Avenue Addition to Minneapolis", and between the extensions South of the East and West lines of said Block 3.

According to the recorded plats thereof and according to the Government Survey thereof, as evidenced by Certificate of Title No. 371889.

(Torrens Property)

# DAILDOAD FASEMENT

Exhibit C - 1 of 3

| <u>_</u>                                                                                                                                                                 | AILROAD EASEMENT                                                                                                                                                                                                                                                                                                                                                |                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
|                                                                                                                                                                          | )<br>)<br>)<br>)<br>)<br>)<br>(reserved for recording data)                                                                                                                                                                                                                                                                                                     |                              |
| (reserved for valuation and tax data)                                                                                                                                    | (reserved for fecording data)                                                                                                                                                                                                                                                                                                                                   |                              |
| STATE DEED TAX DUE HEREON:                                                                                                                                               | \$                                                                                                                                                                                                                                                                                                                                                              |                              |
| Date:,                                                                                                                                                                   | , 19                                                                                                                                                                                                                                                                                                                                                            |                              |
| subdivision and local government unit ur<br>and quitclaims to the Soo Line Railro<br>Minnesota, Grantee, a temporary railroa<br>the terms of which are set forth in Pure | T, the Hennepin County Regional Railroad Authority, a polit<br>nder the laws of the State of Minnesota, Grantor, hereby con-<br>oad Company, a corporation under the laws of the State<br>ad easement over real property in Hennepin County, Minnes<br>chase Agreement between Soo Line Railroad Company and<br>thority dated $December 231992$ . The real prop | veys<br>e of<br>sota,<br>the |
| (Legal description on reverse of this do                                                                                                                                 | cument)<br>Hennepin County Regional Railroad Authority                                                                                                                                                                                                                                                                                                          |                              |
| · · · · · · · · · · · · · · · · · · ·                                                                                                                                    | By<br>Its <u>Chairman</u>                                                                                                                                                                                                                                                                                                                                       |                              |
|                                                                                                                                                                          | By                                                                                                                                                                                                                                                                                                                                                              |                              |
| STATE OF MINNESOTA )<br>)ss<br>COUNTY OF HENNEPIN )                                                                                                                      | Its Executive Director                                                                                                                                                                                                                                                                                                                                          |                              |
| The foregoing was acknowledged before<br>Director of Hennepin County Regional<br>unit under the laws of Minnesota, on be                                                 | and Vern T. Genzlinger, the Chairman and Execu<br>Railroad Authority, a political subdivision and local governm                                                                                                                                                                                                                                                 | , by<br>itive<br>nent        |
|                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                 |                              |
|                                                                                                                                                                          | Notary Public                                                                                                                                                                                                                                                                                                                                                   |                              |
| This Instrument was drafted by:                                                                                                                                          | Tax Statements for the real property described                                                                                                                                                                                                                                                                                                                  |                              |

.

Hennepin County Regional Railroad Authority Southwest Street Level Government Center 300 South Sixth Street Minneapolis, MN 55487-0016

in this instrument should be sent to:

## Exhibit C - 2 of 3

#### **Description of Property Affected**

All that part of the Hennepin County Regional Railroad Authority right of way, formerly the right of way of the Soo Line Railroad Company, passing through the Northwest Quarter of the Southwest Quarter, the Southwest Quarter of the Southwest Quarter, and the Southeast Quarter of the Southwest Quarter, all in Section 36, Township 29, Range 24; all of which lies westerly of the easterly right of way line of Hiawatha Avenue.

also:

All that part of the Hennepin County Regional Railroad Authority right of way, formerly the right of way of the Soo Line Railroad Company, passing through the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 35, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter, Section 33, Township 29, Range 24; the South Half of the Southeast Quarter, Section 32, Township 29, Range 24; and the North Half of the Northwest Quarter of Section 5, Township 28, Range 24.

#### (Abstract Property)

also:

All that part of the North Half of the Southeast Quarter of the Southwest Quarter of Section 35, Township 29, Range 24, lying South of the South line of Block 3, "Avery's Chicago Avenue Addition to Minneapolis", and between the extensions South of the East and West lines of said Block 3.

According to the recorded plats thereof and according to the Government Survey thereof, as evidenced by Certificate of Title No. 371889.

#### (Torrens Property)

### Description of Railroad Easement to Expire (Insert Date of Severence at Hiawatha)

Strips of land 30 feet in width lying 15 feet on either side of the centerlines of: all main tracks, spurs, sidings and tail tracks as they are now laid out and constructed over the above described property.

## Exhibit C - 3 of 3

## Description of Railroad Easement to Expire December 31, 2008

Strips of land 30 feet in width lying 15 feet on either side of the centerlines of all existing trackage over the above described property lying between the west boundary of Fifth Avenue and the west boundary line of Bloomington Avenue, in the City of Minneapolis

#### also

a strip of land 30 feet in width lying 15 feet on either side of the centerline of the south main track over the above described property lying west of the west boundary line of Fifth Avenue, and east of the west boundary of Bloomington Avenue to the east boundary line of Cedar Avenue, in the City of Minneapolis

## EXHIBIT D 1 of 3 QUITCLAIM DEED

(reserved for valuation and tax data)

(reserved for recording data)

Date:\_\_\_\_\_, 199\_\_\_

For valuable consideration, Soo Line Railroad Company ("Grantor" or "Seller"), a corporation under the laws of the State of Minnesota, hereby conveys and quitclaims to Hennepin County Regional Railroad Authority ("Grantee"), a political subdivision and local governmental unit under the laws of the State of Minnesota, real property in Hennepin County, State of Minnesota, described below, together with all hereditaments and appurtenances thereto. The real property is described as follows:

That part of the Soo Line Railroad Company right of way passing through the Northwest Quarter of the Southwest Quarter, the Southwest Quarter of the Southwest Quarter, the Southeast Quarter of the Southwest Quarter, all in Section 36, Township 29, Range 24; all of which lies westerly of the easterly right of way line of Hiawatha Avenue.

also:

That part of the Soo Line Railroad Company right of way passing through the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 35, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 33, Township 29, Range 24: the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 33, Township 29, Range 24: the South Half of the Southeast Quarter and the Southeast Quarter of the Southwest Quarter, Section 32, Township 29, Range 24; and the North Half of the Northwest Quarter of Section 5, Township 28, Range 24.

## EXHIBIT D 2 of 3

(Abstract Property)

also:

That part of the North Half of the Southeast Quarter of the Southwest Quarter of Section 35, Township 29, Range 24, lying south of the South line of Block 3, "Avery's Chicago Avenue Addition to Minneapolis", and between the extensions South of the East and West lines of said Block 3.

According the recorded plats thereof and according to the Government Survey thereof, as evidenced by Certificate of Title No. 371889.

(Torrens Property)

[Seller certifies that seller does not know of any wells on the real property.] (insert as necessary)

Ву:\_\_\_\_\_

Its:\_\_\_\_\_

STATE OF MINNESOTA

COUNTY OF HENNEPIN

The foregoing quitclaim deed was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_ 199\_\_\_ by \_\_\_\_ the \_\_\_\_\_ of Soo Line Railroad Company, a corporation under the laws of the State of Minnesota, on behalf of the corporation.

)SS

Notary Public

-2-

# EXHIBIT D 3 of 3

Tax statements for the property should be sent to Grantee at:

This instrument was drafted by: John P. Nail Soo Line Railroad Company P. O. Box 530 Minneapolis, MN 55440

9211-MPLS-HCRRA-1

# EXHIBIT E

## QUITCLAIM BILL OF SALE

#### KNOW ALL PERSONS BY\_THESE PRESENTS:

Soo Line Railroad Company ("Seller"), in consideration of the sum of \$1.00 and other valuable consideration to it paid, receipt of which is hereby acknowledged, hereby conveys and quitclaims to Hennepin County Regional Railroad Authority the following property:

This conveyance is made strictly on an "as is, where is" basis, and Seller makes no express or implied representation or warranty whatsoever concerning said property (including, without limitation, express or implied representations or warranties of title, merchantability, or fitness for a particular purpose).

#### SOO LINE RAILROAD COMPANY

Ву: \_\_\_\_\_

Its:\_\_\_\_\_

Date:\_\_\_\_\_

## EXHIBIT F

.

2.1

| <u>Lessee/Licensee</u>        | Number  | Type Agreement          |
|-------------------------------|---------|-------------------------|
| Roland Millwork Co.           | 24055   | Land lease              |
| Bituminous Roadways, Inc.     | 24035   | Land lease              |
| Sears, Roebuck & Co.          | 24191   | Land lease              |
| Donald K. Raymond             | 24400   | Land lease              |
| Bituminous Roadways, Inc.     | 24767   | Land lease              |
| Northern States Power         | 25034   | Wire crossing           |
| KBL Cablesystems of Minnesota | 25391   | Wire crossing           |
| KBL Cablesystems of Minnesota | 25392   | Wire crossing           |
| KBL Cablesystems of Minnesota | 25393   | Wire crossing           |
| KBL Cablesystems of Minnesota | 25394   | Wire crossing           |
| KBL Cablesystems of Minnesota | 25395   | Wire crossing           |
| KBL Cablesystems of Minnesota | 25396   | Wire crossing           |
| Northern States Power         | 25420   | Pole & wire agreement   |
| Northern States Power         | 25445   | Overhead wire crossing  |
| Northern States Power         | 25457   | Wire crossing           |
| Northern States Power         | 25464   | Pole & wire agreement   |
| Northern States Power         | 25466   | Pole & wire agreement   |
| U. S. West Communications     | 25604   | Conduit agreement       |
| U. S. West Communications     | 25606   | Conduit agreement       |
| U. S. West Communications     | 25620   | Conduit agreement       |
| U. S. West Communications     | 25624   | Pole line attachment    |
| U. S. West Communications     | 25632   | Pole & wire agreement   |
| U. S. West Communications     | 25645   | Pole & wire agreement   |
| KBL Cablesystems of Minnesota | 25680   | Wire crossing           |
| KBL Cablesystems of Minnesota | 25681   | Wire crossing           |
| AT & T Communications Inc.    | 26086   | Fiber optic agreement   |
| Northern States Power         | 26292   | Wire crossing           |
| Northern States Power         | 26632   | Pole & wire agreement   |
| Minnegasco                    | 27116   | Gas pipe line agreement |
| Northern States Power         | 27384   | Overhead wire crossing  |
| Northern States Power         | 27612   | Wire crossing           |
| Northern States Power         | 27627   | Overhead wire crossing  |
| John A. Dalsin & Sons, Inc.   | 27878   | Land lease              |
| KBL Cablesystems of Minnesota | 28039   | Wire crossing           |
| KBL Cablesystems of Minnesota | 28040   | Wire crossing           |
| Northern States Power         | 28066   | Overhead wire crossing  |
| Paragon Cable TV              | 28080   | Overhead wire crossing  |
| U. S. West Communications     | 28202   | Pole & wire agreement   |
| Smith Foundry Company         | 28285   | Land lease and shed     |
| L. H. Sowles Company          | 28487   | Land lease              |
| N. C. Bennett Lumber Company  | 28625   | Land lease              |
| Minneapolis Gas Light Co.     | N7226   | Gas pipe agreement      |
| City of Minneapolis           | V68     | Bridge agreement        |
| City of Minneapolis           | V74     | Bridge agreement        |
| City of Minneapolis           | V210    | Land sale agreement     |
| City of Minneapolis           | V2368   | Bridge agreement        |
| Minneapolis Gas Light Co.     | W1406   | Gas pipe agreement      |
| City of Minneapolis           | W2272   | Sewer line agreement    |
| City of Minneapolis           | W2427   | Sewer line agreement    |
| Minneapolis Gas Light Co.     | W3509   | Gas pipe agreement      |
| Minneapolis Gas Light Co.     | W3937   | Gas pipe agreement      |
| Minneapolis Gas Light Co.     | W4106   | Gas pipe agreement      |
| Minneapolis Gas Light Co.     | W4111   | Gas pipe agreement      |
| City of Minneapolis           | W5320   | Water pipe agreement    |
| City of Minneapolis           | W6469   | Storm sewer agreement   |
| Naegele Outdoor Advertising   | SOL-726 | Sign board              |
| Midwest Outdoor Adv, Inc.     | SOL-776 | Sign board              |
| Midwest Outdoor Adv, Inc.     | SOL-777 | Sign board              |
| Midwest Outdoor Adv, Inc.     | SOL-791 | Sign board              |
| Minneapolis Com. Dev. Agency  | None    | Environ. Rt. of Entry   |
|                               |         | Internet the of Energy  |
| MCI Fiber-optics              | 26093   |                         |
| •                             | (())    |                         |

# Exhibit H

#### Formula to Calculate the Net Present Value of Future Lost Net Freight Revenue

Lost Net Revenue = The product of "A" and "T" discounted to the present value, using "C" as the discount rate when:

- A = Average annual lost net freight revenue, before tax, from the then available records of the most recent two-year period. Revenues used in the projection should be adjusted to reflect those revenues reasonably expected to continue.
- C = Cost of Capital determined by I.C.C. on the date of request by the Authority.
- $D_1 = Date of closing plus 20 years.$
- $D_2$  = Date of termination of Railroad Easement.
- $T = D_1 D_2$  (remaining term).

# Exhibit H

## Formula to Calculate the Net Present Value of Future Lost Net Freight Revenue

Lost Net Revenue = The product of "A" and "T" discounted to the present value, using "C" as the discount rate when:

A = Average annual lost net freight revenue, before tax, from the then available records of the most recent two-year period. Revenues used in the projection should be adjusted to reflect those revenues reasonably expected to continue.

C = Cost of Capital determined by I.C.C. on the date of request by the Authority.

- $D_1 = Date of closing plus 20 years.$ 
  - $D_2$  = Date of termination of Railroad Easement.
  - $T = D_1 D_2$  (remaining term).

DL.1/29thSt.ExH

Minneapolis to Hopkins Trail

# HOPKINS TO MINNEAPOLIS TRAIL AGREEMENT (THIS APPROVES EXTENDING TRAIL FROM BELTUNE BLVD, TO WEST END MIDTOWN GREENWAY TRAIL) BLVD, TO WEST END MIDTOWN GREENWAY TRAIL)

The following Resolution was offered by Commissioner Opat, seconded by Commissioner Dorfman:

BE IT RESOLVED, that First Amendment to Permit Agreement No. 73-32001 with Suburban Hennepin Regional Park District, extending the Hopkins to Minneapolis Recreational Trail on Hennepin County Regional Railroad Authority property, from Beltline Boulevard in St. Louis Park, to the west end of the 29th Street Midtown Greenway - Phase I Trail at Chowen Avenue in Minneapolis, be approved; and that the Chair of the Board be authorized to sign the First Amendment on behalf of the Authority.

The question was on the adoption of the Resolution and there were  $\underline{6}$  YEAS and 0 NAYS, as follows:

-----

| BOARD OF COMMISSIONERS<br>HENNEPIN COUNTY REGIONAL<br>RAILROAD AUTHORITY | YEA      | NAY      | OTHER  |
|--------------------------------------------------------------------------|----------|----------|--------|
| Michael Opat                                                             | <u></u>  |          |        |
| Mark Stenglein                                                           |          |          | ABSENT |
| Gail Dorfman                                                             | <u></u>  | <u> </u> |        |
| Peter McLaughlin                                                         | <u> </u> |          |        |
| Randy Johnson                                                            | <u> </u> |          |        |
| Penny Steele                                                             | <u></u>  |          |        |
| Mary Tambornino, Chair                                                   | x        |          |        |

RESOLUTION ADOPTED ON 10/03/00

ATTEST:

Secretary, HCRRA

## RESOLUTION NO. <u>49-HCRRA-98</u>

The following resolution was offered by Commissioner Opat, seconded by Commissioner Stenglein:

WHEREAS, Resolution 8-HCRRA-84 authorized the purchase of abandoned Chicago and NorthWestern Transportation Company (CNW) right of way, located between the City of Hopkins and the City of Minneapolis; and

 $|i\rangle$ 

WHEREAS, the Suburban Hennepin Regional Park District (Hennepin Parks) desires to construct a recreational trail between the proposed 29<sup>th</sup> Street Greenway Trail and the existing Hopkins-to-Chaska Trail; and

WHEREAS, Hennepin Parks desires to enter into a permit agreement with Hennepin County Regional Railroad Authority for the purpose of constructing and maintaining a recreational trail in the Hopkins-to-Minneapolis Corridor, between 11<sup>th</sup> Avenue South, in the City of Hopkins, and Beltline Boulevard, in the City of St. Louis Park,

BE IT RESOLVED, that Permit Agreement 73-32001, with the Suburban Hennepin Regional Park District, for recreational trail purposes, be approved, and that the Chair be uthorized to sign the Agreement on behalf of the Authority.

The question was on the adoption of the resolution and there were <u>6</u> YEAS and <u>0</u> NAYS as follows:

OARD OF COMMISSIONERS ENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

|                        | YEA      | <u>NAY</u> | <u>OTHER</u>                           |
|------------------------|----------|------------|----------------------------------------|
| Mike Opat              | V        |            |                                        |
| Mark Stenglein         | <u> </u> |            |                                        |
| Mark Andrew            | <u> </u> |            |                                        |
| Peter McLaughlin       | <u> </u> |            |                                        |
| Randy Johnson          | <u> </u> |            |                                        |
| Penny Steele           | <u> </u> |            | ······································ |
| Mary Tambornino, Chair |          |            |                                        |
| , endi                 |          |            | ABSENT                                 |

ESOLUTION ADOPTED SEPTEMBER 1, 1998

US. TO HOPKING

#### FIRST AMENDMENT TO PERMIT AGREEMENT NO. 73-32001

THIS AGREEMENT, made and entered into by and between the HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY ("Permittor"), a Minnesota political subdivision, and Suburban Hennepin Regional Park District ("Permittee"), a Minnesota political subdivision;

#### WITNESSETH:

WHEREAS, Permittor and Permittee entered into a certain Permit Agreement bearing Agreement No. 73-32001, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Rail Authority "Hopkins to Minneapolis Rail Corridor", said Permit being set forth in Exhibit "I", attached hereto and made a part hereof by reference;

WHEREAS, Permittor and Permittee desire to amend the Permit in certain particulars;

NOW, THEREFORE, the parties mutually agree as follows:

Clause 1. "Premises" of the Permit is hereby amended by substituting the following therefor:

#### 1. <u>Premises</u>

Permittor hereby agrees to grant certain rights and benefits to Permittee hereinafter described with regard to that certain real property described as follows:

That part of the Hennepin County Regional Railroad Authority (HCRRA) right of way from 11<sup>th</sup> Avenue South in the City of Hopkins, and including that part of the HCRRA Hopkins to Minneapolis Rail Corridor in the City of St. Louis Park, to the intersection of Chowen Avenue South and West 31<sup>st</sup> Street in the City of Minneapolis, generally conforming to the center 16 feet of the rail corridor, or generally conforming to that part within 8 feet on each side of the centerline of the trail where trail is not located in the center of the HCRRA rail corridor, and including a crossing of the HCRRA "Kenilworth" railroad trackage approximately 1,475 feet easterly of the east line of Beltline Boulevard in St. Louis Park, Minnesota, said trackage currently being used by the Twin Cities and Western Railroad Company, and including a connection to the west end of the existing 29<sup>th</sup> Street Midtown Greenway – Phase I Trail at Chowen Avenue South and West 31<sup>st</sup> Street, as delineated and colored green on HCRRA Property Maps numbered 28, 29, 2, 3, 4, 5, 6, and 31 and attached hereto as Exhibit A.

A more complete description will be prepared upon the completion of construction of the trail and the completion of "as built" construction plans and will replace and supersede the above description.

The said real estate shall be hereinafter described as the "Premises".

Clause 8. "Other Users" of the Permit is hereby amended by substituting the following therefore:

#### 8. Other Users

Permittor shall use its best efforts to terminate or amend any permits or leases, or other written permission to the Premises, except as provided herein, which may previously have been extended to others by Permittor and which conflict with this Permit.

Permittee hereby acknowledges the presence and use of portions of the Premises and adjacent property for railroad purposes by the Soo Line Railroad Company and other users, including without limitation, Permittor and the Twin Cities and Western Railroad. Permittee agrees to coordinate activities with the railroad use to avoid disrupting or otherwise adversely affecting continued railroad use.

Clause 23. "Conditions of Premises Inspection" of the Permit is hereby amended by substituting the following therefore:

#### 23. <u>Conditions of Premises Inspection</u>

Permittee accepts the Premises in an "AS IS" condition with no express or implied representations or warranties by Permittor as to the physical condition or fitness or suitability for any particular purpose, express or implied. Permittee is responsible for and has had ample opportunity to inspect the Premises, is familiar with the same, and has determined to its satisfaction the fitness of the Premises for its intended use.

Permittee acknowledges and assumes all risks associated with the proximity of the Premises to the railroad right of way upon portions of the Premises and adjacent to the Premises and to any railroad operations thereon including, but not limited to, operations of The Soo Line Railroad Company and the Twin Cities and Western Railroad.

Clause 26. "Railroad Operations" is added as a new provision of the Permit:

#### 26. Railroad Operations

Permittee agrees that the rights contained in this Permit Agreement are subject to and subordinate to the rights granted and contained in any agreements entered into by Permittor as to railroad operations over right of way upon portions of the Premises and adjacent to the Premises, including without limitation, agreements with the Soo Line Railroad Company and the Twin Cities and Western Railroad whether or not entered into on or after the commencement of this Permit Agreement. Permittee shall comply with all rules and regulations in regards to railroad operations on the right of way, including without limitation, those regarding safety. This Permit and all provisions thereof shall be subject to revision at any time if made necessary by any order or finding of the Surface Transportation Board or state authorities having jurisdiction over railroad operations.

Without limiting the foregoing, Permittee agrees that the rights contained in this Agreement are subject to and subordinate to the rights granted in the Trackage Rights

Agreement between Soo Line Railroad Company, Twin Cities and Western Railroad Company and Hennepin County Regional Railroad Authority entered into on August 10, 1998, Contract No. A18158, and Permittee agrees to be bound by the terms therein regarding the Kenilworth Trail including without limitation those contained in Sections 4.5 and 4.8. A copy of the Trackage Rights Agreement is attached hereto as Exhibit II and made a part of this Agreement. Further, Permittee agrees that the rights contained in this Agreement are subject to and subordinate to the rights granted in the Purchase Agreement between Soo Line Railroad Company and Hennepin County Regional Railroad entered into on December 23, 1992, and Permittee agrees to be bound by the terms therein regarding the easement granted, which covers the 29<sup>th</sup> Street Corridor including without limitation those contained in Section 14 regarding entry into the easement area. A copy of the Purchase Agreement is attached hereto as Exhibit III and made a part of this Agreement.

The effective date of this First Amendment to Permit Agreement No. 73-32001 is October 4, 2000.

Except as herein above amended, the terms, conditions and provisions of Permit Agreement No. 73-32001, shall apply to and govern the provisions of this Agreement.

IN WITNESS WHEREOF, the parties hereto have signed this Permit Agreement as of , 20

Approved as to form: Assistant County Atterney Date: 🖊 28/00

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

By: Chair, Board of Commissioners-

And Executive Director

Approved as to form:

Attorney for Suburban Hennepin Regional Park District Date:

Approved as to execution: Assistant County Attorney Date: 1 9 28/00

SUBURBAN HENNEPIN REGIONAL PARK DISTRICT

Superintender 9-Date:

Chair, Board of Commissioners

Date: 9-2/

Approved as to execution:

Attorney for the Suburban Hennepin Regional Park District Date:

# EXHIBIT I

Agreement No. 73-32001

## PERMIT AGREEMENT

Hopkins to Minneapolis Trail

This agreement, entered into by and between the Hennepin County Regional Railroad Authority, a Minnesota political subdivision, ("Permittor") and Suburban Hennepin Regional Park District ("Permittee") a Minnesota political subdivision.

In consideration of the covenants by and between the parties, it is hereby agreed:

1. Premises

Permittor hereby agrees to grant certain rights and benefits to Permittee hereinafter described with regard to that certain real property described as follows:

That part of the Hennepin County Regional Railroad Authority (HCRRA) right of way, located in the Cities of St Louis Park and Hopkins, generally conforming to the center 16 feet of the rail corridor, delineated and marked in green, as shown on the construction plans for the Southwest LRT Extension Trail and attached hereto as, Exhibit "A"

The said real estate shall be hereinafter described as the "Premises."

2. <u>Uses</u>

The Premises shall be for the temporary use of Permittee, its agents, officers, employees, subpermittees and invitees for trail purposes, including but not limited to pedestrian use, cross country skiing, bicycles and other non motorized uses, and all requirements necessary to the enjoyment of the Premises for said uses. Permittee shall be granted temporary use of adjacent lands controlled by Permittor as reasonably required for construction and maintenance of the Premises.

3. <u>Term</u>

The term of this Permit shall be for an indefinite period, commencing on execution of this Agreement by the Chair of the Hennepin County Regional Railroad Authority until termination in accordance with Paragraph 4.

#### 4. Termination

Either party may, at any time and for any reason, terminate this Permit by giving <u>ninety (90) days'</u> written notice of its intention to do so. Such notice may be served upon the Hennepin County Regional Railroad Authority by delivering a copy thereof to the Executive Director at the principal office in the Hennepin County Government Center,

### PERMIT AGREEMENT

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47

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#### 4. Termination

Either party may, at any time and for any reason, terminate this Permit by giving <u>ninety (90) days'</u> written notice of its intention to do so. Such notice may be served upon the Hennepin County Regional Railroad Authority by delivering a copy thereof to the Executive Director at the principal office in the Hennepin County Government Center,

Minneapolis, Minnesota, 55487, or by depositing the same in the United States Post Office directed to the Executive Director at the principal office. Such notice may be served on the Suburban Hennepin County Park District by delivering a copy thereof to its Superintendent, 12615 County Road 9, Plymouth, Minnesota 55441. Except as provided herein, this Agreement may not be terminated or revoked by either party hereto.

#### 5. Temporary Nature of Use

Permittee acknowledges that the Premises was acquired by Permittor specifically and solely for the purpose of constructing a light rail transit system or other permitted transportation uses and its associated facilities and that it is Permittor's intention to allow Permittee to use the Premises only until it is needed for that purpose. Nothing in this Permit shall be deemed to evidence any change by Permittor of its intended use of the Premises for light rail transit purposes or other permitted transportation uses. Rather, Permittor has agreed to the terms of this Permit to provide a temporary use for the Premises during the time required for further planning and development of the light rail transit system or other permitted transportation uses.

#### 6. <u>Rights Upon Termination</u>

On the expiration of ninety (90) days after such service of said notice of termination, this Permit, and all rights hereunder, shall thereupon terminate and be at an end, saving and excepting such rights as may have accrued to either party hereunder prior to such termination. Permittee shall, without further notice or demand, deliver possession of the Premises to the Permittor at the expiration of said ninety (90) days and shall, before the expiration of said ninety (90) days, remove all buildings and property placed upon the Premises which it may desire and have the right to remove. If it shall fail to remove buildings and property, its right shall, at the option of the Permittor, cease and Permittee's interest thereto shall be forfeited and at the same time shall belong to Permittor or, in such case, if the Permittor shall elect, it may, at any time after the expiration of said period of ninety (90) days, tear down and/or remove any or all such buildings and property at the expense of Permittee without any liability for damages thereof in any respect whatsoever and Permittee shall thereupon promptly reimburse Permittor for all expenses incurred by it in doing so.

#### 7. Rent

Upon any such termination of this Permit, rent shall be paid by the Permittee to the date of termination fixed by said notice at the rate of \$1.00 per year.

#### 8. Other Users

Permittor shall use its best efforts to terminate or amend any permits or leases, or other written permission to the Premises which may previously have been extended to others by Permittor and which conflict with this permit.

#### 9. Subpermits

Permittee may grant permits to subpermittees only upon written agreement of Permittor. Any subpermit shall be on the same terms and conditions and for the same uses as are contained in this Permit.

#### 10, <u>Signage</u>

Permittee shall provide, install and maintain signage, including kiosks, on the Premises identifying the Premises as a temporary trail corridor of the Suburban Hennepin Regional Park District, by permission of the owner, the Hennepin County Regional Railroad Authority, until the Premises are used for light rail transit or other transportation uses.

#### 11. Nuisance, Waste

Permittee shall not permit the existence of any nuisance on said Premises. Permittee, at all times, shall keep said Premises clean and shall comply with all laws, ordinances and regulations respecting Permittee's business and use and occupation of said Premises. Permittee, at its sole cost, shall make any and all improvements, alterations, repairs and additions, and install all appliances required on said Premises by or under any such regulations, ordinances or laws. No bills, posters or advertising matter of any kind shall be posted on said Premises; provided, however, that Permittee may post on appropriate structures, informational materials relating to the permitted uses. Permittee shall use all reasonable precautions to prevent any waste, injury, death or property damage and shall modify, repair or replace any railings, pathways or other improvements on the Premises when necessary.

#### 12. <u>Utilities, Title, Existing Rights of Others</u>

Permittee accepts said Premises subject to the rights of any person, firm or corporation, including the Permittor in and to any existing telephone, telegraph and/or other wires, poles and facilities of any kind whatsoever, whether or not of record, and should it, at any time, become necessary because of Permittee's use of the Premises to relocate any of said poles, wires or facilities by reason of this Permit, Permittee shall bear and pay the cost of so doing.

Permittee also accepts said Premises subject to any want or failure at any time of Permittor's title to said Premises or any part thereof and Permittee shall assume any damages sustained by Permittee in connection therewith. Permittee also accepts such Premises subject to rights of any party, including Permittor, in and to any roadways, easements, leases and permits, whether granted, at Permittor's sole discretion, either prior to or after the date of this Permit Agreement. Permittee agrees to provide to Permittor or other tenants of Permittor access over and through the Premises on these roadways and easements should such access be deemed necessary by Permittor. Permittee accepts said Premises subject to the right of Permittor, its employees, agents, permittees, lessees, and contractors

when reasonably necessary to walk upon said Premises to repair adjacent property and the right of Permittor, its employees, agents, permittees, lessees, and contractors to temporarily place equipment upon the property when reasonably necessary for the purpose of maintaining, repairing, inspecting or constructing upon Permittor's property.

#### 13. <u>Indemnification</u>

Permittee shall defend, indemnify and hold harmless Permittor, its Commissioners, officers, agents, and employees from any liability, claims, demands, personal injury, costs, judgments, or expenses, including reasonable attorney's fees, resulting directly or indirectly from an act or omission of Permittee, its agents, employees, customers, invitees, subpermittees, permittees, lessees or other occupiers of the Premises.

Permittor shall not be liable to Permittee or those claiming by, through, or under Permittee for any injury, death or property damage occurring in, on or about the Premises based upon the construction, operation or maintenance of the Premises by Permittee or any subpermittee, nor for the loss or damage by reason of the present or future condition of repair of the Premises, or for the loss or damage arising from the acts or omissions of Permittee, its agents, employees, customers, invitees, subpermittees, permittees, lessees, or other occupiers of the Premises.

#### 14. Insurance

Permittee further agrees that if in any case the release and indemnity provided in this section shall not be valid, Permittor shall have the full benefit of any insurance effected by the Permittee upon the property injured, destroyed or damaged and/or against the hazard involved; and Permittee agrees that any and all such insurance shall be so written that the insurer shall have no claim or recourse of any kind whatsoever against Permittor in connection therewith.

#### 15. Covenant

Permittee, in consideration of the permitting of the said Premises, as herein provided, hereby covenants and agrees to pay the rent therefor promptly, as above provided, and fully to abide by and perform all and singular the conditions, covenants and agreements herein contained and to be observed and performed by said Permittee and to yield up said Premises unto the Permittor at the expiration or termination of the Permit Agreement in as good condition as when entered upon.

#### 16. Quiet Enjoyment

Permittor has the right and authority to enter into this Agreement and if Permittee pays the rent required hereby and otherwise performs the terms hereof to be performed by Permittee, Permittee shall, during the term hereof, be entitled to quiet enjoyment and possession of the Premises subject to the termination provisions hereof. Notwithstanding

the foregoing, Permittee acknowledges that the rights provided to it by virtue of the Permit are subject to the provisions of Paragraph 12.

#### 17. <u>Waiver</u>

No receipt of money by Permittor from Permittee after any default by Permittee or . after the expiration of this Permit or after the service of any notice or after the commencement of any suit or after final judgment for possession of said Premises, shall waive such default or reinstate, continue or extend the term of this Permit or affect any such notice or suit, as the case may be. No waiver of any default of Permittee shall be implied from omission by Permittor to take any action on account of such default, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated.

#### 18. Breach

It is further agreed between the parties hereto, that if the said Permittee shall breach or make default in any of the conditions, covenants or agreements of this Permit, which breach or default shall continue for fifteen (15) days after Permittee's receipt of written notice thereof from Permittor, then it shall be lawful for the Permittor, then or at any time thereafter, to declare this Permit ended, and to re-enter said Premises and take possession thereof, with or without process of law, and to use any reasonable or necessary lawful force for regaining possession; whereupon the rights and obligations of the parties shall be the same as above specified in the case of termination pursuant to Paragraph 4; and it is hereby further agreed and provided that any waiver at any time of a breach of any condition, covenant or agreement of this Permit shall extend only to the particular breach so waived and shall, in no manner, impair or affect the existence of such condition, covenant or agreements, or the right of Permittor thereafter to avail itself of same and any subsequent breach thereof. In the event Permittor has to take action for repossession of said property, Permittee, its assigns or heirs shall be liable for reasonable attorney's fees incurred by Permittor.

#### 19. Assignment

The benefits and obligations of this Permit shall extend to and shall bind the heirs, administrators, executors, leases, successors or assigns of the parties hereto, but no interest in this Permit shall be assigned, nor said Premises or any part thereof shall be subpermitted, used or occupied by any party other than the Permittee unless specifically stated herein. Permittor reserves the right to review and revise the rental rate applicable to this Permit upon any change in the status of the Permit, the Permittee or person occupying the Premises during the term of this Permit or any renewal thereof.

#### 20. Improvements, Maintenance

Permittee shall be responsible for the construction of all improvements necessary to its use of the Premises and shall be responsible for the maintenance of said Premises. Permittee shall also be responsible for the construction of all bridges and crossings including, without limitation, under or over passes, required pursuant to Paragraph 25 deemed necessary for Permittee to provide for any trails on the Premises or to otherwise use the Premises. Construction plans, if any, shall be submitted to the Permittor for review and comment. Permittor reserves the right to reject any plans for construction proposed by Permittee on the grounds, in Permittor's sole discretion, that said plans are inappropriate or incompatible with its future use of the Premises, or with the operations of the Soo Line Railroad Company or other railroad companies operating on the right of way adjacent to the Premises.

#### 21. Environmental Concerns

Permittee shall not create or permit any condition of the Premises that could present a threat to human health or to the environment. Permittee shall bear the expense of all practices or work, preventative, investigative or remedial, which may be required because of any conditions of the Premises introduced by Permittee, subpermittees or invitees during Permittee's period of use, including conditions introduced by Permittee, subpermittees, or invitees which affect other lands. Permittee expressly agrees that the obligations it hereby assumes shall survive cancellation of this Permit. Permittee agrees that statutory limitation periods on actions to enforce these obligations shall not be deemed to commence until Permittor discovers any such health or environmental impairment, and Permittee hereby knowingly and voluntarily waives the benefits of any shorter limitation period.

Permittor shall have the right, but not the duty, to enter upon the Premises from time to time as set forth below to inspect the Premises for environmental contamination and in the course thereof to conduct soil and groundwater testing and to perform environmental investigation, remediation or mitigation. Permittor may enter the Premises during regular business hours of Permittee without prior notice, and may enter the Premises during periods other than regular business hours either with prior written consent of Permittee or without if Permittor reasonably believes that an emergency exists on the Premises. Permittor shall conduct any such inspections or testing so as to minimize interference with Permittee's operations. Permittor's entry on to the Premises pursuant to this paragraph shall not relieve the Permittee's obligation to pay rent under this Permit.

Permittee may make any inspections, tests, audits or reviews of the physical condition of the premises, all at Permittee's sole cost and expense. Such inspections and tests may include, without limitation, soil tests, soil borings, surveys, environmental audits, and other tests of the premises ("environmental inspections"). If Permittee elects to abandon its trail project and terminate this agreement due to its "environmental inspection", Permittee shall restore the property to its prior condition, and provide the Permittor with copies of all reports and test result. Permittee agrees to indemnify, defend, and hold the Permitor harmless from any and all actual out-of- pocket expenses incurred by

the by the Permittor related to containing or disposing of any contaminated materials released by such inspections.

In addition to the foregoing provisions of this Paragraph 21, and in exchange for the rights and privileges granted in this Permit Agreement Permittee hereby agrees to bear the expense of all practices or work, preventative, investigative or remedial necessary to comply with all federal, state, local and other governmental statutes, rules and regulations necessary for Permittee's use of the Premises for trail and park purposes regarding any hazardous waste, pollutant, contaminant or petroleum-related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement provided, however, that should Permittee elect in its sole discretion to abandon its trail project and terminate this agreement, due to its "environmental Inspections," Permitee shall not be obliged to bear expenses enumerated in this sentence. Further, Permittee agrees to defend, indemnify and hold harmless Permittor, its Commissioners, officers, agents and employees from any liability, claims, demands, personal injury, costs, judgments, or expenses, including reasonable attorney's fees arising from exercise of the rights granted by this Permit Agreement and resulting from the presence of any hazardous waste, pollutant, contaminant or petroleum-related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. Permittee expressly agrees that the obligations it hereby assumes related to construction and operation of the park trail, shall survive the cancellation of this Permit.

#### 22. Compliance with Laws, Ordinances and Rules

Permittee agrees to comply with all laws, ordinances and regulations of federal, state, municipal and local government agencies as they apply to use of the Premises. Permittee agrees to comply with rules as may be promulgated from time to time by Permittor. Permittee may enforce its ordinances on the premises, as it applies to third parties.

### 23. <u>Condition of Premises Inspection</u>

Permittee accepts the Premises in an "AS IS" condition with no express or implied representations or warranties by Permittor as to the physical condition or fitness or suitability for any particular purpose, express or implied. Permittee is responsible for and has had ample opportunity to inspect the Premises, is familiar with the same, and has determined to its satisfaction the fitness of the Premises for its intended use.

Permittee acknowledges and assumes all risks associated with the proximity of the Premises to the railroad right of way adjacent to the Premises and to any railroad operations thereon including, but not limited to, operations of The Soo Line Railroad Company.

#### 24. <u>Liens and Encumbrances</u>

Permittee shall not permit any liens or encumbrances to be established or remain against the Premises, including but not limited to, encumbrances with respect to work performed or equipment or materials furnished in connection with use of the Premises by Permittee, its agents, employees, customers, invitees, subpermittees, lessees or other occupiers of the Premises pursuant to this Permit.

#### 25. <u>Relocation</u>

Not withstanding the provisions of Paragraph 8 regarding other users, in the event relocation of Permittee's trail is required to accommodate the relocation of rail traffic pursuant to Minn. Stat. 398A.04, Subd.1, as it may be amended, or otherwise is required to accommodate Permittor's use of the corridor, Permittee shall be required at no cost to Permittor to relocate, remove or alter all or any part of Permittee's trail improvements necessary to accommodate such use.

IN WITNESS WHEREOF, the parties hereto have signed this Permit Agreement as of \_\_\_\_, 199\_\_\_\_.

### HENNEPIN COUNTY REGIONAL **RAILROAD AUTHORITY**

Day, By:

Chair, Board of Commissioners

And: irector

## Attorney for Suburban Hennepin **Regional Park District** Date: \_\_\_\_\_

Approved as to execution:

Approved as to form:,

Date: {

Assistant County Attorney

Assistant County Attorney Date: \_\_\_\_\_

Attorney for Suburban Hennepin Regional Park District Date:\_\_\_\_\_

## SUBURBAN HENNEPIN REGIONAL PARK DISTRICT

Superintenden Date:

Chair Board of Commissioners Date: 9-17-98

T:/Tre/HCRRA/Permits/8/25/98/8:55

EXHIBIT II

. .

A18158 HCRRA: Contract No. AMB59-August 3, 1998

### TRACKAGE RIGHTS AGREEMENT BETWEEN SOO LINE RAILROAD COMPANY, TWIN CITIES & WESTERN RAILROAD COMPANY AND HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

THIS Agreement, made and entered into this / day of duguat, 1998 by and between the SOO LINE RAILROAD COMPANY, a Minnesota corporation doing business as Canadian Pacific Railway (hereinafter sometimes called "Soo"), TWIN CITIES & WESTERN RAILROAD COMPANY, a Minnesota corporation (hereinafter sometimes called "TCW") and the HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY, a political subdivision and local government unit of the State of Minnesota (hereinafter sometimes called the "Authority").

#### RECITALS

The Authority presently owns a line of railroad approximately 2.5 miles in length, extending from a point of connection with Soo trackage in the City of St. Louis Park, in the vicinity of Lake Street and the westerly city limits of the City of Minneapolis, northeasterly to a point of connection with trackage owned and operated by The Burlington Northern and Santa Fe Railway Company in the vicinity of Cedar Lake, in the City of Minneapolis. The Authority acquired the right-of-way, bridges and other related structures, but not the trackage, west from the Chicago and NorthWestern Transportation Company (hereinafter called "CNW") in 1984. CNW retained ownership of the trackage, including rails and ties, and was granted an easement to continue freight service over said line of railroad. On July 26, 1993, CNW granted overhead trackage rights to Soo and TCW over said trackage, subject to an Operating Agreement dated December 31, 1990 between CNW and the Authority.

CNW subsequently abandoned its operating rights over said railroad line and sold its interest in the trackage, including rail and ties, to the Authority. The Authority acquired the trackage subject to the trackage rights held by the Soo and TCW.

Soo and the Authority entered into an Agreement dated December 23, 1992 in which the parties agreed to cooperate in obtaining a rail route alternative to the 29th Street trackage in the City of Minneapolis, being acquired by the Authority pursuant to said Agreement. The Cedar Lake line of railroad described in the first recital has been identified by the parties as an alternative route under the December 23, 1992 Agreement.

The Soo and TCW desire to commence operations over this trackage on or after the date of this Agreement as a result of the implementation of the earlier agreements mentioned above.

The parties, therefore, agree as follows:

#### **SECTION 1 - DEFINITIONS**

1.1. "Agreement" shall mean this Agreement dated \_\_\_\_\_\_, 1998. All references in this document to Exhibits are to those attached to, and made a part of, this Agreement.

1.2. "Rail Line" is defined as the trackage and underlying right-of-way formerly owned by the CNW, extending from a point of connection with Soo Line trackage at or near CNW milepost 16.2 in the City of St. Louis Park, easterly to CNW milepost 13.7 at a point of connection with BNSF in the City of Minneapolis.

1.3. "Rail Corridor" shall mean the area where a right of use is created by this Agreement providing for operation by Soo and TCW over the Rail Line consisting of a corridor 50 feet in width centered on the Rail Line, except where the Authority does not own sufficient land to provide a 50-

foot corridor, and where the Kenilworth Trail as described in Section 1.5 is to be located less than 25 feet from the center line of the Rail Line. The Rail Corridor is further described in Exhibit A.

1.4 "Railroad(s)" shall mean the Soo and TCW.

1.5 "Kenilworth Trail" shall mean the public trail described in Exhibit B attached hereto.

1.6. "Sole Employees" and "Sole Property" shall mean employees, agents, contractors, passengers, invitees, railroad and motor vehicle equipment, including lading, and other equipment of each of the parties or their agents or contractors while engaged in, or about to engage in, maintaining, using, operating, constructing, repairing, renewing, replacing and improving the trackage in the Rail Corridor, or in switching or handling railroad cars of the respective parties hereto.

1.7. "Taxes" shall mean lawfully imposed real estate taxes and assessments including, but not limited to, special assessments.

1.8. "Trackage" shall mean all rail, cross ties, related track appliances such as spikes and tie plates (sometimes known as "other track material"), ballast, all grade crossing signals and other signal and communication equipment located upon the Rail Line, and including trackage laid in and across public streets and highways.

#### **SECTION 2 - GRANT OF RIGHTS**

2.1. Subject to the terms and conditions in this Agreement, Authority grants to Soo and TCW, and their respective permitted assigns, non-exclusive rights to conduct railroad operations over the Rail Line within the Rail Corridor for the operation of freight trains, occasional passenger trains, locomotives, cabooses, rail cars, maintenance-of-way equipment and other rail equipment in common with other railroad users the Authority may admit to the joint use of the Rail Line in the future. This grant of rights shall be known as the Rail Corridor rights under this Agreement and

supersedes and replaces all other agreements, including trackage rights agreements between CNW and Soo, and between CNW and TCW, governing use of the Rail Line in the Rail Corridor.

2.2 The Authority shall convey a Railroad Easement to TCW in the form shown on Exhibit C attached.

2.3. Soo and TCW shall not have the right to set out, pick up or store cars or switch any existing or future industries on the Rail Line, or serve any industry or team tracks now or hereafter located on the Rail Line without the express written consent of the Authority. Neither Soo nor TCW may admit additional tenants, and assignment of existing operating rights shall require the consent of the Authority, except as otherwise provided in this Agreement.

2.4. Nothing in this Agreement is to be construed as establishing any common carrier status on the part of the Authority.

2.5. Soo and TCW acknowledge that, concurrent with the exercise of their rights and obligations under this Agreement, the City of Minneapolis will exercise rights granted to it by the Authority for the Kenilworth Trail (State Project No. 141-090-05) in proximity to the Rail Corridor as more fully described in Exhibit B and made a part of this acknowledgment.

#### SECTION 3 - RENT

3.1. The rental for use of the Rail Corridor payable by TCW or Soo, in addition to payment of any expenses provided elsewhere in this Agreement, shall be \$7.50 per train mile, for each train operated by either TCW or Soo. To compute charges, the train mile rate shall be multiplied by 2.5 miles. Any movement of one or more pieces of railroad equipment over the Rail Corridor, except maintenance-of-way equipment and work trains while actually engaged in work on the Rail Corridor, shall be considered a train movement.

3.2. Rent shall be payable to the Authority quarterly. The rate of \$7.50 per train mile shall be adjusted retroactively to July 1, 1992 and on each July 1 thereafter, by utilization of the Annual

Indices of Charge-Out Prices and Wage Rates (1977= 100) Series RCR, included in the "AAR Railroad Cost Recovery Index", and supplements thereto, issued by the Association of American Railroads. In making such adjustment, the final "Material prices, wage rates and supplements combined (excluding fuel)" Index for the Western District for the calendar year 1990 shall be compared to the final Index for the calendar year immediately preceding the year in which such adjustment is to become effective. Said Train Mile Rate shall then be adjusted by the percentage of increase or decrease, as the case may be, in the Index of the year to be escalated as related to the year 1990, provided, however, that said Train Mile Rate shall never be less than \$7.50. If the Association of American Railroads, or any successor organization or association, discontinues such Index, an appropriate substitute for determining in a similar manner the percentage of increase or decrease in the Train Mile Rate shall be agreed upon by the parties hereto.

3.3. At such time as use of, and the right to use, the Rail Corridor is terminated by written notice by either Soo or TCW, the terminating party shall have no further obligation to pay rental to the Authority and shall have no claim against the Authority for any payment of any kind, except as may have arisen prior to such termination or by reason of other provisions of this Agreement. At such time as TCW relinquishes its right to use the Rail Corridor, Soo shall become obligated to pay a minimum Annual Rental until such time as Soo provides written notice to the Authority of its intention to permanently abandon Railroad rights to use the Rail Corridor. Soo shall be obligated to pay a minimum Annual Rental of \$10,000 for any year in which rentals payable in accordance with Sections 3.1 and 3.2 do not reach \$10,000. In such case, the minimum Annual Rental payment shall be in lieu of rental required under Section 3.1 and Section 3.2.

#### **SECTION 4 - MAINTENANCE, CONTROL AND OPERATIONS**

4.1. TCW shall have the exclusive management, direction and control of the Rail Corridor, including the obligation to dispatch rail traffic, at its sole cost and expense. In dispatching, directing and controlling use of the Rail Corridor, TCW shall not discriminate against the trains of Soo or any other railroad tenants admitted to use of the rail line. In the event the Authority seeks to admit additional railroad tenants to use of the Rail Line, the Authority agrees to require such tenant to agree to terms, including liability, substantially as contained in this Agreement. The parties agree to renegotiate this Section 4 in the event any additional railroad tenants are admitted to use of the Rail Line by the Authority in order that additional costs incurred by TCW that are attributable to such additional tenants may be fairly compensated.

4.2(1) TCW shall perform all construction, derailment and wreck clearing, maintenance, repair and renewal of the Trackage, including any additions Soo or TCW may deem necessary or desirable for the safe and efficient operation of all trains. Any additions deemed necessary or desirable for the safe and efficient operation of trains will be paid for by the Railroad or Railroads requesting the same. The cost of derailment and wreck clearing are governed by Section 10. The Authority shall reimburse TCW for construction, maintenance, repair and renewal costs, as outlined in Section 4.3. The provisions of Sections 4.2(2) through 4.2(6) shall control as between the Railroads in the case of conflict with other provisions of this Agreement.

4.2(2) TCW shall employ all persons necessary to operate, maintain, repair and renew the Rail Corridor. TCW shall be bound to use only reasonable and customary care, skill and diligence in the operation, maintenance, repair, renewal and management of the Rail Corridor and Soo shall not, by reason of TCW's performing or failing, or neglecting to perform any operation, maintenance, repair, renewal or management of the Rail Corridor, have or make against TCW any claim or demand for delay, loss, damage, destruction, injury or death whatsoever resulting from TCW's performance, failure or neglect, except as otherwise provided in Section 10.3.

4.2(3) Soo, at its expense, shall install and maintain upon its trains, locomotives, cabooses and cars such equipment or devices as may now or in the future be necessary or appropriate, in the reasonable judgment of TCW for the safe and efficient operation of trains over the Rail Corridor.

4.2(4) If the use of the Rail Corridor is at any time interrupted or traffic over the Rail Corridor is delayed for any cause, TCW shall, with reasonable diligence, restore the line for the passage of trains of the parties. Neither Railroad shall have or make any claim against the other for loss or damage of any kind resulting from such interruption or delay.

4.2(5) The operation of Soo over the Rail Corridor shall at all times be in accordance with the General Code of Operating Rules, or such other rules as TCW and Soo agree upon, TCW timetables, bulletins, instructions and restrictions, but such rules, instructions and restrictions shall be reasonable, just and fair between all Railroads using the Rail Corridor and shall not unjustly discriminate against any of them. TCW shall provide Soo with a copy of existing rules and instructions and provide Soo with prior, written notice of any changes in such rules or instructions. These rules and instructions shall include, but not be limited to, General Code of Operating Rules, Timetables, Special Instructions, Bulletins, General Orders and authoritative directions of Train Dispatchers and Operating Officers and all applicable federal statutes and regulations regarding railroad safety.

4.2(6) All employees of Soo engaged in the operation of Soo trains over the Rail Corridor shall be required to qualify, at Soo's expense, to operate over the Rail Corridor. TCW shall have the right to bar Soo employees from service over the Rail Corridor for cause until such time the barred individual is deemed to be qualified.

4.3. The Authority will reimburse TCW for construction, maintenance, repair and renewal costs on an annual basis upon presentation of a complete description of work done and materials used for the preceding calendar year. The Authority shall have the right to audit such billings and

to inspect work done upon reasonable notice. The Authority's obligation to reimburse TCW for such costs shall be limited to sixty percent (60%) of the trackage rights fees paid to the Authority by all users for the calendar year during which the maintenance charges were incurred, subject to an authorized minimum expenditure for maintenance cost of \$16,000 per year in any year when trackage rights fees are not sufficient to justify expenditures to that level. The authorized minimum expenditure shall be adjusted annually from \$16,000 beginning July 1, 1999 and thereafter in accordance with the formula set forth in Section 3.2 hereof. The authorized expenditures for maintenance, as limited by the foregoing, shall be known as the *Maintenance Allowance*. Any unexpended Maintenance Allowance may be drawn upon in future years for authorized expenditures, including the above minimum expenditure. TCW may draw, as additional Maintenance Allowance, an amount equivalent to a maximum of 100% of the prior year's rentals as calculated under Section 3, only for the following purposes:

1. To reach the authorized minimum expenditure for maintenance of \$16,000 per year; or

2. To carry out necessary bridge repairs or repairs to crossing signals.

If at any time the cumulative Maintenance Allowances justified by rental payments and this Section 4.3 are not sufficient to permit the safe and continued operation of the Rail Line, the additional maintenance and repair costs will be borne by the Authority. The Authority shall have no other obligation to reimburse TCW for construction, maintenance, repair or renewal costs, including long-term rehabilitation and capital expenditures.

4.4. Prior to commencement of operations over the Rail Corridor under this Agreement, MNDOT will arrange for rehabilitation of the Rail Line to FRA Class 2 standards. Following said commencement of operations, all maintenance, rehabilitation, renewal, reconstruction, repairs and improvements, replacement, including bridges, grade crossings and signals, will be the sole responsibility of TCW to perform, the costs of which shall be reimbursed by the Authority, in accordance with Section 4.3.

4.5. TCW shall have a right of access over other portions of the Rail Corridor within 25 feet either side of the center line of the now existing Trackage for the sole purpose of maintaining said Trackage over the Rail Corridor, except as limited by the physical proximity of fencing for the pedestrian and bicycle trails as provided for in the Kenilworth Trail (Exhibit B). Provided, however, that TCW shall not have the right to remove trees and other vegetation found more than 15 feet either side of the center line of the now existing trackage, except for purposes of wreck clearance, track repair, visibility at grade crossings, or with the consent of the Authority.

4.6. Neither Soo nor TCW shall be permitted to erect any structures in or upon the Rail Corridor without the express written permission of the Authority. The Authority shall not construct any facility in or over the Rail Corridor where the vertical distance between the top of the rail or the ground surface of the Rail Corridor, and any part of the facility, is less than 23 feet.

4.7. Unless otherwise ordered by the State, the Authority shall not pay the expenses of any public crossing of the Rail Corridor which may be opened or improved, including all expenses of crossing protection, unless such crossings are requested or opened by the Authority. The Authority shall not be responsible for any expenses incurred by Soo or TCW as a result of activities of third parties not authorized by the Authority occupying or otherwise interfering with the Rail Corridor, except as otherwise provided in this Agreement.

4.8. The Authority will permit construction of pedestrian and bicycle trails in proximity to the Rail Line as shown in Exhibit B. At any point where a trail is located within 25 feet of the center line of the Trackage, a fence along the boundary of the trail corridor will be provided, maintained and promptly repaired at no expense to Soo or TCW by the City of Minneapolis. No trespassing and other appropriate warning signs shall be provided by the City. The Authority will require that the City agree to the terms of this provision.

#### **SECTION 5 - TERMINATION**

5.1. The Rail Corridor rights shall become effective upon execution of this Agreement, and shall continue in full force and effect until terminated by either TCW or Soo as to the respective rights of the terminating party upon thirty (30) days' written notice, which notice may be given at any time. Trackage, other facilities and all improvements to the Rail Corridor will remain the property of the Authority. The permanent easement conveyed, however, may not be terminated by the Authority, except in accordance with this Agreement.

5.2. At such time as either Railroad desires to terminate its rights over the Rail Corridor, such Railroad shall have the obligation to obtain necessary Surface Transportation Board ("STB") and other regulatory approval that may be required. The Authority agrees to cooperate in seeking regulatory approval.

5.3. TCW and Soo will vacate all use of, and permanently terminate all rights to use, the Rail Corridor no later than thirty (30) days after a new connection between the Soo Hopkins line (TCW's current operating route) and the former Minneapolis, Northfield & Southern line in St. Louis Park (MNS connection), and between the MNS and The Burlington Northern and Santa Fe Railway (BNSF connection) becomes operational, or at such time as any other feasible alternative to use of the Rail Corridor satisfactory to TCW becomes available and is operational. The MNS connection and the BNSF connection are shown on Exhibit D attached to this Agreement.

#### SECTION 6 - CONDITIONS PRECEDENT

Operation over the Rail Corridor is contingent upon obtaining any required regulatory and government approvals, and any necessary corporate authorization.

#### SECTION 7 - TAXES

7.1. The Authority agrees to pay promptly to taxing authorities when due all Taxes, if any, duly levied on the Property with respect to the Authority's ownership, leases, air rights development, and/or operations. TCW and Soo agree to pay promptly to taxing authorities when due all Taxes, if any, with respect to their use or operations duly levied, to the extent Soo or TCW's property rights have been separately assessed by the appropriate assessing authority while either TCW or Soo are conducting operations over the Rail Corridor. To the extent TCW's property right is not so separately assessed to TCW, but the underlying fee in the Rail Corridor is assessed as railroad operating property and would be exempt except for TCW's use in operations, then TCW agrees to pay all such Taxes duly levied while conducting operations over the Rail Corridor. TCW reserves the right to protest to a taxing authority any such Taxes it deems to be unfair or excessive and may in good faith litigate and settle with the taxing authority any such protested amount. This subparagraph 7.1 will apply to Soo for any period during which Soo exercises its operating rights.

7.2. The Authority shall pay without reimbursement from Soo or TCW all Taxes, if any, attributable to any passenger transportation system installed by or at the direction of the Authority.

#### SECTION 8 - ASSIGNMENT RIGHT

Soo may admit a third-party operator as assignee of Soo's common carrier freight service obligation, or in connection with the sale of, or merger of, all or most of its railroad system, subject to the consent of the Authority, which shall not be unreasonably withheld, and subject to orders of the Surface Transportation Board ("STB"). TCW may admit a third-party operator as assignee of TCW's common carrier freight service obligation in connection with the sale of, or merger of all or most of its railroad system, subject to the consent of the Authority, which shall not be unreasonably withheld, subject to the orders of the STB.

### SECTION 9 - OBLIGATIONS FOLLOWING TERMINATION.

Upon termination of all rights to the Rail Corridor, the parties hereto are relieved from any and all obligations relating thereto, except for any obligations which may have accrued or which may have been incurred prior to the date of such termination or in accordance with the terms of this Agreement.

#### SECTION 10 - LIABILITY AND ENVIRONMENTAL INDEMNIFICATION.

10.1. TCW agrees to defend, indemnify and hold harmless the Authority, its commissioners, officers, agents and employees from any liability, claims, damages, costs, judgments, or expenses, including reasonable attorneys' fees, resulting directly or indirectly from any act or omission of TCW, its agents, employees, customers, tenants, or invitees, occurring on or from the Rail Corridor after the effective date of this Agreement, except that portion of liability caused by, or contributed to by, acts or omissions of the Authority, its agents, employees and invitees, notwithstanding the provisions of Section 12.

10.2. Soo agrees to defend, indemnify and hold harmless the Authority, its commissioners, officers, agents and employees from any liability, claims, damages, costs, judgments, or expenses, including reasonable attorneys' fees, resulting directly or indirectly from any act or omission of Soo, its agents, employees, customers, tenants, or invitees, occurring on or from the Rail Corridor after the effective date of this Agreement, except that portion of liability caused by, or contributed to by, acts or omissions of the Authority, its agents, employees and invitees, notwithstanding the provisions of Section 12.

10.3 The Authority agrees to defend, indemnify and hold harmless Soo and TCW, their respective officers, agents and employees from any liability, claims, damages, costs, judgments, or expenses, including reasonable attorneys' fees, resulting directly or indirectly from any act or omission of the Authority, its commissioners, officers, agents and employees, tenants, customers or

invitees occurring on the Rail Corridor after the effective date of this Agreement, except that the Authority shall not be required to defend, indemnify or hold TCW harmless to the extent the liability is caused or contributed by acts or omissions of TCW, and the Authority shall not be required to defend, indemnify or hold Soo harmless to the extent the liability is caused or contributed by acts or omissions of Soo, notwithstanding the provisions of Section 12.

10.4 Railroads. In the event Soo commences operations on the Rail Corridor, Soo and TCW shall allocate liability as between them only as follows.

Definition: Whenever the expression "Loss or Damage" is used in this Section 10.4, it means all costs, liabilities, judgments, fines, fees (including without limitation reasonable attorneys' fees and disbursements) and expenses of any nature arising from or in connection with death of or injury to persons, including without limitation employees of the Railroads, or damage to or destruction of property including without limitation property of the Railroads or the Rail Corridor, in connection with operations of the Railroads over or on the Rail Corridor.

Definition: Whenever the expression "proportionally by the Railroads" is used in this Section, it means that expenses will be borne in proportion to the total trains handled by each Railroad over any part of a segment of the Rail Corridor on which the Loss or Damage occurs during the three calendar months prior to the month of the occurrence, or if the occurrence is in any of the first three months of operation under this Agreement, such lesser period as precedes the date of occurrence. For the purposes of determining proportionality as herein provided, light engines shall not be considered a trains. In case of conflict with other provisions of this Agreement, the provisions of Section 10.4 shall control as between the Railroads.

10.4(1) The employees of either Railroad while operating, maintaining or directing operation along the Rail Corridor shall not be considered as joint employees but will remain the sole employees of either Railroad. However, when any sole employee of TCW or Soo is engaged in the

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direct activity of maintaining, repairing, renewing, removing, or inspecting the Rail Corridor, or in dispatching, giving orders for or directing the movement of trains over the Rail Corridor for the common benefit of the Railroads, and Loss or Damage to TCW, Soo or a third party, arises out of such service for the common benefit of the Railroads, then the expense of the Loss or Damage shall be borne proportionally by the Railroads; provided that the terms of this Section 10.4(1) shall control in the case of conflict with the provisions of Section 10.4(3) below, but in the case of conflict with Section shall control.

10.4(2) Notwithstanding anything else contained in this Agreement, liability for Loss or Damage resulting from or in connection with the operation of locomotives, trains or cars of either Railroad, or in connection with the presence on the Rail Corridor of locomotives, trains, cars or property of either Railroad, shall be borne and paid by the Railroads as follows:

(a) When the same shall involve the train or equipment of only one of the Railroads, regardless of any third party involvement, all Loss or Damage, including but not limited to, restoration and repair of the Rail Corridor and third party persons or property will be borne by that Railroad.

(b) When the same shall involve the trains or equipment of both Railroads, Loss or Damage shall be borne by each Railroad as to its own employees, property, or property in its custody (except for damage to the Rail Corridor). As to third party persons or property and the Rail Corridor, Loss or Damage shall be borne equally by the Railroads.

10.4(3) Liability for Loss or Damage not involving the train or equipment of either Railroad, or where the identity of the train or equipment involved is unknown, shall be borne and paid by the Railroads as follows:

(a) Liability for Loss or Damage shall be borne by each Railroad as to its own employees (except for employees performing services for the common benefit of the

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Railroads), property (other than the Rail Corridor), or property in its custody, but as to third party persons or property, employees performing service for the common benefit of the Railroads, and the Rail Corridor, the cost of Loss of Damage shall be borne proportionally by the Railroads.

(b) Third party claims for Loss or Damage arising out of the killing or injuring of livestock or the setting of fires on or along the Rail Corridor, when caused by the locomotive, train, care or fusee of one of the Railroads, shall be handled or settled by the Railroads whose locomotive, train, car or fusee caused such Loss or Damage, but if it cannot be determined whose locomotive, train or car caused such Loss or Damage, the claim will be handled or settled on behalf of both Railroads in the first instance by TCW, and the Loss or Damage will then be borne equally by the Railroads.

10.4(4) Each Railroad agrees that it will pay for all Loss or Damage, the risk of which it has herein assumed, the judgment of any court to the contrary notwithstanding, and will forever indemnify and save harmless the other Railroad, its successors and assigns, from such payment; provided, however, the indemnifying Railroad shall be assigned any rights which the indemnified Railroad may have against any third party or parties for recovery of any indemnified amount.

10.4(5) In the event that both Railroads hereto shall be liable under the Agreement for Loss or Damage, and the same shall be compromised and settled by voluntary payment of money or valuable consideration by one of the Railroads, the settling Railroad shall obtain a valid and enforceable release from liability for TCW and Soo Line Railroad Company, Soo Line Corporation and their Parents, Subsidiaries and Affiliated Companies, and all of their Officers, Agents, and Employees, etc. Neither Railroad shall make any such compromise or settlement in excess of \$5,000 without prior, written authority of the other Railroad having liability, but any settlement made by

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one Railroad in consideration of \$5,000 or less shall be a settlement releasing all liability of both Railroads and shall be binding upon both Railroads.

10.4(6) In case a lawsuit or lawsuits shall be commenced against either Railroad hereto for or on account of any Loss or Damage for which the other Railroad would be solely or jointly liable under this Agreement, the Railroad thus sued shall give the other Railroad timely written notice of the pendency of such suit, and thereupon the Railroad so notified shall assume or join in the defense thereof, and if the Railroad so notified is liable therefore under this Agreement, such Railroad shall save harmless the Railroad so sued from all Loss or Damage in accordance with the liability allocation set forth in this Agreement. Neither Railroad shall be bound by any judgment against the other Railroad unless it shall have been so notified and shall have had reasonable opportunity to assume or join in the defense of the action. When so notified, and said opportunity to join in the defense of the action has been afforded, the Railroad so notified shall to the extent of its liability under this Agreement be bound by such judgment.

10.4(7) If trains, locomotives or cars of Soo are wrecked or derailed on the Rail Corridor, TCW shall arrange to pick up and remove said equipment, and Soo shall bear the entire cost of such service (except to the extent that the allocation of liability in this Agreement provides otherwise), except that if TCW does not have the necessary personnel or equipment, Soo may furnish both as required, at its own expense; provided, however, that in the case of a minor derailment where the derailed equipment can be promptly rerailed by rerailers or blocking by Soo's employees, then in such event Soo may, at its sole expense, rerail such equipment unless TCW's supervisory employees direct otherwise.

10.4(8) It is understood and agreed that a number of vehicular crossings on the Rail Corridor presently exist, or may be constructed. Soo agrees to accept all crossings in whatever condition they may be during the term of this Agreement and will not assert any claim, demand or cause of action

against TCW and will hold TCW harmless from any claim, demand or cause of action arising out of any crossing accident on the Rail Corridor in which the engines, cars or trains of Soo only are involved; provided, however, that nothing in this Section 10.4(8) shall relieve TCW or Soo from liability arising from its gross negligence or intentional acts.

10.5. Soo shall remediate any environmental pollution or contamination on the Rail Corridor that is in violation of any applicable environmental statute ,ordinance, rule or regulation which first occurred during its period of use and was caused by Soo or its invitees. Soo shall bear the expense of all practices or work, preventative, investigative or remedial, which may be required because of any such conditions on the Rail Corridor caused by Soo, or its invitees during Soo's period of use, including conditions caused by Soo or its invitees which affect other lands. Soo expressly agrees that the obligations it hereby assumes shall survive cancellation of this Agreement. Soo agrees that statutory limitation periods on actions to enforce these obligations shall not be deemed to commence until the Authority discovers any such conditions and Soo hereby knowingly and voluntarily waives the benefits of any shorter limitation period.

10.6. TCW shall remediate any environmental pollution or contamination on the Rail Corridor that is in violation of any applicable environmental statute, ordinance, rule or regulation which first occurred during its period of use and was caused by TCW or its invitees. TCW shall bear the expense of all practices or work, preventative, investigative or remedial, which may be required because of any such conditions on the Rail Corridor caused by TCW, or its invitees during TCW's period of use, including conditions caused by TCW or its invitees which affect other lands. TCW expressly agrees that the obligations it hereby assumes shall survive cancellation of this Agreement. TCW agrees that statutory limitation periods on actions to enforce these obligations shall not be deemed to commence until the Authority discovers any such conditions and TCW hereby knowingly and voluntarily waives the benefits of any shorter limitation period.

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10.7. Authority shall have the right, but not the duty, to enter upon the Rail Corridor from time to time as set forth below to inspect the Rail Corridor for environmental contamination and in the course thereof to conduct soil and groundwater testing and to perform environmental investigation, remediation or mitigation. Authority may enter the Rail Corridor upon 24 hour notice to TCW and Soo, and may enter the Corridor in the case of an emergency, without prior notice, but the Authority shall give TCW and Soo immediate notice of the emergency. Authority shall conduct any such inspections or testing so as to not to interfere with Soo's and TCW's operations and shall provide sufficient notice of actions that might impair safe train operation. Authority's entry on to the Rail Corridor pursuant to this paragraph shall not relieve Soo's and TCW's obligations to pay rent under this Agreement.

10.8. At the request of the Authority, Soo (if Soo commences operations over the rail corridor) and TCW shall pay for the services of a state-approved contractor to sample what appears to be any visibly contaminated areas of the Rail Corridor for which they respectively appear to be responsible. For any contaminated areas, Soo's and TCW's respective contractor shall provide remediation recommendations to the Authority, and shall provide remediation as may be required by law. Copies of the results shall be forwarded to the Authority to ensure that the Rail Corridor is returned to the Authority reasonably free of contamination and in compliance with all applicable environmental law, ordinances, regulations and requirement. The provisions of this paragraph shall survive the termination of this Agreement.

Notwithstanding the foregoing, Soo and TCW is not responsible, by virtue of the terms of this Agreement, for any testing or sampling costs resulting from contamination existing on the Rail Corridor prior to their respective use or occupancy of the Rail Corridor, or which was not caused by TCW or Soo or their invitees, or where no contamination was found.

10.9. Each party shall give the other parties prompt written notice of any and all claims or suits arising from operations on or about the Rail Corridor.

10.10. Notwithstanding the foregoing, the terms of this Agreement are not to be construed as, nor operate as, waivers of the Authority's statutory or common law immunities or limitations on liability, including, but not limited to, Minnesota Statutes Chapter 466. Further, the Authority's obligations set forth in this Section and otherwise in this Agreement, are expressly limited and governed by the provisions of Minnesota Statutes Chapter 466, Minnesota Statutes Chapter 604, and any other applicable law or regulation.

#### SECTION 11 - INSURANCE.

11.1 TCW, at its own cost or expense, will procure and maintain in effect during the term of this Agreement, a policy or policies of insurance covering the liability to which TCW is or may be subject under this Agreement. Such policy shall name Soo as an additional insured which shall provide the following total coverage:

> Third party liability coverage covering injury to or death of persons and damage to property in any one occurrence in the amount of not less than \$10,000,000 (ten million dollars) with a maximum deductible of \$100,000 (one hundred thousand dollars) per occurrence. Such coverage shall include all employees and shall insure named insureds against workmen's compensation and Federal Employers' Liability Act claims. Soo agrees to cooperate in the processing of insurance claims.

11.2. If the insurance procured by TCW, pursuant to this Section, takes the form of a claims-made policy and is cancelled or allowed to expire without renewal, TCW may provide evidence of insurance that provides per occurrence and annual aggregate limits of not less than those

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required pursuant to Section 11.1 Such coverage must be retroactive to the original inception date of the cancelled or non-renewed policy.

11.3. At any time not less than sixty (60) days prior to an anniversary date of this Agreement, Soo, in consideration of current and reasonably anticipated claims and litigation costs, may notify TCW of Soo's intent to increase the amount of insurance required by this Agreement or to require that the terms and conditions of such insurance be modified. Should TCW object to any such increase or modification, TCW and Soo will attempt in good faith to negotiate a resolution of their disagreement. If TCW and Soo are not able to agree and such disagreement continues for thirty (30) days past the anniversary date of this Agreement, then the matter or matters in disagreement will be submitted to arbitration in accordance to the rules of the American Arbitration Association.

11.4. Each policy of insurance obtained by TCW pursuant to the requirement of this Section will contain provisions requiring that the insurance carrier give Soo, through the Soo's Director of Insurance, at least thirty (30) days' notice, in writing, of any proposed policy cancellation or any modification of the terms and conditions of any policy of insurance TCW is required to provide under this Section.

11.5. The terms and conditions of each policy of insurance obtained by TCW to satisfy the requirements of this Section will be subject to the approval of Soo, which approval shall not be unreasonably withheld or delayed. TCW will furnish to Soo's Director of Risk Management an accurate copy of each policy of insurance obtained pursuant to the requirements of this Section. Neither compliance with this requirement nor Soo's approval of the terms and conditions of any such policy will in any way limit or modify the obligation of TCW to provide the specific insurance coverage required by this Section.

11.6. In the event TCW fails to maintain the levels of insurance coverage required in this Section, or fails to properly notify Soo of said coverage, after giving TCW written notice of

noncompliance and then (10) days from receipt of such notice within which to comply, Soo may require TCW to suspend operations over the Rail Corridor until such time as TCW complies with the insurance requirements hereunder or otherwise provides Soo evidence of financial responsibility acceptable to Soo in its sole discretion.

#### **SECTION 12 - REPRESENTATIONS AND WARRANTIES**

Soo and TCW accept the Rail Corridor and the Rail Line in an "as is" condition, with no express or implied representations or warranties by the Authority as to the physical condition or fitness or suitability for any particular purpose, express or implied, except as otherwise provided in this Agreement. Soo and TCW are responsible for, had ample opportunity to inspect the Rail Line and are familiar with the same. As between the parties, Soo and TCW acknowledge the risks to their rail operations associated with the proximity of the Rail Line to the pedestrian and bicycle trails adjacent to the Rail Corridor. Soo and TCW do not assume liability for damages to the property of third persons or for injury to third persons by reason of Soo or TCW rail operations on the Rail Corridor nor waive any claims they might have against such third persons.

#### **SECTION 13 - SURVIVAL**

All of the terms of this Agreement, including all warranties, representations, and indemnification given by each party to this Agreement, all of which are relied upon by each party, shall survive and be enforceable after the execution of this Agreement and any subsequent transfer of title of the Property.

#### **SECTION 14 - LAWS GOVERNING**

This Agreement shall be governed to the extent applicable and not preempted by federal law, and the parties agree to be bound, by the laws of the State of Minnesota; and the parties agree to comply with or abide by all laws relevant to this Agreement governing their respective operations in the State of Minnesota.

#### **SECTION 15 - REMEDIES FOR BREACH**

Should Soo or TCW default in any payments to be made hereunder or fail to faithfully perform any of their covenants herein or violate any term or condition of this Agreement and, if such default, failure or violation shall continue for a period of sixty (60) days after the Authority shall have given Soo or TCW notice of an "event of default", the Authority may thereupon exclude Soo or TCW, as the case may be, from all the rights and privileges granted to it hereunder, and Soo and TCW shall have no claim or depend upon the authority at law or in equity on account of such exclusion. The rights and remedies granted to the parties in this Section 14 are intended to be cumulative to all other rights and remedies available to the parties (whether under this Agreement, at law, in equity or otherwise); accordingly, the exercise by any party of any such right or remedy shall not preclude it from exercising any other such right or remedy.

#### **SECTION 16 - ASSIGNMENT; BINDING EFFECT**

The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns, including without limitation, any entities into or by which either of the parties is merged, combined, reorganized or acquired.

#### <u>SECTION 17 - NOTICES</u>

Unless explicitly stated to the contrary elsewhere in this Agreement, all notices and other communications required or contemplated by this Agreement must be in writing and shall be deemed given when delivered in legible form to the business address of the party to whom addressed. The business addresses of the parties are as follows:

#### **SOO:**

Mailing Address: P.O. Box 530 Minneapolis, Minnesota 55440 Attention: Director - Commercial Development

| Delivery Address: | 1710 Soo Line Building<br>105 South 5th Street<br>Minneapolis, Minnesota 55402<br>Attention: Director - Commercial Development |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Fax:              | 612/347-8064<br>Attention: Director - Commercial Development                                                                   |

TCW:

| Mailing Address: | 2925 - 12th Street East |
|------------------|-------------------------|
| •                | Glencoe, MN 55336       |
|                  | Attention: President    |
| Fax:             | 320/864-7220            |

#### THE AUTHORITY:

| Mailing Address: | Hennepin County Regional Railroad Authority |
|------------------|---------------------------------------------|
| and Delivery     | A2300 Government Center                     |
|                  | Minneapolis, MN 55487-0230                  |
|                  | Attention: Executive Director               |
| Fax:             | 612/348-8228                                |

Notices not given in the manner or within the time limits set forth in this Agreement are of no effect and may be disregarded by the party to whom they are directed. Either party may change its business address, for notice purposes, by giving notice of the change to the other party.

ATTEST:

ONTRACTS Ti 14160

ATTEST:

SOO LINE RAILROAD COMPANY

By: Its:

#### TWIN CITIES & WESTERN RAILROAD COMPANY

By: rman Its:

Approved as to Form

Assistant Hennepin County Attorney

Date:

Approved as to Execution

Assistant Hermepin County Attorney

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Date:

### HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

ambarnio Ву: \_\_\_\_ Its: Chair

and

By: ector

#### RAILROAD EASEMENT

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| (reserved for valuation and tax data)                                                                                                                                       | (reserved for recording data)                                                                                                                                                                                                                                                                                                                                   |
| STATE DEED TAX DUE HEREON: \$                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                 |
| Date: <u>August 10</u> , 1998                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                 |
| FOR VALUABLE CONSIDERATION, the<br>subdivision and local government unit under<br>conveys and quitclaims to the Twin Cities a<br>laws of the State of Minnesota, Grantee, a | e Hennepin County Regional Railroad Authority, a pointeal<br>er the laws of the State of Minnesota, Grantor, hereby<br>and Western Railroad Company, a corporation under the<br>railroad easement over real property in Hennepin County,<br>in Trackage Rights Agreement between the Twin Cities and<br>proad Company and the Hennepin County Regional Railroad |
| (Legal description on Exhibit A)                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                             | Hennepin County Regional Railroad Authority                                                                                                                                                                                                                                                                                                                     |

By Its Chairman By Its B

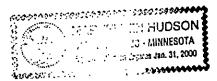
STATE OF MINNESOTA ) )ss COUNTY OF HENNEPIN )

The foregoing was acknowledged before me this <u>Maru Tambornino</u> and Jeff Spartz. the Chairman and Executive Director of Hennepin County Regional Railroad Authority, a political subdivision and local government unit under the laws of Minnesota, on behalf of the Authority.

Notary Fublic

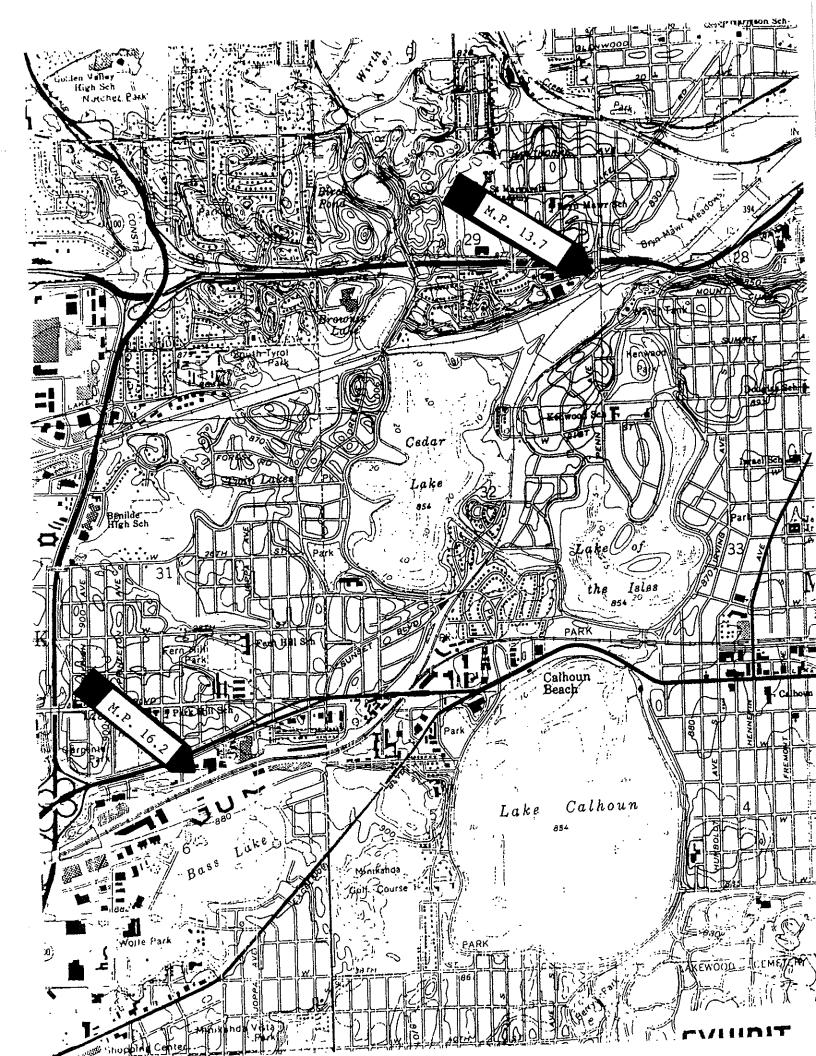
This instrument was drafted by:

Hennepin County Regional Railroad Authority 417 North Fifth Street, Suite 320 Minneapolis, MN 55401-1362 Tax Statements for the real property described in this instrument should be sent to:



#### EXHIBIT A

#### **Description of Railroad Easement**



PURCHASE AGREEMENT BETWEEN SOO LINE RAILROAD COMPANY AND HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

EXHIBIT III

THIS AGREEMENT, made and entered into this 2-3 day of December, 1992, by and between the Soo Line Railroad Company, a Minnesota corporation, hereinafter sometimes called "Soo", and the Hennepin County Regional Railroad Authority, a political subdivision and local government unit of the State of Minnesota, hereinafter sometimes called the "Authority".

### RECITALS

Soo presently owns and operates a line of railroad parallel with the approximate alignment of 29th Street South in the City of Minneapolis, County of Hennepin, State of Minnesota between Hiawatha Avenue and France Avenue sometimes referred to as the 29th Street Corridor.

The State of Minnesota Department of Transportation and the City of Minneapolis propose to reconstruct Hiawatha Avenue between Lake Street and 24th Street South in the City of Minneapolis and desire to eliminate all Soo rail crossings of Hiawatha Avenue within this segment.

Soo is willing to alter its operations in and through the City of Minneapolis to accommodate the Hiawatha Avenue improvements and is willing to sever its rail line across Hiawatha Avenue, providing alternate rail routes are provided for Soo and other railroads presently using the Soo crossings of Hiawatha Avenue under trackage

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rights agreements. Soo also expects to be compensated for any increased operating expense resulting from use of alternate routes.

Elimination of rail links across Hiawatha between Lake Street 24th Street will save substantial sums of money for all and governmental agencies involved in funding the Hiawatha Avenue reconstruction.

The Authority desires to acquire by purchase the 29th Street Corridor from Hiawatha Avenue west to France Avenue for future use for public transportation purposes. Acquisition and utilization of Hiawatha across links the rail said corridor will sever substantially accommodating the Hiawatha Avenue reconstruction.

NOW THEREFORE, in consideration of the foregoing, the parties agree as follows:

## SECTION 1 - DEFINITIONS

"Agreement" shall mean this Agreement dated  $\frac{12-23}{2}$ , Α. All references in this document to Exhibits are to those 1992. attached to, and made a part of, this Agreement.

"Property" is defined in Section 2A and shown on Exhibit в. A and Exhibit B to this Agreement.

"Railroad Easement" shall mean the easement created by с. this Agreement and legally described in Exhibit C, providing for the continuation of Soo's present operation of common carrier freight railroad service for a limited period of time and the use of the Property to be acquired by the Authority as a result of this Agreement as may be necessary for said railroad operations.

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D. "Loss or Damage" includes any and all claims, liabilities, damages, costs, judgments, and expenses (including reasonable attorneys' fees and expenses) of every character incident to loss or destruction of or damage to Property and injury to or death of persons, arising upon or as a result of any operations conducted under the terms of this Agreement.

E. "Sole Employees" and "Sole Property" shall mean employees, agents, contractors, passengers, invitees, railroad and motor vehicle equipment, including lading, and other equipment of each of the parties or their agents or contractors while engaged in, or about to engage in, maintaining, using, operating, constructing, repairing, renewing, replacing and improving the trackage in the Railroad Easement, or in switching or handling railroad cars of the respective parties hereto.

F. "Taxes" shall mean lawfully imposed real estate taxes and assessments including, but not limited to, special assessments.

G. "Trackage" shall mean all rail, cross ties, related track appliances such as spikes and tie plates (sometimes known as other track material), ballast, all grade crossing signals and other signal and communication equipment located upon the Property, and including trackage laid in and across public streets and highways.

H. "Environmental Site" shall mean the physical location from which emanates any claims, damages, liabilities, costs, including costs and expenses of response, removal, remediation or disposal expenses (including reasonable experts' and attorneys' fees), suits or obligations of any and every nature resulting from

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the generation, treatment, use, handling, storage, transportation, manufacture, release, discharge or disposal of any toxic or hazardous substances or wastes, pollutants, or contaminants (including, without limitation, asbestos, urea formaldehyde, the group of organic compounds known as polychlorinated biphenyls, petroleum products including gasoline, fuel oil, crude oil and various constituents of such products) on or from the Property.

# SECTION 2 - PROPERTY TO BE ACQUIRED

A. Soo agrees to sell and the Authority agrees to buy all of Soo's interest in the railroad right-of-way presently owned and operated by Soo along the approximate alignment of 29th Street South in the City of Minneapolis between the east right-of-way line of Hiawatha Avenue and the westerly city limits of the City of Minneapolis all as shown and described in Exhibits A and B attached (the Property). Included in the Property to be sold are the following:

- (1) Soo's interest in all lines of railroad between Cedar Avenue and Hiawatha Avenue, some of which cross Hiawatha Avenue in the vicinity of 28th Street and the other crossing Hiawatha Avenue in the vicinity of 26th Street.
- (2) Soo's interest in any industrial spurs or other spur track rights of way appurtenant to the right-of-way.
- (3) Soo's interest in any bridges, retaining walls, and other similar structures upon, over, under, across, or appurtenant to the right-of-way, but excluding grade

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crossing protection signals and other signal and communication equipment.

- (4) Soo's interest in any permits, licenses, ordinances, easements, or other rights permitting the occupation of the right-of-way and the operation of a railroad over the Property including (but not limited to) rights to cross, traverse, or operate in or upon public streets and rights of way, but excluding Soo's rights and obligations to provide common carrier freight rail service on the Property:
  - (5) Soo's interest in the railroad right-of-way located in public streets and other public rights of way.
  - Valuation maps, plats, deeds of conveyance, and other (6) similar records relating to Soo's ownership of the rightof-way. Except as provided herein, the originals of such records shall be delivered to the Authority within a mutually convenient and reasonable time following the closing. A copy may be delivered in lieu of the original under the following circumstances: (i) the original is unavailable, (ii) the record also pertains to Soo property other than the 29th Street Corridor, or (iii) the original record is reasonably required by Soo during the term of the Railroad Easement (as defined in this in which event the original shall be Agreement), delivered to the Authority promptly after the termination of the Railroad Easement.

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B. Trackage is excluded from the property to be sold, except as otherwise provided by Section 12.

C. Notwithstanding acquisition of the Property by the Authority, the Authority grants use of a portion of the Property for purposes of the Railroad Easement and limited access to other portions of the Property solely for maintaining and performing Railroad operations upon the Railroad Easement, under the terms set forth in this Agreement. The Authority reserves the right to enter, and make alterations upon, the Railroad Easement, provided that such entry and alterations do not unreasonably interfere with Soo railroad operations and are in accord with other provisions of this Agreement.

## SECTION 3 - CONVEYANCE AND CLOSING

A. The property will be conveyed at the closing by quit claim deed and bill of sale in a form consistent with Exhibits D and E and such other documents or evidence as the Authority or its counsel may reasonably request or as required by applicable law.

B. The Railroad Easement will be conveyed in a form consistent with Exhibit C which provides that the Railroad Easement is governed by the terms of this Agreement and shall be delivered at the closing .

C. The closing of this transaction shall occur on or before June 1, 1993, at 10:00 a.m. at the office of the Authority, Southwest Street Level Government Center, Minneapolis, Minnesota or at such other time or place as may be mutually agreed upon by the parties.

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The Authority will purchase, affix, and cancel any and all documentary stamps in the amount prescribed by statute, and D. will pay any and all deed taxes, transfer taxes, excise taxes, sales taxes, use taxes, and fees incidental to the transfer of the Property or the recordation or filing of the deed or deeds.

### SECTION 4 - PAYMENT

The Authority agrees to pay funds in the following Α. amounts to Soo for the Property in accordance with the terms and conditions of this Section and in accordance with other terms of this Agreement. All amounts are net to Soo and shall be paid by immediately negotiable warrant . The funds so paid will constitute full and final payment by the Authority to Soo for each of the following defined items:

- \$9,000,000 for all of the Property described in Section (1)2 and Exhibits A and B.
- full and final compensation for all increased As (2) operating costs and trackage rights:
  - \$688,000 for trackage rights incurred by Soo and (a) its railroad tenants in transporting rail traffic via alternate routes that now originates or terminates on the Property, or traverses the such traffic continues, so long as Property, subject to adjustment as a result of audit accepted by the Minnesota Department of Transportation or The Authority its designee before payment.

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anticipates the audit will be completed by closing and will use its best efforts to achieve that goal. (b) \$158,000 for increased operating costs incurred by Soo to continue to serve customers originating or terminating traffic on the Property after Soo's present line of railroad is severed at Hiawatha Avenue, all subject to adjustment as a result of audit accepted by the Minnesota Department of Transportation or its designee before payment. The Authority anticipates the audit will be completed by closing and will use its best efforts to achieve that goal.

Payment for increased operating costs and trackage rights will be adjusted in accordance with audit (C) and paid at the later of closing, completion of the audit or at such time as the existing Soo rail are severed. connections across Hiawatha Avenue Said payments for increased operating costs and trackage rights may be made directly by the Authority to Soo or, in lieu thereof, by the governmental agencies participating in the Hiawatha Avenue reconstruction project. Provided, however, that the obligation to make such payments to Soo, or to cause said payments to be made to Soo by others, shall be and remain the obligation of the Authority.

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B. The payments described in 4A will be paid in the amounts and at the times set forth as follows:

- (1) \$8,250,000 at closing.
- (2) \$ 750,000 after termination of the Railroad Easement in accordance with Section 12 of this Agreement. Said sum will be deposited as the Railroad Easement Escrow in an interest bearing escrow account or certificate of deposit with interest earned to be reinvested in the escrow account. The entire balance of the Railroad Easement Escrow account including accrued interest, less the costs associated with said account, will be disbursed to Soo upon the written authorization of the Authority, which shall be given upon termination of the Railroad Easement in accordance with Section 12.

C. The payments described in 4A(2) for increased operating costs and trackage rights will be adjusted in accordance with audit and paid at the later of closing, completion of the audit or at such time as the existing Soo rail connections across Hiawatha Avenue are severed. Said payments for increased operating costs and trackage rights may be made directly by the Authority to Soo or, in lieu thereof, by the governmental agencies participating in the Hiawatha Avenue reconstruction project. Provided, however, that the obligation to make such payments to Soo, or to cause said payments to be made to Soo by others, shall be and remain the obligation of the Authority.

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# SECTION 5 - CONDITIONS PRECEDENT TO CLOSING

A. <u>General Conditions</u>. The obligations of the Authority to consummate the transaction contemplated by this Agreement will be subject to fulfillment on or before the closing date of all of the following conditions, any of which may only be waived by the Authority in writing.

- (1) Closing of this transaction is contingent upon obtaining of any required regulatory and other governmental approvals.
- (2) Closing of this transaction is contingent upon the Authority obtaining commitments satisfactory to it to pay all of the increased operating costs and trackage rights set forth in Section 4A(2) of this Agreement.
  - Provision by Soo of any and all documents to comply with (3) the terms of this Agreement and execution of any and all necessary, and consents as documents instruments, including quit claim deeds, releases executed by any secured parties and in a form acceptable to insurers of title as to any and all security interests, mortgages or other encumbrances on the Property. Within 90 days after the closing, Soo shall cause to be recorded partial releases or satisfactions of any mortgages or deeds of trust of Soo which may appear of record as a lien against the Property, and Soo shall indemnify the Authority, and the Authority's title insurer, for any loss or expense sustained by either of them as a result of Soo's failure

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to have such lien so released or satisfied. The existence of any such lien will not afford a basis for objecting to the marketability of Soo's title.

- (4) Any judgment against Soo which may appear of record as a lien against the Property shall be settled and satisfied by Soo within 30 days after it becomes final and unappealable, and Soo shall indemnify the Authority, and the Authority's title insurer, for any loss sustained by either of them as a result of Soo's failure to have such lien so settled and satisfied. The existence of any such lien will not afford a basis for objecting to the marketability of Soo's title.
  - (5) Soo shall provide agreements by present tenants of the Property to vacate or terminate trackage rights presently in effect, to take effect no later than such time as the Railroad Easement is terminated.
  - (6) The Property will be conveyed subject to facts which would be disclosed by a comprehensive survey, rights and claims of parties in possession, rights of the public, and those easements, leases, licenses and permits listed in Exhibit F. The Authority may object to the marketability of Soo's title on the basis of such matters. Soo is under no obligation to cure title defects. If a title defect is not cured, the Authority at its option may terminate this Agreement at any time prior to closing.

(7) The Property shall be conveyed subject to the rights of CMC Real Estate Corporation or its successors or assigns to the location of certain billboards on the Property shown by arrows on Exhibit G and which shall not afford a basis for objecting to the marketability of Soo's title.

B. <u>Environmental Conditions</u>. The obligations of the Authority and Soo to consummate the transaction contemplated by this Agreement are subject to the fulfillment on or before the closing date of all of the following environmental conditions, any of which may only be waived by the other party in writing:

- (1) All of the environmental representations and warranties of the Soo contained in this Agreement shall be true and correct on and as of the closing date.
- (2) Soo shall have completed a Phase II environmental investigation of the Property and a supplemental Phase I environmental investigation and shall have shared all final reports and recommendations of such investigations with the Authority within 30 days from the execution of this Agreement.
  - (3) The Authority shall have performed an environmental investigation of the Property supplemental to the Phase II, the scope of which shall be in the sole discretion of the Authority.

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- (4) If the highest estimated cost to remediate the Property to federal, state and local environmental regulatory standards for use as a transportation corridor exceeds \$2 million, either party may terminate this Agreement by written notice to the other prior to the closing and thereupon neither party shall have any further rights or obligations under this Agreement. The estimate of remediation cost shall be based upon remediation techniques that reasonably accommodate the Authority's time needs in using the Property as a transportation corridor.
  - (5) Soo shall have sealed or caused to have been sealed in accordance with the requirements of Minnesota law any existing wells known to Soo and shall have delivered the required Sealed Well Certification to the Minnesota Department of Health except for the two monitoring wells which are the subject of a right of entry in an agreement between the Soo and the Minneapolis Community Development Agency (designated in said agreement as MW304 and MW306), for which a partial assignment shall be made to the Authority.

C. <u>Corporate Authority Conditions</u>. The obligations of the Authority to consummate the transaction contemplated by this Agreement are subject to delivery by Soo to the Authority of a certificate or certificates dated as of the closing date and signed

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on behalf of Soo by its Secretary or Assistant Secretary to the effect that:

- The copy of Soo's restated Certificate of Incorporation or Articles of Incorporation attached to the certificate are true, correct and complete;
- (2) No amendment to said Articles or Certificate has occurred since the date of the last amendment annexed;
- A true and correct copy of the By-Laws of Soo as in effect on the date thereof and at all times since the adoption of the resolutions referred to in the following paragraph is annexed to such certificate;
- (4) The resolutions by the Board of Directors of Soo authorizing the actions taken in connection with the sale of the Property including the execution and delivery of this Agreement and any related agreements, were duly adopted and continue in force and effect (a copy of such resolutions to be annexed to such certificate).
- (5) The officers of Soo executing this Agreement and any other related agreements executed and delivered pursuant to or in connection with this Agreement are incumbent officers of Soo and that their signatures as shown on such certificate or certificates are genuine.
- (6) Soo is a corporation in good standing in the State of
   Minnesota.

D. <u>Municipal Corporate Authority Conditions</u>. The obligation of Soo to consummate the transaction contemplated by this Agreement

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is subject to the provision by the Authority to Soo of a certified copy of the resolution of the Board of the Authority certifying its approval of the transaction pursuant to the authority of Minnesota Statutes § 398A.04.

E. <u>Opinion of Counsel to Soo</u>. The obligations of the Authority to consummate the transaction contemplated by this Agreement are subject to delivery by Soo to the Authority of an opinion of Counsel to Soo, which may be house Counsel, that:

- (1) To Soo's knowledge, no proceeding is pending, nor is there a substantial threat of such a proceeding, before any court or governmental agency in which it is sought to restrain or prohibit, or to obtain labor or environmental protection, conditions or provisions or damages or to obtain other relief in connection with, this Agreement or any other agreement to be executed in connection with this Agreement or the consummation of the transactions contemplated hereby or which, if adversely decided, would materially affect or impair either party's right or ability to perform its obligations hereunder or to obtain the benefits hereof, and no investigation that might eventuate in any such suit, action or proceeding is pending or threatened; and
  - (2) To Soo's knowledge, there are no labor disputes in progress or threatened with respect to Soo or the transaction contemplated by this Agreement.

F. <u>Opinion of Counsel to Authority</u>. The obligation of Soo to consummate the transaction contemplated by this Agreement will be subject to delivery by the Authority to Soo of an opinion of counsel as follows:

(1) All actions, proceedings, resolutions, instruments and documents required to carry out this Agreement and all other related legal matters shall have been approved on or before the closing date by the Hennepin County Attorney or the law firm of Felhaber, Larson, Fenlon & Vogt, P.A., counsel to the Authority in the exercise of its or their reasonable judgment, and the Authority or its counsel shall have been furnished with copies, satisfactory in form and substance to counsel to the Authority in the exercise of its or their reasonable judgment, of all of such required material corporate records and related proceedings of Soo authorizing its execution, delivery and performance of this Agreement as the Authority or its counsel shall reasonably require.

G. <u>Alternate Routing Conditions</u>. The obligation of the parties to consummate the transaction contemplated by this Agreement is subject to fulfillment on or before the closing date of the following condition, which may only be waived by either party in writing. The Authority agrees to cooperate and assist Soo in obtaining the agreements contemplated by this condition :

Soo shall have obtained agreements satisfactory to Soo with Chicago and North Western Transportation Company, Burlington Northern Railroad, and other railroads affording Soo and Twin Cities and Western Railroad

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Company alternate routing for rail traffic that is currently routed via the 29th Street Corridor.

# SECTION 6 - ENVIRONMENTAL INVESTIGATION

The Authority may enter the Property and, to the extent necessary, Soo's land in the vicinity of the Property (jointly referred to as the Site in this Section 6) for the purpose of surveying and conducting the supplemental environmental investigation referred to in Section 5 of this Agreement, including, but not limited to, soil borings, water samplings and other environmental inspections and tests the Authority in its sole discretion deems necessary subject to the following conditions:

- (1) The Authority shall give Soo advance notice of the date and time of each entry and the nature of the activities to be conducted on the Site at each such date and time.
- (2) Soo may elect to be present during the conduct of such activities and to monitor same. Such monitoring shall not relieve the Authority of any liability under this Section.
- (3) Prior to entering the Property, the Authority shall secure the permission of any tenant then in possession of same.
- (4) Upon the completion of its activities, the Authority shall remove any debris resulting from such activities and shall restore the Site to the condition it was in prior to the commencement of such activities.

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- Only to the extent permitted by law, including but not (5) limited to Minnesota Statutes Chapter 466, as amended, and only to the extent of the Authority's fault or negligence, the Authority shall indemnify Indemnitees against all claims, demands, actions, suits, judgments, losses, damages (including, but not limited to, actual, direct, consequential, punitive, and compensatory, penalties, fines, expenses, damages), exemplary sanctions, court costs, litigation costs, environmental response and remediation costs, and reasonable attorneys' fees (collectively, Claims) arising out of or relating to any loss of (or damage to) any property or business or any injury to (or death of) any persons, where such loss, damage, injury, or death actually or allegedly arises (whether directly or indirectly, wholly or in part) from: any action or omission of the Authority (or its (a)
  - employees, agents, or contractors) while on the Site pursuant to this Section; or
  - (b) the exercise by Authority (or its employees, agents, or contractors) of the permission granted by this Section; or
  - (c) the escape or release of any pollutant, contaminant, or hazardous substance resulting (directly or indirectly, wholly or in part) from any action or omission of Authority (or its

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employees, agents, or contractors) while on the Site pursuant to this Section.

Indemnitees means the following companies and their officers, directors, employees, and agents: Soo Line Corporation, Soo Line Railroad Company, Tri-State Land Company, Tri-State Management Company, The Milwaukee Motor Transportation Company, Hiawatha Transfer Company, Canadian Pacific Limited, and CP Rail, and their respective parent companies, subsidiaries, and affiliated companies.

- (6) The Authority (and its employees, agents, and contractors) shall comply with all applicable laws while on the Site.
- (7) The Authority will provide Soo with complete copies of the test data and test reports as soon as they are available to the Authority.
- (8) The cost of any test or survey will be borne solely by the Authority.
- (9) Unless reasonably necessary to complete the Authority's environmental investigation, test holes shall be located no closer than 10 feet from the nearest rail of any railroad track located on or adjacent to the Site and drilling equipment and related equipment shall not be placed closer than 10 feet from the nearest rail of any such track. Before the Authority proceeds with test holes or placement of drilling equipment in such manner

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Soo must have given written permission to do so which shall not be unreasonably withheld.

- (10) While on the Site, the Authority (and its employees, agents, and contractors) shall comply with Soo's safety rules, including any requirement regarding the use of flagmen. All costs associated with compliance with such rules shall be borne by the Authority. If Soo shall incur any costs in connection therewith, the Authority shall reimburse Soo within 30 days after receipt of Soo's invoice.
  - (11) Unless disclosure is required by court order or applicable law, the Authority shall maintain, and shall cause its employees, agents, and contractors to maintain, the confidentiality of all information pertaining to any environmental test performed on the Site.
  - (12) If any mechanics' or materialmen's lien, or similar lien, is asserted against the Site, the Property, or any other property of Soo or Indemnitees as a result of the exercise of the permission granted in this Section, the Authority shall immediately satisfy and/or obtain the release of such lien, all at the Authority's expense, and the Authority shall indemnify and defend Soo from and against all Claims arising out of or connected with such lien.
    - (13) Notwithstanding the foregoing, the terms of this Agreement are not to be construed as nor operate as

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waivers of the Authority's statutory or common law immunities or limitations on liability, including but not limited to Minn. Ch. 466. Further, the Authority's obligations set forth in this Section and otherwise in this Agreement are expressly limited and governed by the provisions of Minn. Stat. Ch. 466, Minn. Stat. Ch. 604, and any other applicable law or regulation.

# SECTION 7 - ASSIGNMENTS OF CONTRACTS, LEASES AND RELATED

A. Soo will assign to and the Authority or its designee will accept, all right, title, interest and obligations held by the Soo, to the extent transferrable and/or assignable, and relating to the interests in the Property to be transferred to the Authority, under leases, contracts, permits, licenses and other instruments which, to the extent discovered by Soo after diligent search of its files and records, have been listed and described in Exhibit F, attached hereto and hereby made a part of this Agreement.

B. Soo will also assign all other interests of any nature of the Soo, to the extent transferrable and/or assignable, and relating to the interests in the Property to be transferred to the Authority, including rights in and to general intangibles and contract rights in addition to those identified or described in Exhibit F, including franchises, governmental and contractual operating rights and other contracts, leases, licenses, permits and privileges, except to the extent such rights relate to Soo's rights

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and obligations to provide common carrier freight rail service on the Property.

C. Soo reserves to itself all prepaid rentals attributable to any lease, license or easement whereby a third party has been granted the right to install and maintain a fiberoptic transmission line. Payments for rentals due under said instruments after closing shall be prorated between Soo and the Authority based upon their respective ownership of the affected areas. Otherwise, there shall be no proration of lease rentals.

### SECTION 8 - PAYMENTS FOR TAXES

to pay promptly to taxing Authority agrees The Α. authorities when due all Taxes, if any, duly levied on the Property with respect to the Authority's ownership, leases, air rights development, and/or operations. Soo agrees to pay promptly to taxing authorities when due all Taxes, if any, with respect to its use or operations duly levied, to the extent Soo's property right has been separately assessed by the appropriate assessing authority to Soo while conducting operations over the Railroad Easement. To the extent Soo's property right is not so separately assessed to Soo, but the underlying fee in the Railroad Easement is assessed as railroad operating property and would be exempt except for Soo's use in operations, then Soo agrees to pay all such taxes duly levied while conducting operations over the Railroad Easement. Soo reserves the right to protest to a taxing authority any such Taxes it deems to be unfair or excessive and may in good faith

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litigate and settle with the taxing authority any such protested amount.

B. The Authority shall pay without reimbursement from Soo all Taxes, if any, attributable to any passenger transportation system installed by or at the direction of the Authority.

## SECTION 9 - GRANT OF RAILROAD EASEMENT

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A. Subject to all of the terms and conditions of this Agreement, the Authority hereby agrees to grant to Soo at closing a Railroad Easement to continue its present railroad operations and to continue to meet its common carrier obligations at Soo's sole cost and obligation subject to the terms of this Agreement, on its solely owned Trackage located upon said Railroad Easement as described in Exhibit C, including the right to:

- (1) Exclusively provide freight railroad service to any industry, team, or house track existing in the 29th Street Corridor on the date of this Agreement or as otherwise may be required by law.
- (2) Permit current third party users for bridge rights only or admit a third party only for emergency detour purposes to use all or any portion of said Trackage.
- (3) Construct or modify tracks connecting to or crossing said Trackage, including track connections with the Chicago and North Western owned trackage located on Authority owned right-of-way West of France Avenue, subject to provisions of this Agreement, and the prior written approval by the Authority, which approval shall not be

unreasonably withheld and shall be deemed given if required by law.

- (4) Use the existing roadbed, bridges, and other existing railroad facilities, if any, acquired by the Authority as a result of this Agreement.
- (5) Admit a third party operator as assignee of Soo's common carrier freight service obligation subject to the consent of the Authority which shall not be unreasonably withheld.

### SECTION 10 - RAILROAD EASEMENT RENTAL

A. Until termination of the Railroad Easement in accordance with Section 12 of this Agreement, Soo will pay an annual rental of \$40,000 to the Authority for the Property utilized by the Railroad Easement. The first payment of \$40,000 shall be due one month after the closing date and shall thereafter be paid annually by the same date.

- (1) In the event of termination of the Railroad Easement upon other than the anniversary of the closing date, remaining rental due shall be prorated accordingly.
- (2) The rental amount may be adjusted upward by the Authority each five (5) years, but each upward adjustment shall be no greater than ten percent of the previous rate.

B. At such time as the Railroad Easement is terminated, Soo shall have no further obligation to pay rental to the Authority and shall have no claim against the Authority for any payment of any

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kind except as may have arisen prior to such termination or by reason of other provisions of this Agreement.

### SECTION 11 - RAIL CAR STORAGE

Effective no later than six (6) months after closing, Soo and its tenants shall cease storing or parking railroad cars at any location on the Property except such cars as are actually used to service rail users located on or adjacent to the Property. Any rail cars required to be stored for the use of such rail users shall be parked in the vicinity of the loading or unloading tracks of said users.

## SECTION 12 - TERMINATION OF RAILROAD EASEMENT

A. As provided in this Section 12, the Railroad Easement and the rental obligation under Section 10 will terminate, and the Railroad Easement Escrow account referred to in Section 4B(2) including accrued interest will be paid to Soo, no later than 90 days (unless winter conditions have prevented removal of Soo Trackage, then 180 days) after the effective date of an abandonment authorization order issued by the Interstate Commerce Commission ("ICC") or an ICC Notice of Exemption, and upon the occurrence of the events in (1) and either (2) or (3) below (unless otherwise provided by this Agreement):

- (1) (a) Written notice of termination by either party to the other party;
  - (b) Soo delivers a release of Railroad Easement suitable for recordation;
  - (c) The Authority accepts relinquishment of the Railroad Easement in writing which shall be given

when Soo satisfies the conditions in either (2) or (3).

Upon notification by Soo in writing to the Authority that (2)Soo intends to remove the Trackage, and Soo completes salvage of the Trackage and removal of rails located in and across public streets and highways and restores paving (or has reimbursed the Authority for the cost of doing the same). All such removal and repaving shall be completed in a workmanlike manner and shall include removal of all debris and waste materials including scrap If Soo has not completed salvage, and removal of ties. rails and restoration of paving in and across public streets and highways, within ninety days after the effective date of the abandonment authorization (unless winter conditions have prevented removal of Soo Trackage, then within 180 days), the Trackage not salvaged shall be in place without compensation from the abandoned Authority and Soo shall reimburse the Authority for the cost of completing any removal and repaving which may be deducted from the Railroad Easement Escrow payment.

However, the Authority may, at its sole option, declare that the Trackage is to be left in place and pay to Soo within 90 days of the effective date of the abandonment order the market value of the track materials, less the cost of removal and the value of any additions or betterments previously provided at the

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expense of the Authority. In such event, Soo shall have no obligation to restore street and highway crossings.

Upon notification by Soo in writing to the Authority that (3) Soo does not intend to remove the Trackage from the Property and Soo completes the removal of rails located in and across public streets and highways and the restoration of paving (or Soo reimburses the Authority for the cost of doing the same) no later than ninety days after the effective date of the abandonment authorization (unless winter conditions have prevented removal of Soo Trackage, then within 180 days). All such removal and repaving shall be completed in a workmanlike manner and shall include removal of all debris and waste materials including scrap ties. The Trackage not salvaged shall be deemed abandoned in place without compensation from the Authority. If Soo has not completed removal of rails and restoration of paving in and across public streets and highways within ninety days after the effective date of the abandonment authority (unless winter conditions have prevented removal of Soo Trackage, then within 180 days). Soo shall reimburse the Authority for the cost of completing any remaining removal and repaving, which may be deducted from the Railroad Easement Escrow payment.

B. Both Soo and the Authority shall have the right to terminate the Railroad Easement at any time in accordance with the provisions of this Agreement. Any such termination must be

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initiated by written notice to the other party of its desire to terminate the Railroad Easement. Notwithstanding any other provisions of this Agreement, the Railroad Easement will terminate no later than 15 years following the date of closing, at which time the provisions of Section 12, paragraph E will apply. At that time, Soo agrees to transfer its railroad freight service common carrier obligation to the Authority or the Authority's designee.

C. If Soo desires to terminate the Railroad Easement, Soo shall have the obligation to seek to obtain, by Notice of Exemption, abandonment application, or such other filing as may be appropriate, any necessary ICC and other regulatory approval to terminate common carrier railroad freight service. In such event, Soo shall have no right to any payment for lost freight revenue. The Authority agrees to cooperate in seeking regulatory approval.

D. In the event of cessation of local rail freight traffic for a period of one year or more, or in the event the last user of rail freight service along the Railroad Easement ceases operations or otherwise makes clear that it has no further need for rail service, Soo shall have the obligation to seek to obtain, by Notice of Exemption, abandonment application, or such other filing as may be appropriate, any necessary ICC and other regulatory authority to terminate common carrier railroad freight service. Soo agrees to make filing of any such request for abandonment authority within six months after the last user ceases operations or after a year in which no local railroad traffic has originated or terminated on the Railroad Easement. Soo further agrees to use its best efforts to

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obtain any necessary regulatory abandonment approval for itself and any other users within one year of said filing.

- (1) The Authority agrees to cooperate in any such effort. In the event more than one year elapses before necessary regulatory approval is obtained by Soo, or earlier at Soo's request, the Authority may, at its option, proceed in the name of the Soo to prosecute and complete any necessary regulatory procedure to obtain authorization for such cessation, including cessation of operations by users.
- (2) In the event regulatory approval to cease rail operations is not received within one year of said filing, or is denied in whole or in part, Soo agrees to transfer its railroad freight service common carrier obligations to the Authority or the Authority's designee, if requested by the Authority, in which case Section 12E(2) will apply.
  - (3) Soo shall not be entitled to any payment for lost freight revenue, except as provided in paragraph (2) above.
  - (4) Soo shall have no obligation to appeal an adverse regulatory decision, but shall be obligated to refile for abandonment approval no later than one year after any such denial. In any event, Soo shall have no obligation to refile for abandonment approval subsequent to a denial more than twice.

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(5) The Authority shall have the right at any time to require Soo to divulge its most recent two years freight traffic and revenues generated on the Railroad Easement.

E. In the event the Authority requests termination of the Railroad Easement, the Authority shall have the obligation to obtain regulatory approval at its expense. Soo agrees to cooperate in any such effort at its expense, including preparation of necessary traffic, accounting and financial data in form suitable for ICC or other regulatory application. Soo also agrees that the Authority may proceed in the name of the Soo to prosecute and complete any such procedure. Soo agrees to provide any requested data for regulatory filing within ninety days of request by the Authority.

- (1) In the event regulatory approval to cease rail operations is not received within one year of said filing, or is denied in whole or in part, Soo agrees to transfer its railroad freight service common carrier obligations to the Authority or the Authority's designee, if requested by the Authority, in which case, Sec. 12E(2) will apply.
- (2) In the event the Authority requests termination of the Railroad Easement prior to cessation of active rail freight shipping via the Easement, the Authority will make an additional payment at the time termination takes place for lost net revenue calculated in accordance with the provisions of Exhibit H based on average freight revenues for the most recent two years prior to the

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request by the Authority and based upon the assumption that revenue will continue for a maximum term of 20 years from the date of closing and further based on the cost of capital as determined by the Interstate Commerce Commission on the date of the request by the Authority to terminate the freight railroad easement. Revenues used in the projection shall be adjusted to reflect those revenues reasonably expected to continue. No payment for lost revenue will be made under any other circumstances. F. In the event the Authority shall cause, contribute to, or assist in the relocation of any customer facility located adjacent

assist in the repotation of and to the Railroad Easement and currently used for rail shipping, the Authority shall:

1. Give Soo advance notice of the proposed relocation.

- Give Soo advance needed
   Give Soo advance needed
   Keep Soo advised as to the particulars of the
- 2. Keep Soo advised at proposed relocation.

In the event such facility is relocated with the financial assistance of the Authority on a line of railroad not served by Soo, CP Rail or their affiliates, successors or assigns, the provisions of Section 12E(2) will apply.

# SECTION 13 - OBLIGATIONS FOLLOWING TERMINATION

Upon termination of the Railroad Easement, the parties hereto are relieved from any and all obligations relating thereto, except for any obligations which may have accrued or which may have been incurred prior to the date of such termination or in accordance with the terms of this Agreement.

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### SECTION 14 - RAILROAD EASEMENT MAINTENANCE, OPERATIONS, CONTROL AND ENTRY

A. Until termination of the Railroad Easement, Soo shall have the exclusive direction and control of the Trackage upon said Easement, at its sole cost and expense, subject to the rights of the Authority as set forth in this Agreement. Soo shall perform all construction, derailment or wreck clearing, maintenance, repair and renewal of the Trackage, including any additions thereto it may deem necessary or desirable for the safe and efficient operation of all trains. Soo's obligation for maintenance and repairs shall include any repairs to overhead bridges necessitated by reason of interference with freight railroad operations, which repairs are not required for any other purpose.

B. The management and operation of the Railroad Easement shall be under the direction and control of Soo. Soo shall have the power to change its operations, management and operating practices on or over the Railroad Easement as in its judgment may be necessary, expedient or proper for the operations herein intended, consistent with the provisions of this Agreement.

C. Soo shall have the right to operate trains, engines and cars over the Railroad Easement for its sole benefit, and shall not, except as otherwise provided in this Agreement without prior written permission by the Authority, which permission shall not unreasonably be withheld, permit any third party to operate trains, engines or cars over the Railroad Easement except as already provided in existing trackage rights agreements or as a temporary emergency detour.

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D. Soo shall, at its sole cost and expense, determine all means and employ all persons necessary to operate, maintain, repair and renew the Trackage, as well as crossings, crossing signals, ditches, roadbeds, bridges, and communication lines within the Railroad Easement which may be necessary for its use of the Trackage.

E. Soo shall have a right of access over other portions of the Property for the sole purpose of maintaining and performing freight railroad operations over the Railroad Easement. Such access shall not unreasonably interfere with activities of the Authority or other users permitted by the Authority upon Property not part of the Railroad Easement.

F. The Authority shall not pay the expenses of any public crossing of the Railroad Easement which may be opened or improved, including all expenses of crossing protection, unless such crossings are requested or opened by the Authority. The Authority shall not be responsible for any expenses incurred by Soo as a result of activities of third parties not authorized by the Authority occupying or otherwise interfering with the Railroad Easement.

G. The Authority may enter upon, and make alterations to, the Railroad Easement subject to the following conditions:

(1) The Authority shall give Soo at least three working days advance notice of the date, time, and location of each entry upon the Railroad Easement and the precise nature

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of the activities to be conducted on the Railroad Easement at each such date, time and location.

- (2) The Authority and its contractors shall not interfere with the operations of any trains or railroad facilities upon the Railroad Easement except with the consent of Soo which consent shall not be unreasonably withheld.
- The Authority shall take (and shall cause its contractors (3) to take) such actions as are required to afford Soo the benefit of any applicable insurance held by the Authority or its contractors. In any case where the circumstances would cause a prudent railroad to require the Authority its contractors to do so, the Authority or its or contractors shall procure and maintain in effect railroad protective liability insurance (occurrence form), in Soo's name and issued by an insurer and in a form \$2,000,000 per acceptable to Soo, with limits of occurrence and \$6,000,000 aggregate for bodily injury (including death) and property damage.
  - (4) While on the Railroad Easement, the Authority and its contractors shall comply with all applicable laws and with Soo's safety rules, all at no expense to Soo.
  - (5) No work shall be done or obstruction placed over any track or within the Railroad Easement until the Authority or its contractors shall have arranged for Soo to furnish, at the Authority's or its contractors' expense, such flagging as Soo deems necessary for the protection

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of railroad operations. Such flagging shall not relieve the Authority or its contractors from any liability.

- (6) Construction equipment and related equipment shall not be placed closer than 10 feet from the nearest rail of any track.
- (7) If the Authority desires to construct facilities upon the Railroad Easement, such construction shall be effected in strict accordance with plans which have been approved in advance by Soo. The Authority shall submit the plans to Soo no less than forty-five (45) days prior to the commencement of construction. Soo may require the Authority to make changes in the plans if, in Soo's judgment, the planned construction would create a safety hazard with respect to, or interfere with, railroad operations. Soo assumes no responsibility for, and shall not under any circumstances be held liable for, any error, omission, defect, or deficiency in the plans.
  - (8) The Authority shall not construct any facility over any track where the vertical distance between the top of the rail and any part of the facility is less than 23 feet.

### SECTION 15 - LIABILITY

A. While conducting operations over the Railroad Easement, Soo agrees to defend, indemnify, and hold harmless the Authority, its Commissioners, officers, agents, and employees from any liability, claims, damages, costs, judgments, or expenses resulting directly or indirectly from the act or omission of Soo, its agents,

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employees, customers, tenants, or invitees, occurring on or from the Property (including, without limitation, reasonable attorney's fees and compensation for harm resulting from the handling, storage or release of toxic or hazardous substances or wastes, pollutants or contaminants including, without limitation, asbestos, urea formaldehyde, the group of organic compounds known as polychlorinated biphenyls, petroleum products including gasoline, fuel oil, crude oil and various constituents of such products).

B. Notwithstanding anything in this Agreement to the contrary, in case of collision occurring on the Property involving railroad cars, locomotives, rail passenger cars, motor vehicles, other vehicles or equipment operated by the respective parties which causes Loss or Damage involving the Sole Property or Sole Employees of each of the parties hereto, the party whose Sole Employees are alone at fault shall be solely responsible for and shall settle for and pay the entire Loss and Damage caused thereby, or, if caused by the fault of the Sole Employees of both parties hereto, each party hereto shall bear and pay for all Loss or Damage which its Sole Employees and Sole Property may have suffered as a result thereof, and each party shall bear the percentage of Loss or Damage for which it is legally responsible to third parties.

C. Each party hereto shall pay all Loss or Damage for which such party shall be liable under the provisions of this Agreement, and shall defend, indemnify and save harmless the other party against such Loss or Damage, including any such damages in any court action. Each party hereto shall have the right to settle, or

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cause to be settled for it, all claims for Loss or Damage for which such party shall be liable under the provisions of this Agreement, and to defend or cause to be defended all suits for the recovery of any such Loss or Damage.

D. Each party shall give the other prompt written notice of any and all claims or suits arising from operations on or about the Railroad Easement.

E. Notwithstanding the foregoing, the terms of this Agreement are not to be construed as nor operate as waivers of the Authority's statutory or common law immunities or limitations on liability, including but not limited to Minn. Stat. Ch. 466. Further, the Authority's obligations set forth in this Section 15 and otherwise in this Agreement are expressly limited and governed by the provisions of Minn. Stat. Ch. 466, Minn. Stat. Ch. 604, and any other applicable law or regulation.

# SECTION 16 - ENVIRONMENTAL REPRESENTATIONS AND WARRANTIES

A. Soo hereby represents and warrants as follows to the Authority, such representations and warranties to be true and correct on the closing date, that:

(1) Soo has provided to the Authority within 30 days of the execution of this Agreement all relevant and material environmental information with respect to the Property which is in Soo's possession. Soo may provide such information in summary fashion, but warrants that any summary so provided is fully representative of the environmental conditions of the Property known to Soo and

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that Soo has promptly provided all other relevant and reports results, test data, documents, recommendations requested by the Authority as it pertains summarized summarized information. The said to information will be set forth in Soo's Environmental Disclosure schedule which shall be identified as Exhibit I to this Agreement.

Except as disclosed in any documentation provided by Soo (2) to the Authority pursuant to this Section 16 hereof and except as disclosed on Exhibit I (which is to be provided to the Authority within 30 days after the date of this Agreement), Soo has not generated, treated, stored, released or disposed of, or otherwise placed, deposited in or located any toxic or hazardous substances or wastes, pollutants or contaminants (including, without limitation, asbestos, urea formaldehyde, the group of organic compounds known as polychlorinated biphenyls, petroleum products including gasoline, fuel oil, crude oil and various constituents of such products, and any hazardous substance as defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), 42 U.S.C. Section 9601-9647, as amended) on the Property, nor has Soo undertaken any activity on the Property which has caused, or, to Soo's knowledge, would contribute to:

- (i) the Property being or becoming a treatment, storage or disposal facility within the meaning of the Resource Conservation and Recovery Act of 1976
   ("RCRA"), 42 U.S.C. Section 6901 et seq., or any similar state law or local ordinance,
  - (ii) a release or threatened release of toxic or hazardous wastes or substances, pollutants or contaminants from the Property within the meaning of CERCLA or any similar state law or local ordinance,
  - (iii) the discharge from the Property of pollutants or effluent into any water source or system, the dredging or filling of any waters or the discharge into the air of any emissions, that would require a permit under the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq., or the Clean Air Act, 42 U.S.C. Section 7401 et seq., or any similar law or local ordinance.
- (3) Except as disclosed in Exhibit I, to Soo's knowledge, there is no existing claim or cause of action and there is no pending claim or cause of action against the Property under RCRA, CERCLA or any federal, state or local environmental statutes, regulations, ordinances or other environmental regulatory requirements, including without limitation, the Minnesota Environmental Response and Liability Act, Minn. Stat. § 115B ("MERLA") and the

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Minnesota Petroleum Tank Release Cleanup Act, Minn. Stat.

(4) Except as disclosed on Exhibit I, no above ground or underground tanks (i) have been located on the Property by Soo, or (ii) have been located on the Property by Soo and subsequently removed or filled. There are no known wells within the meaning of Minn. Stat. § 103I.005 on the Property except as described on Exhibit I.

## SECTION 17 - ENVIRONMENTAL INDEMNIFICATION

Except as limited by this Section 17, Soo shall defend, Α. indemnify and hold the Authority harmless from and against all claims, damages, liabilities, costs, including costs and expenses of response, removal, remediation or disposal expenses (including reasonable experts' and attorneys' fees), suits or obligations of any and every nature whatsoever to the extent that they (i) result from or arise out of Soo's breach of any of the representations and warranties in Section 16 of this Agreement, or (ii) result from or arise as a result of the generation, treatment, use, handling, storage, transportation, manufacture, release, discharge or disposal of any toxic or hazardous substances or wastes, pollutants or contaminants (including, without limitation, asbestos, urea as known compounds organic of formaldehyde, the qroup polychlorinated biphenyls, petroleum products including gasoline, fuel oil, crude oil and various constituents of such products) on or from the Property to the extent that same occurred prior to transfer of ownership of the Property to the Authority.

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B. Soo's obligation to the Authority for responding to, removing, remediating or disposing of any pollutant, contaminant, toxic or hazardous substance or waste is restricted to that where the response, removal, remediation or disposal is ordered or required by any federal, state or local government agency with jurisdiction over the same; however, response, removal, remediation or disposal shall be based upon techniques that reasonably accommodate the time needs of the Authority in using the Property as a transportation corridor.

C. Soo's obligation to the Authority for responding to, removing, remediating or disposing of any pollutant, contaminant, toxic or hazardous substance or waste is further limited to that necessary for the Authority's use of the Property as a transportation corridor, including, but not limited to, use as a railroad right-of-way, roadway, bike, pedestrian or other trailway and necessary facilities, including without limitation, station sites, maintenance facilities and other buildings incidental to use as a transportation corridor.

D. The Authority is responsible for the first \$50,000 attributable to each Environmental Site up to an aggregate total of \$250,000 for all Environmental Sites.

E. Soo is obligated to defend, indemnify and hold the Authority harmless for amounts over \$50,000 attributable to each Environmental Site and for amounts in excess of the Authority's aggregate amount of \$250,000.

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Notwithstanding anything else to the contrary in this Section 17, Soo's obligation to defend and indemnify the Authority with respect to Environmental Sites shall be limited to an aggregate amount of \$2,000,000.00 for any and all Environmental sites.

Soo is not responsible for defending or indemnifying the Authority for Environmental Sites discovered after termination, G. pursuant to Section 12, of the Railroad Easement.

Each Party agrees to inform the other of notices and investigations of Environmental Sites and the Parties further agree to confer with respect to management of remediation.

All the terms, covenants, and conditions of this Agreement shall be binding upon, and inure to the benefit of and be enforceable by the parties hereto and their respective successors, heirs, executors and assigns.

### SECTION 18 - SURVIVAL

All of the terms of this Agreement, including all warranties, representations, and indemnification given by each party in this Agreement, all of which are relied upon by the each party shall survive and be enforceable after the closing date and any subsequent transfer of title of the Property.

## SECTION 19 - LAWS GOVERNING

This Agreement shall be governed, and the parties agree to be bound, by the laws of the State of Minnesota; and the parties agree

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to comply with or abide by all laws relevant to this Agreement governing their respective operations in the State of Minnesota.

## SECTION 20 - LABOR RELATIONS

Soo and the Authority each shall be responsible for conducting their own labor relations with any labor organization either representing or seeking representation among either's employees, and each shall regulate or seek to adjust all disputes that may arise with respect to their employees without involving the other Either party may freely enter into any contract with any party. labor organization representing or seeking representation among its own employees. Neither party shall obligate the other party to its employees or to any union representing its employees. Each party shall give written notice to the other of any labor dispute that prevents or threatens to prevent timely performance under this Agreement, including all relevant information concerning the dispute that may impact upon this Agreement.

## SECTION 21 - INDEPENDENCE OF PARTIES

Soo and the Authority hereby declare that they are acting independently, and agree that in the performance of this Agreement their actions are as independent contractors and not as an employee of the other; nor are any of their respective employees considered at any time an employee of the other. Soo has and hereby retains full control of its business in the performance of this Agreement and full control of all the employment, compensation and discharge of all employees of Soo assisting in its performance hereunder.

Soo and the Authority each shall be fully responsible for all matters relating to payment of their employees, including compliance with Social Security, Railroad Retirement, withholding taxes and all other laws and regulations governing such matters. Soo and the Authority each shall be responsible for their own acts and those of their agents, officers, employees, lessees, and contractors during the term of this Agreement.

SECTION 22 - REMEDIES FOR BREACH. If the Authority fails to perform any of the terms or conditions of this Agreement within the specified time limits, Soo may declare this Agreement terminated or may have this Agreement specifically enforced. Likewise, if Soo fails to perform any of the terms or conditions of this Agreement within the specified time limits, the Authority may declare this Agreement terminated or may have this Agreement specifically enforced. The rights and remedies granted to the parties in this Section 22 are intended to be cumulative to all other rights and remedies available to the parties (whether under this Agreement, at law, in equity, or otherwise); accordingly, the exercise by either party of any such right or remedy shall not preclude it from exercising any other such right or remedy.

SECTION 23 - ENTIRE AGREEMENT. This Agreement constitutes the entire Agreement between the parties with respect to the sale and purchase of the Property. Neither party has relied on any statements or representations by the other party except as are set forth in this Agreement.

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SECTION 24 - ASSIGNMENT; BINDING EFFECT. The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, including without limitation any entities into or by which either of the parties is merged, combined, reorganized or acquired.

SECTION 25 - NOTICES. Unless explicitly stated to the contrary elsewhere in this Agreement, all notices and other communications required or contemplated by this Agreement must be in writing and shall be deemed given when delivered in legible form to the business address of the party to whom addressed. If delivered at the closing, a notice shall be deemed given when hand-delivered to the party's representative at the closing. The business addresses of the parties are as follows:

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| mailing address:  | P. O. Box 530<br>Minneapolis, Minnesota 55440<br>Attn: Director - Real Estate                                  |
|-------------------|----------------------------------------------------------------------------------------------------------------|
| delivery address: | 1380 Soo Line Building<br>105 South 5th Street<br>Minneapolis, Minnesota 55402<br>Attn: Director - Real Estate |
| telecopier:       | (612) 347-8170<br>Attn: Director - Real Estate                                                                 |

#### THE AUTHORITY

mailing address: Hennepin County Regional Railroad Authority Southwest Street Level Government Center Minneapolis, MN 55487-0016 Attn: Director - Light Rail Transit

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Hennepin County Regional Railroad delivery address: Authority Southwest Street Level Government Center Minneapolis, MN 55487-0016 Attn: Principal Right-of-way Agent (612) 348-9710

Attn: Principal Right-of-way Agent telecopier:

Notices not given in the manner or within the time limits set forth in this Agreement are of no effect and may be disregarded by the Either party may change its party to whom they are directed. business address, for notice purposes, by giving notice of the

change to the other party.

ATTEST:

SOO LINE RAILROAD COMPANY

BY\_\_ 'Z AFSIDENT Its 🖌

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

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ATTEST: May Sudson

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Approved as to execution:

Assistant County Attorney

1-5-93 Dated:

Approved as to legality:

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Assistant County Attorney

Dated: 12-23-92

#### RAILROAD EASEMENT ESCROW AGREEMENT

This Agreement is made by and among Hennepin County Regional Railroad Authority (Buyer), Norwest Bank Minnesota, National Association (Escrow Agent), and Soo Line Railroad Company (Seller) on the 30th day of July, 1993.

WHEREAS, Buyer has entered into a Purchase Agreement (the Purchase Agreement) dated December 23, 1992 with Seller for the purchase of certain real estate identified as the 29th Street Corridor.

WHEREAS, a copy of the Purchase Agreement is attached hereto as Exhibit A.

WHEREAS, pursuant to Section 9 of the Purchase Agreement, Buyer will grant to Seller a Railroad Easement; and, pursuant to Section 4.B. (2) of the Purchase Agreement, \$750,000 of the purchase price for the 29th Street Corridor is to be held in a Railroad Easement Escrow and paid to Seller upon termination of the Railroad Easement.

WHEREAS, Buyer and Seller desire to engage the services of the Escrow Agent to hold and invest that portion of the purchase price and disburse it upon written authorization of Buyer.

WHEREAS, the Escrow Agent is willing to act as the escrow agent on the terms and conditions set forth below.

NOW THEREFORE,

1. Buyer shall deposit the sum of \$750,000 (which amount, together with the interest and other earnings thereafter earned in connection therewith, is referred to as the Escrow Funds) with the Escrow Agent, who shall receive and hold the Escrow Funds in accordance with the terms of this Agreement.

2. Upon receipt of the Escrow Funds, Escrow Agent shall immediately invest the Escrow Funds in such interest bearing accounts, certificates of deposit, direct obligations of the United States Government, or mutual funds (collectively, Accounts) as shall have been designated in a written notice from Seller's Chief Financial Officer. Thereafter, Escrow Agent shall invest the Escrow Funds in such Account or Accounts as may be designated from time to time in written notices from Seller's Chief Financial Officer. If no such written notice has been given at the time the Escrow Funds are received, Escrow Agent shall immediately deposit the Escrow Funds in an interest bearing account of Escrow Agent's choosing and shall thereupon request in writing that Seller's Chief Financial Officer give notice of the Accounts into which the Escrow Funds are to be invested. Upon receipt of such notice, Escrow Agent shall invest the Escrow Funds in the Accounts so designated. (All references in this Agreement to Seller's Chief Financial Officer and any person holding a comparable position with Seller's successor or assign.) 3. All income (i.e., interest, capital gains, dividends, and other earnings) from the Accounts shall be reinvested in the Accounts and shall be considered part of the Escrow Funds.

4. All income earned on the Accounts shall be reported in the name of Seller for tax purposes.

5. Escrow Agent shall receive fees for its services pursuant to the Escrow Fee Schedule attached hereto as Schedule "A." Escrow Agent will deduct said fees from income earned on the Accounts.

6. Escrow Agent shall furnish to Seller a monthly statement of account reflecting an inventory of assets in the Accounts, all activity during the previous month, and a market value for the assets of the Accounts. Escrow Agent will also furnish such other reports as the Seller or Buyer may reasonably request, including reports to the Seller's or Buyer's accountants or other examiners as may be necessary or appropriate.

7. This Agreement may only be amended by written agreement of the parties.

8. Escrow Agent shall hold the Escrow Funds until it receives written authorization from Buyer (or its successor or assign) to disburse the entire balance of the Escrow Funds (less Escrow Agent's fees) to Seller (or its successor or assign), which consent shall be given upon termination of the Railroad Easement in accordance to Section 12 of the Purchase Agreement. Written authorization from Buyer may be given by the Executive Director of Buyer. Written authorization from Buyer's successor or assign may be given by any officer of such successor or assign.

9. Disbursement of the balance of the Escrow Funds to the Seller shall be made as directed by Seller's Chief Financial Officer.

10. This Agreement shall be effective on the date of deposit of the Escrow Funds with Escrow Agent pursuant to paragraph 1 of this Agreement and shall terminate upon the full performance by each of the parties of their respective obligations hereunder.

11. Except as otherwise provided in this Agreement, the sole duty of Escrow Agent shall be to receive the Escrow Funds and hold them subject to release, in accordance herewith, and Escrow Agent shall be under no duty to determine if Buyer or Seller are complying with the requirements for termination of the Railroad Easement. Escrow Agent may conclusively rely upon, and shall be protected in acting upon, any statement, certificate, notice, request, consent, order, or other document believed by it to be genuine and to have been signed or presented by the proper party or parties. Escrow Agent shall have no duty or liability to verify any such statement, certificate, notice, request, consent, order, or other document, and its sole responsibility shall be to act only as expressly set forth in this Agreement. Escrow Agent shall be under no obligation to institute or defend any action, suit, or proceeding in connection with this Agreement unless first indemnified to its satisfaction. Escrow Agent may consult counsel in respect of any question arising under this Agreement, and Escrow Agent shall not be liable for any action taken or omitted in good faith upon advice of such counsel.

12. Buyer and Seller hereby agree to indemnify and hold Escrow Agent harmless from and against any and all claims, liabilities, and expenses (including attorneys' fees) which Escrow Agent may incur by reason of its acting as the escrow agent under this Agreement. Notwithstanding the foregoing, it is specifically understood and agreed that in the event Escrow Agent has committed negligence or malfeasance in the exercise of its responsibilities hereunder, the indemnification provisions of this Agreement shall not apply. Further, nothing in this Agreement shall be deemed to waive any of Buyer's statutory defenses and immunities or limitations on liability.

13. The books, records, documents, accounting procedures, and practices of Escrow Agent relevant to this Agreement are subject to examination by Buyer and Seller or their agents.

14. This Agreement and all transactions hereunder shall be governed by, and interpreted, construed, and enforced in accordance with, the laws of the State of Minnesota.

15. All notices, authorizations, and directives required or contemplated by this Agreement shall be in writing and shall be effective when actually received by the party to whom addressed. Such notices and authorizations shall be addressed as follows. A party may change its address for notice purposes by giving notice of the change to the other parties.

Notices to Buyer shall be directed as follows:

Don Lawrence Hennepin County Regional Railroad Authority Southwest Street Level Hennepin County Government Center Minneapolis, MN 55487 Fax (612) 348-9710

Notices to Seller shall be directed as follows:

James A. Lee Senior Vice President and Chief Financial Officer Soo Line Railroad Company 925 Soo Line Building 105 South Fifth Street Minneapolis, MN 55402 Fax (612) 337-0434 with a copy to:

Director of Real Estate Development Soo Line Railroad Company 1380 Soo Line Building 105 South Fifth Street Minneapolis, MN 55402 Fax (612) 347-8170

Notices to Escrow Agent shall be directed as follows:

Attn: Alice I. Weibye Norwest Bank Minnesota, N.A. Corporate Custody Services Sixth Street & Marquette Avenue Minneapolis, MN 55479-0065 Fax (612)667-3822

16. This Agreement contains the entire understanding among the parties hereto with respect to the escrow contemplated hereby and supersedes and replaces all prior and contemporaneous agreements and understandings, oral or written, with regard to such escrow.

17. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which shall constitute the same instrument.

18. Escrow Agent may resign upon 30 days advance written notice to Buyer and Seller. If Seller and Buyer are unable to agree upon a successor Escrow Agent within the 30-day period following such notice, Escrow Agent may petition any court of competent jurisdiction to name a successor escrow agent. Escrow Agent will continue to serve as the escrow agent under this Agreement until such time as the successor escrow agent is able to assume its duties under this Agreement.

19. Seller acknowledges and agrees that the terms of this Agreement meet the requirements contained in Section 4.B.(2) of the Purchase Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

HENNEPIN COUNTY REGIONAL RAILRØAD AÚTHORITY Βv Its

NORWEST BANK MINNESOTA, NATIONAL ASSOCIATION By l 12 Its

ME RAILBOAD COMPANY **S**00 By Ø Its

APPROVED AS TO FORM AND LEGALITY: Asst. Hennepin County Attorney -93 -29-Dated

APPROVED AS TO EXECUTION: ð County Attorney Asst. Hennepin 7-30-9 Dated

James R. Uhar JAMES R. UFER (

Aset. Hennepin County Investment and Financial Manager

Dated

#### SUPPLEMENT NO. 1 TO PURCHASE AGREEMENT

This is Supplement No. 1 dated May 27, 1993, to that certain Purchase Agreement dated December 23, 1992 (the Purchase Agreement), by and between Soo Line Railroad Company (Soo) and the Hennepin County Regional Railroad Authority (the Authority).

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties, Soo and the Authority hereby agree as follows:

Section 3 C of the Purchase Agreement is amended by changing June  $1_{r_2}$  1993, to July 1, 1993.

RAILROAD COMPANY /LINE SOO By Its 1 r-APPROVED AS TO FORM Law Department Glenn Olander - Quamme

| HENNEPIN COUNTY REGIONAL               |   |
|----------------------------------------|---|
| RAILROAD AUTHORITY,                    |   |
| By Jandia Helauf<br>Its Chalr          | , |
| Its Chair                              |   |
| and A A                                |   |
| By 19 Alland<br>Its Executive Director |   |

Approved as to execution: Assistant County Attorney May 27, 1993 Dated:

Approved as to yegali Assistant County Attorney Dated: May 27, 1993

### SUPPLEMENT NO. 2 TO PURCHASE AGREEMENT

This is Supplement No. 2 dated June 25, 1993, to that certain Purchase Agreement dated December 23, 1992 (the Purchase Agreement), by and between Soo Line Railroad Company (Soo) and the Hennepin County Regional Railroad Authority (the Authority).

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties, Soo and the Authority hereby agree as follows:

Section 3 C of the Purchase Agreement is amended by changing June 1, 1993, to August 1, 1993.

This Supplement No. 2 supersedes Supplement No. 1 to Purchase Agreement (which Supplement No. 1 is dated May 27, 1993).

RAILROAD COMPANY **SOO** INÉ By

Its Sr. Vice President

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY By Chair Its Chair

and By Its Execut

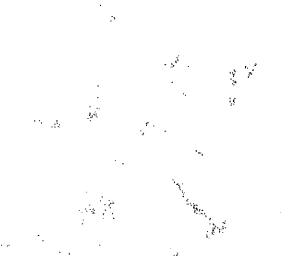
\*\*\*\*\*\*

Approved as to/execution:

Assistant County Attorney Dated: June 25, 1993

Approved as to legality: Assistant County Attorney

Dated: June 25, 1993



### CP COUNTERPART 7/26/93

### RELINQUISHMENT AGREEMENT

THIS IS AN AGREEMENT dated July 27, 1993, between Soo Line Railroad Company (Soo) and Twin Cities & Western Railroad Company (TCW). The premises of this agreement are as follow:

- a. Soo and TCW are parties to that certain Twin Cities Trackage Rights Agreement dated July 26, 1991 (the Base Agreement), whereby Soo granted TCW trackage rights with respect to certain railroad trackage owned by Soo in the Minneapolis-St. Paul metropolitan area, including the "Merriam Park Line" (as that term is defined in the Base Agreement) which is shown in red coloration on the attached Exhibit A.
- b. The Base Agreement permits TCW to traverse the Merriam Park Line to reach Soo's St. Paul Yard but prohibits TCW from serving any rail freight customers located on and along the Merriam Park Line.
- c. The Merriam Park Line includes a line of railroad that extends from the westerly city limit of the City of Minneapolis to the easterly line of Hiawatha Avenue, all in the City of Minneapolis, referred to as the 29th Street Corridor.
- d. Section 8.2 of the Base Agreement stipulates that TCW agrees to relinquish all its rights over the Merriam Park Line in the event of a sale or abandonment of any portion of the Merriam Park Line, provided that Soo shall secure an alternate route to St. Paul Yard for TCW.

e. By Purchase Agreement dated December 23, 1992 (the Purchase Agreement), between Soo and the Hennepin County Regional Railroad Authority (the Authority), Soo agreed to sell the 29th Street Corridor to the Authority. The Purchase Agreement contemplates that Soo and TCW may continue to use the 29th Street Corridor for a period of time after the consummation of the sale.

. . . .

- f. Pursuant to Section 5 A (4) of the Purchase Agreement, the obligation of the Authority to consummate the purchase of the 29th Street Corridor is subject to the condition that Soo provide agreements by present users of trackage rights to vacate or terminate those trackage rights in a timely manner.
- g. The Purchase Agreement contemplates that the existing Merriam Park Line track crossings at Hiawatha Avenue will be permanently severed in order to accomodate the reconstruction of Hiawatha Avenue. The exact date of severance is not known at this time. Once the track crossings at Hiawatha Avenue are severed, TCW will no longer be able to utilize the Merriam Park Line to reach Soo's St. Paul Yard.
- h. Soo has procured alternate trackage rights for TCW that give TCW an alternate route to Soo's St. Paul Yard using the tracks of other railroads, all as specified in the Base Agreement. TCW has accepted such alternate trackage rights.
- i. TCW is willing to surrender its trackage rights with respect to a portion of the Merriam Park Line as shown in yellow coloration on Exhibit A on the terms set forth below.

-2-

NOW, THEREFORE, in consideration of the foregoing premises, and in further consideration of the promises and undertakings set forth below, Soo and TCW agree as follows:

. . . . .

1. TCW hereby surrenders its trackage rights (as granted by the Base Agreement) with respect to that portion of the Merriam Park Line lying between the westerly limits of the City of Minneapolis (milepost 428.00) and Merriam Park (milepost 416.43), all as shown in yellow coloration on the attached Exhibit A.

Said surrender shall take effect at the earlier of the following:

- (a) upon receipt of written demand from Soo demanding such surrender, or
- (b) at such time as the railroad crossings at Hiawatha Avenue are severed;

provided, however, that if, upon the happening of either of the events specified in subparagraphs (a) or (b) above, TCW has not yet received authority or exemption from the Interstate Commerce Commission ("ICC") to discontinue its trackage rights, then said surrender shall not take effect as specified above, but, instead, shall take effect upon receipt by TCW of such authority or exemption; provided further that said surrender shall not take effect until TCW has received ICC approval or exemption therefrom, for the alternate trackage rights described in paragraph h above.

2. TCW will cooperate in good faith with Soo to obtain any regulatory approval (or exemption in lieu thereof) necessary to effectuate the purposes of this agreement.

-3-

3. This agreement is expressly intended for the benefit of the Authority.

4. TCW shall remain obligated, pursuant to Section 8 of the Base Agreement, to relinquish its trackage rights with respect to that portion of the Merriam Park Line located west of milepost 428.00 in the event such portion (or any part thereof) is abandoned or sold to a third party.

By

SOO LINE RAILROAD COMPANY

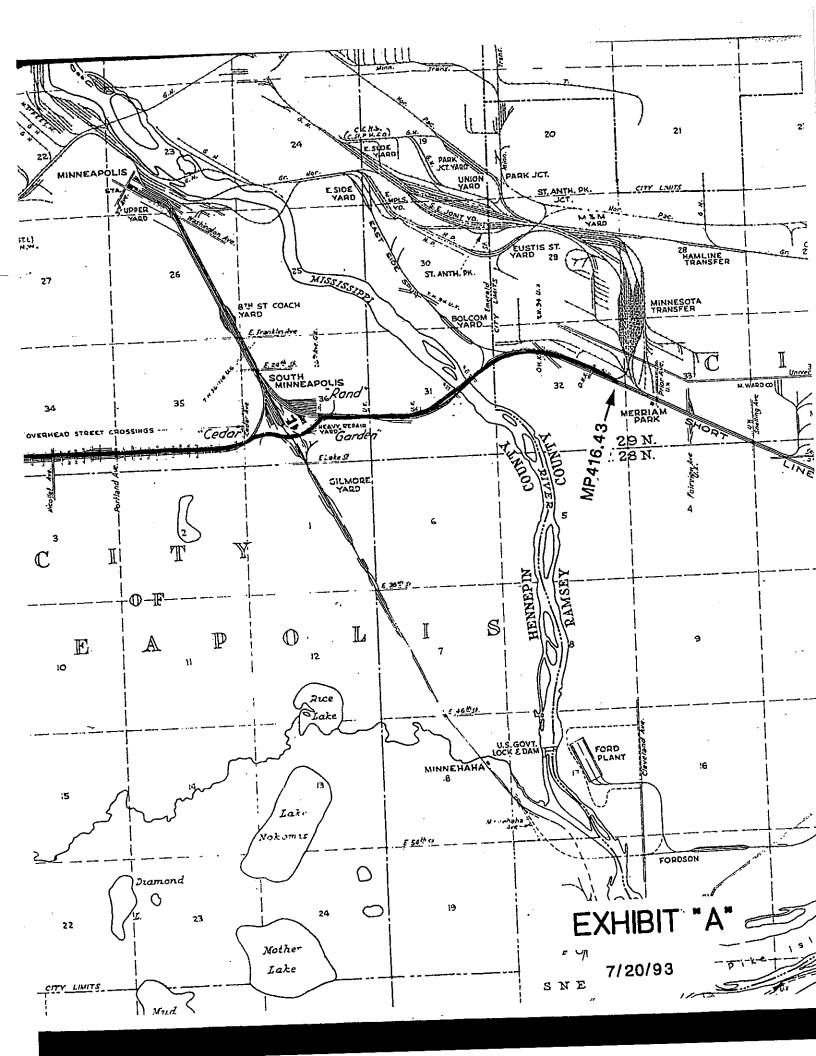
TWIN CITIES & WESTERN RAILROAD COMPANY

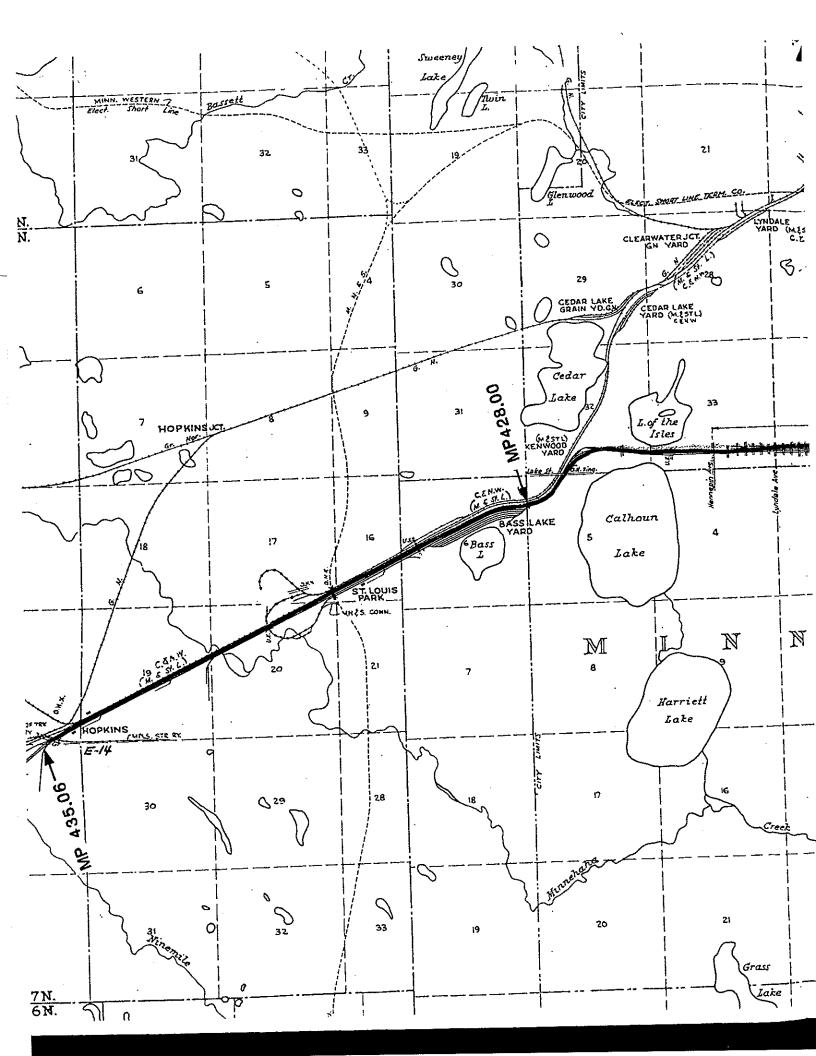
By

P. A. Pender Vice President and Chief Operating Officer 1 Control

Chairman

-4-





RAILROAD EASEMENT

(reserved for valuation and tax data)) (reserved for recording data)

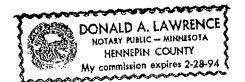
FOR \$1.00 AND OTHER VALUABLE CONSIDERATION, the receipt of which is hereby acknowledged, the Hennepin County Regional Railroad Authority, hereby acknowledged, the Hennepin County Regional Railroad Authority, a political subdivision and local government unit under the laws of the State of Minnesota, Grantor, hereby conveys and quitclaims to the Soo Line Railroad Company, a corporation under the laws of the State of Minnesota, Grantee, a temporary railroad easement over real of Minnesota, Grantee, a temporary railroad easement over real forth in that certain Purchase Agreement (the Purchase Agreement) forth in that certain Purchase Agreement (the Purchase Agreement) between Soo Line Railroad Company and the Hennepin County Regional Railroad Authority dated December 23, 1992. The real property is described as follows: see attached Exhibit A.

Hennepin County Regional Railroad Authority Sandra M. Hilary By Its Chair By Jame M. Bourey Its/Executive Director

STATE OF MINNESOTA ) )ss COUNTY OF HENNEPIN )

The foregoing was acknowledged before me this 30th day of July, 1993, by Sandra M. Hilary and James M. Bourey, respectively the Chair and Executive Director of Hennepin County Regional Railroad Authority, a political subdivision and local government unit under the laws of Minnesota, on behalf of the Authority.

Illrena Notàrv



This instrument was drafted by:

Soo Line Railroad Company P.O. Box 530 Minneapolis, MN 55440 Tax statements for the real property described in this instrument should be sent to:

Hennepin County Regional Railroad Authority Southwest Street Level Government Center 300 South Sixth Street Minneapolis, MN 55487-0016

### Exhibit A (p. 1 of 2)

### Temporary Easement No. 1:

Strips of land 30 feet in width lying 15 feet on either side of the centerlines of: all main tracks, spurs, sidings and tail tracks as they are now laid out and constructed over Parcel A (described below).

Except for that portion of Parcel A described as Temporary Easement No. 2, below, and unless terminated earlier pursuant to Section 12 of the Purchase Agreement, Temporary Easement No. 1 shall terminate at the earlier of the following: 15 years after the date of this Easement or at such time as all of Grantee's railroad crossings of Hiawatha Avenue between 26th Street East and Lake Street are permanently severed.

### Temporary Easement No. 2:

Strips of land 30 feet in width lying 15 feet on either side of the centerlines of all existing trackage over that portion of Parcel A lying between the west boundary of Fifth Avenue and the west boundary line of Bloomington Avenue, in the City of Minneapolis

#### also

a strip of land 30 feet in width lying 15 feet on either side of the centerline of the south main track over that portion of Parcel A lying west of the west boundary line of Fifth Avenue, and east of the west boundary of Bloomington Avenue to the east boundary line of Cedar Avenue, in the City of Minneapolis

Temporary Easement No. 2 shall terminate 15 years after the date of this Easement, unless earlier terminated pursuant to Section 12 of the Purchase Agreement.

#### Parcel A:

All that part of the Hennepin County Regional Railroad Authority right of way, formerly the right of way of the Soo Line Railroad Company, passing through the Northwest Quarter of the Southwest Quarter, the Southwest Quarter of the Southwest Quarter, and the Southeast Quarter of the Southwest Quarter, all in Section 36, Township 29, Range 24; all of which lies westerly of the easterly right of way line of Hiawatha Avenue.

#### also:

All that part of the Hennepin County Regional Railroad Authority right of way, formerly the right of way of the Soo Line Railroad Company, passing through the South Half of the Southeast Quarter and

### Exhibit A (p. 2 of 2)

the South Half of the Southwest Quarter, Section 35, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 33, Township 29, Range 24; the South Half of the Southeast Quarter and the Southeast Quarter of the Southwest Quarter, Section 32, Township 29, Range 24; and the Southwest Quarter, Section 32, Township 29, Range 24; and the North Half of the Northwest Quarter of Section 5, Township 28, Range 24.

(Abstract Property)

also:

сн. <sub>ј</sub>

All that part of the North Half of the Southeast Quarter of the Southwest Quarter of Section 35, Township 29, Range 24, lying South of the South line of Block 3, "Avery's Chicago Avenue Addition to Minneapolis", and between the extensions South of the East and West lines of said Block 3.

According to the recorded plats thereof and according to the Government Survey thereof, as evidenced by Certificate of Title No. 371889.

(Torrens Property)

(Note: since the legal description has been completely re-typed, it should be checked with great care by all concerned.)

### CP RAIL SYSTEM COPY

# ASSIGNMENT AND ASSUMPTION AGREEMENT

1. As used in this agreement, "Purchase Agreement" means that certain Purchase Agreement dated December 23, 1992, between Hennepin County Regional Railroad Authority (the Authority) and Soo Line Railroad Company (Soo), together with any modifications, amendments, and supplements thereto.

2. Terms defined in the Furchase Agreement are used with the same meanings in this agreement.

3. In accordance with and subject to the terms of Section 7 of the Furchase Agreement, Soo hereby assigns to the Authority Soo's rights, and the Authority hereby assumes Soo's obligations, under the following documents (the "Documents"):

|                               | Identifying | ,                                    |
|-------------------------------|-------------|--------------------------------------|
| Party                         | Number      | Type                                 |
|                               | 1           |                                      |
| Roland Millwork Co.           | 24055       | Land lease                           |
| Bituminous Roadways, Inc.     | 24126       | Land lease                           |
| Sears, Roebuck & Co.          | 24191       | Land lease                           |
| Donald K. Raymond             | 24400       | Land lease                           |
| Bituminous Roadways, Inc.     | 24767       | Land lease                           |
| Northern States Power         | 25034       | Wire crossing                        |
| KBL Cablesystems of Minnesota | 25391       | Wire crossing                        |
| KBL Cablesystems of Minnesota | 25392       | Wire crossing                        |
| KEL Cablesystems of Minnesota | 25393       | Wire crossing                        |
| KHL Cablesystems of Minnesota | 25394       | Wire crossing                        |
| KBL Cablesystems of Minnesota | 25395       | Wire crossing                        |
| XBL Cablesystems of Minnesota | 25396       | Wire crossing                        |
| Northern States Power         | 25420       | Pole & wire agreement                |
| Northern States Power         | 25445       | Overhead wire crossing               |
| Northern States Power         | 25457       | Wire crossing                        |
| Northern States Power         | 25464       | Pole & wire agreement                |
| Northern States Power         | 25466       | Pole & wire agreement                |
| U. 9. West Communications     | 25604       | Conduit agreement                    |
| V. S. West Communications     | 25620       | Conduit agreement                    |
| U. S. West Communications     | 25624       | Pole line attachment                 |
| U. S. West Communications     | 25632       | Pole & wire agreement                |
| U. S. West Communications     | 25645       | Pole & wire agreement                |
| KBL Cablesystems of Minnesota | 25680       | Wire crossing                        |
| KBL Cablesystems of Minnesota | 25681       | Wire crossing                        |
| MCI                           | 26093       | Fiber optic agreement                |
| Northern States Power         | 26292       | Wire crossing                        |
|                               | 26632       | Pole & wire agreement                |
| Northern States Power         | 27116       | Gas pipe line agreement              |
| Minnegasco                    | 27384       | Overhead wire crossing               |
|                               |             |                                      |
|                               | 27612       | Wire crossing                        |
| Northern States Power         | 27627       | Overhead wire crossing<br>Land lease |
| John A. Dalsin & Sons, Inc.   | 27878       |                                      |
| Northern States Fower         | 28066       | Overhead wire crossing               |
| Paragon Cable TV              | 28080       | Overhead wire crossing               |
| U. S. West Communications     | 28202       | Pole & wire agreement                |
| Smith Foundry Company         | 28285       | Land lease and shed                  |
| L. H. Sowles Company          | 28487       | Land lease                           |
| N. C. Bennett Lumber Company  | 28625       | Land lease                           |
| Minneapolis Gas Light Co.     | N7226       | Gas pipe agreement                   |
| City of Hinneapolis           | VES         | Bridge agreement                     |
| City of Minneapolis           | V74         | Bridge agreement                     |
| City of Minneapolis           | V210        | Land sale agreement                  |
|                               |             | •                                    |

CP RAIL

| city of Minneapolis 5-2195 Side Liack agreement | ity of Minneapolis<br>Minneapolis Gas Light Co.<br>City of Minneapolis<br>City of Minneapolis<br>Minneapolis Gas Light Co.<br>Minneapolis Gas Light Co.<br>Minneapolis Gas Light Co.<br>City of Minneapolis<br>City of Minneapolis<br>City of Minneapolis<br>Naegele Outdoor Advertising<br>Midwest Outdoor Advertising<br>Midwest Outdoor Adv, Inc.<br>Minneapolis Com. Dev. Agency<br>Twin City Ready Mix | V2368<br>W1406<br>W2272<br>W2427<br>W3509<br>W3937<br>W4106<br>W4111<br>W5320<br>W6469<br>SOL-726<br><del>SOL-726<br/>SOL-726<br/>SOL-791</del><br>None<br>S-2045 | Bridge agreement<br>Gas pipe agreement<br>Sewer line agreement<br>Sewer line agreement<br>Gas pipe agreement<br>Gas pipe agreement<br>Gas pipe agreement<br>Gas pipe agreement<br>Water pipe agreement<br>Storm sewer agreement<br>Sign board<br>Sign board<br>Sign board<br>Environ. Rt. of Entry<br>Side track agreement |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 | Twin City Ready Mix                                                                                                                                                                                                                                                                                                                                                                                         | 5-2045                                                                                                                                                            | Side track agreement                                                                                                                                                                                                                                                                                                       |
|                                                 | City of Minneapolis                                                                                                                                                                                                                                                                                                                                                                                         | 5-2195                                                                                                                                                            | Side track agreement                                                                                                                                                                                                                                                                                                       |

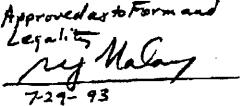
4. The foregoing assignment and assumption is limited to those rights and obligations under the Documents that pertain to the Property.

5. Notwithstanding paragraph 3, above, Soo reserves to itself 100% of the prepaid gross revenue attributable to the following Document: Identifying Number 26093.

6. Soo also assigns to the Authority all other interests of any nature of the Soo, to the extent transferrable and/or assignable, and relating to the interests in the Property transferred to the Authority pursuant to the Purchase Agreement, including rights in and to general intangibles and contract rights in addition to those identified in paragraph 3, above, including franchises, governmental and contractual operating rights and other contracts, leases, licenses, permits and privileges, except to the extent such rights relate to Soo's rights and obligations to provide common carrier freight rail service on the Property. The Authority hereby assumes Soo's obligations and duties with respect to the various interests identified in this paragraph 6, provided that such assumption shall be limited to obligations and duties relating to the Property.

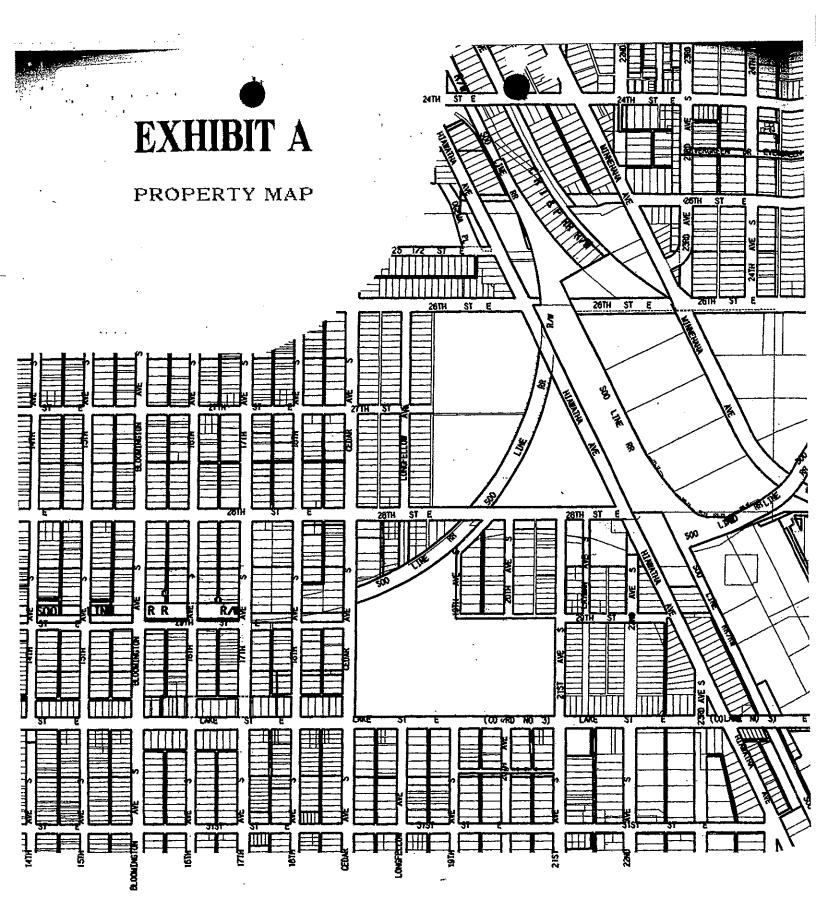
7. This agreement is dated July 30, 1993.

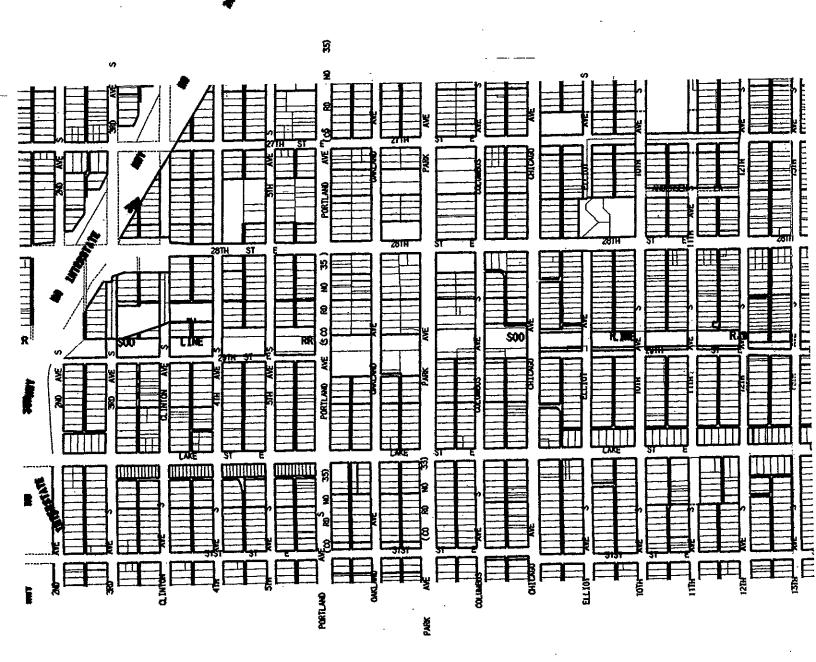
APPROVED AS TO FORM Law Department Glenn Olander - Cuamme



SOO LINE RAILROAD COMPANY Bν Its

HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY By Its





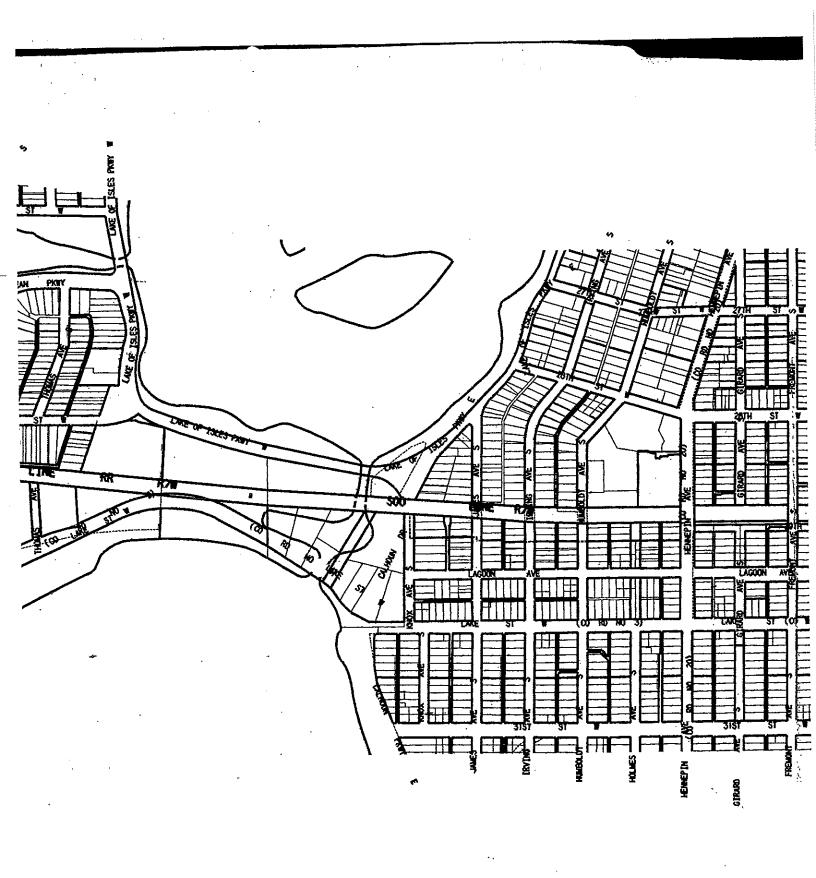
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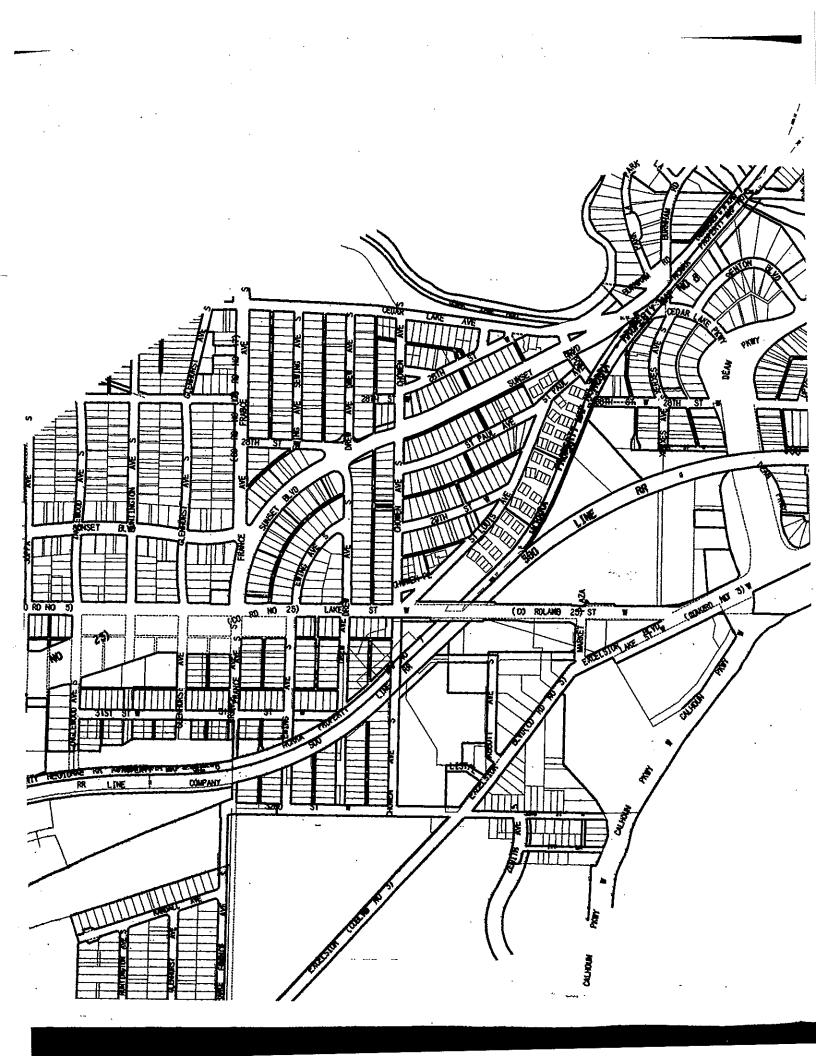
8 2 ΠТ 8 ŤΗ ۲ 2 ۲ **PLEASAN** SEUR LYNDALE BLAISOEL ΞĒ 28<u>TH</u> 28TH . ST. 28TH ST Ĩ ¥. ଛି Т Ę 2 EIL П ROS RR s 500 LD ale v 8 HE. SI SI PLEASUNT ļ, ž THOME ELROY BLAISDE ťα 70 .... 3 Ŧ ΠШ Ħ ۰T 3 <del>]]</del> 315 × 515 51 NICOLLE EE HWARTET ТĽ E DuPow ALDRIGT LYNDILE BLAKSDELL CLFA-ENERSON CARF TELD<sup>1</sup> GRMD -PLEASAN

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# EXHIBIT B

### Legal Description of Property

All that part of the Soo Line Railroad Company right of way passing through the Northwest Quarter of the Southwest Quarter, the Southwest Quarter of the Southwest Quarter, and the Southeast Quarter of the Southwest Quarter, all in Section 36, Township 29, Range 24; all of which lies westerly of the easterly right of way line of Hiawatha Avenue.

also:

All that part of the Soo Line Railroad Company right of way passing through the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 35, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 33, Township 29, Range 24; the South Half of the Southeast Quarter of the Southeast Quarter, Section 32, Township 29, Range 24; and the North Half of the Northwest Quarter of Section 5, Township 28, Range 24.

(Abstract Property)

All that part of the North Half of the Southeast Quarter of the Southwest Quarter of Section 35, Township 29, Range 24, lying South of the South line of Block 3, "Avery's Chicago Avenue Addition to Minneapolis", and between the extensions South of the East and West lines of said Block 3.

According to the recorded plats thereof and according to the Government Survey thereof, as evidenced by Certificate of Title No. 371889.

(Torrens Property).

# L xhibit C - 1 of 3

### RAILROAD EASEMENT

| (reserved for valuation and tax data) (reserved for recording data)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STATE DEED TAX DUE HEREON: \$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Date:, 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| FOR VALUABLE CONSIDERATION, the Hennepin County Regional Railroad Authority, a political subdivision and local government unit under the laws of the State of Minnesota, Grantor, hereby conveys and quitclaims to the Soo Line Railroad Company, a corporation under the laws of the State of Minnesota, Grantee, a temporary railroad easement over real property in Hennepin County, Minnesota, the terms of which are set forth in Purchase Agreement between Soo Line Railroad Company and the Hennepin County Regional Railroad Authority dated The real property is described as follows: |
| (Legal description on reverse of this document)<br>Hennepin County Regional Railroad Authority                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| By<br>Its <u>Chairman</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| By<br>Its <u>Executive Director</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| STATE OF MINNESOTA )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| )ss<br>COUNTY OF HENNEPIN )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| The foregoing was acknowledged before me this day of, 199, by                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Director of Hennepin County Regional Railroad Authority, a political subdivision and local government<br>unit under the laws of Minnesota, on behalf of the Authority.                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Notary Public                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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This Instrument was drafted by:

Hennepin County Regional Railroad Authority Southwest Street Level Government Center 300 South Sixth Street Minneapolis, MN 55487-0016 Tax Statements for the real property described in this instrument should be sent to:

# Exhibit C - 2 of 3

## **Description of Property Affected**

All that part of the Hennepin County Regional Railroad Authority right of way, formerly the right of way of the Soo Line Railroad Company, passing through the Northwest Quarter of the Southwest Quarter, the Southwest Quarter of the Southwest Quarter, and the Southeast Quarter of the Southwest Quarter, all in Section 36, Township 29, Range 24; all of which lies westerly of the easterly right of way line of Hiawatha Avenue.

also:

All that part of the Hennepin County Regional Railroad Authority right of way, formerly the right of way of the Soo Line Railroad Company, passing through the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 35, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 33, Township 29, Range 24; the South Half of the Southeast Quarter and the Southeast Quarter of the Southwest Quarter, Section 32, Township 29, Range 24; and the North Half of the Northwest Quarter of Section 5, Township 28, Range 24.

(Abstract Property)

also:

All that part of the North Half of the Southeast Quarter of the Southwest Quarter of Section 35, Township 29, Range 24, lying South of the South line of Block 3, "Avery's Chicago Avenue Addition to Minneapolis", and between the extensions South of the East and West lines of said Block 3.

According to the recorded plats thereof and according to the Government Survey thereof, as evidenced by Certificate of Title No. 371889.

(Torrens Property)

### Description of Railroad Easement to Expire (Insert Date of Severence at Hiawatha)

Strips of land 30 feet in width lying 15 feet on either side of the centerlines of: all main tracks, spurs, sidings and tail tracks as they are now laid out and constructed over the above described property.

# Exhibit C - 3 of 3

# Description of Railroad Easement to Expire December 31, 2008

Strips of land 30 feet in width lying 15 feet on either side of the centerlines of all existing trackage over the above described property lying between the west boundary of Fifth Avenue and the west boundary line of Bloomington Avenue, in the City of Minneapolis

also

a strip of land 30 feet in width lying 15 feet on either side of the centerline of the south main track over the above described property lying west of the west boundary line of Fifth Avenue, and east of the west boundary of Bloomington Avenue to the east boundary line of Cedar Avenue, in the City of Minneapolis

# EXHIBIT D 1 of 3

### QUITCLAIM DEED

(reserved for valuation and tax data)

(reserved for recording data)

Date: \_\_\_\_\_, 199\_\_\_\_

For valuable consideration, Soo Line Railroad Company ("Grantor" or "Seller"), a corporation under the laws of the State of Minnesota, hereby conveys and quitclaims to Hennepin County Regional Railroad Authority ("Grantee"), a political subdivision and local governmental unit under the laws of the State of Minnesota, real property in Hennepin County, State of Minnesota, described below, together with all hereditaments and appurtenances thereto. The real property is described as follows:

That part of the Soo Line Railroad Company right of way passing through the Northwest Quarter of the Southwest Quarter, the Southwest Quarter of the Southwest Quarter, the Southeast Quarter of the Southwest Quarter, all in Section 36, Township 29, Range 24; all of which lies westerly of the easterly right of way line of Hiawatha Avenue.

also:

That part of the Soo Line Railroad Company right of way passing through the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 35, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 34, Township 29, Range 24; the South Half of the Southeast Quarter and the South Half of the Southwest Quarter, Section 33, Township 29, Range 24: the South Half of the Southeast Quarter and the Southeast Quarter of the Southwest Quarter, Section 32, Township 29, Range 24; and the North Half of the Northwest Quarter of Section 5, Township 28, Range 24.

# EXHIBIT D 2 of 3

## (Abstract Property)

also:

That part of the North Half of the Southeast Quarter of the Southwest Quarter of Section 35, Township 29, Range 24, lying south of the South line of Block 3, "Avery's Chicago Avenue Addition to Minneapolis", and between the extensions South of the East and West lines of said Block 3.

According the recorded plats thereof and according to the Government Survey thereof, as evidenced by Certificate of Title No. 371889.

(Torrens Property)

[Seller certifies that Seller does not know of any wells on the real property.] (insert as necessary)

| SOO LINE RAILROAD | COMPANY |
|-------------------|---------|
| Ву:               |         |
| Its:              | ·       |

• • •

STATE OF MINNESOTA

. •

)SS

COUNTY OF HENNEPIN

|                      | The foregoing quitclaim deed was acknowledge                                  | d before | me |
|----------------------|-------------------------------------------------------------------------------|----------|----|
|                      | The foregoing quite 199 by                                                    |          |    |
| this<br>the<br>corpo | day of of Soo Line Railroad of soo Line the laws of the State of Minnesota, o | Company, | а  |
| the C                | corporation.                                                                  |          |    |

Notary Public

EXHIBIT D 3 of 3

Tax statements for the property should be sent to Grantee at:

This instrument was drafted by: John P. Nail Soo Line Railroad Company P. 0. Box 530 Minneapolis, MN 55440

# EXHIBIT E

### QUITCLAIM BILL OF SALE

### KNOW ALL PERSONS BY THESE PRESENTS:

• •

Soo Line Railroad Company ("Seller"), in consideration of the sum of \$1.00 and other valuable consideration to it paid, receipt of which is hereby acknowledged, hereby conveys and quitclaims to Hennepin County Regional Railroad Authority the following property:

This conveyance is made strictly on an "as is, where is" basis, and Seller makes no express or implied representation or warranty whatsoever concerning said property (including, without limitation, express or implied representations or warranties of title, merchantability, or fitness for a particular purpose).

Date:

| <b>S</b> 00 | LINE    | RAILROAD | COMPANY |  |
|-------------|---------|----------|---------|--|
| By:_        | <u></u> |          |         |  |
| Its         |         |          |         |  |
|             | <u></u> |          |         |  |

HOPKING TO MINNEAPOLIS

ADDITIONAL PARCEL SM.

> Authorization No. 7164 Registered Title Property

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+ effected by Lase. To

State- 9-24-85

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### DEED NO. 83871

U.S. 12 (I-394) OVERPOSES GRANTOR, CHICAGO AND NORTH WESTERN TRANSPORTATION THE COMPANY, a Delaware corporation, whose principal office is located at 165 N. Canal Street, Chicago, Illinois 60606, for the consideration of TEN AND NO/100 (\$10.00) DOLLARS, the provisions hereinafter set forth, and other good and valuable consideration, conveys and quitclaims to HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY, a political subdivision and local government unit of the State of Minnesota, 2400-A Government Center, Minneapolis, Minnesota 55487, GRANTEE, all interest in the following described real estate situated in the County of Hennepin, and the State of Minnesota, to wit:

> That part of Lot 12 lying Southerly of a line drawn from a point on the Westerly line of said lot, distant 75 feet along said West line from the Northwest corner of said lot, to a point in the East line of said lot, 50 feet Southerly at right angles to the Northerly line of said lot;

### ALSO:

hear

Description: Deed to Small portion of two city lots in Kenwood area of Mpls.

That part of Lot 13 lying Southerly of a line drawn from a point in the East line of said lot, which is 75 feet Southerly at right angles to the Northerly line of said lot, to a point in the East line of Lot 16, distant 190 feet North from the Southeast corner of said Lot 16, except the West 56 feet, front and rear thereof; all in Block 2, Lakeview Addition to Minneapolis, according to the plat thereof on file or of record in the office of the Register of Deeds in and for said Hennepin County.

### EXCEPT

That part thereof lying Southeasterly of a line drawn in a Northeasterly and Southwesterly direction from a point in the East line of said Lot 12, 96.2 feet South of the Northeast corner thereof, through a point in the East line of said Lot 13, 106,3 feet South of the Northeast corner thereof, and said line continued Southwestwardly in a straight line to the West line of said Lot 13. The above part of Lot 13 is subject to a reservation by the State of in a thereof, Minnesota to mineral and mineral rights.

Subject to covenants, easements, conditions, and restrictions of record.

TOGETHER with and including all of Grantor's right, title and interest in "as is" condition as of the date of this deed, in and to all buildings, bridges and roadbed, if any, situated upon said real estate.

| DATED this <u>lst</u> day of _                                     | May, 19 <u>84</u>                                                                |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Signed, Sealed and Delivered in<br>Presence of:<br>Grown & Outtown | CHICAGO AND NORTH WESTERN<br>TRANSPORTATION COMPANY<br>By Colorly Maley          |
| Vente 2. Jeures                                                    | Robert W. Mickey, Vice President<br>Attest<br>J. S. Edwards, Assistant Secretary |

STATE OF ILLINOIS)

SS

I, Richard S. Kennerley, a Notary Public duly commissioned and qualified in and for the County and State aforesaid, DO HEREBY CERTIFY that Robert W. Mickey and J. S. Edwards , to me personally known ---and known to me to be, respectively, \_\_\_\_ Vice President Secretary of CHICAGO AND NORTH WESTERN TRANSPORand Assistant TATION COMPANY, a Delaware corporation, and the identical persons whose names are subscribed to the foregoing instrument, appeared before me this day in person, and being first duly sworn by me, severally acknow-Vice ledged to me that they are, respectively, President and Assistant Secretary of said corporation; that as such officers they signed, sealed and delivered said instrument in behalf of said corporation by authority and order of its Board of Directors, as the free and voluntary act and deed of said corporation, and as their own free and voluntary act; that the seal affixed to said instrument is the seal of said corporation; and that said corporation executed said instrument for the uses and purposes therein set forth.

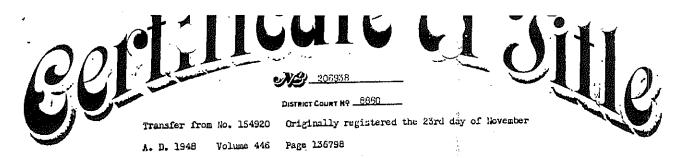
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal as such Notary Public, at Chicago, Illinois, this <u>lst</u>

, 1984 . May ٥f Notany Public, in and for the Count of Cook, In the State of-Illinoi Richard S. Kennerley

My Commission Expires: November 8, 1984

This instrument was prepared by Chicago and North Western Transportation Company, 165 North Canal Street, Chicago, Illinois 60606.

L/19-1R/T(11/28)



STATE-MINNESOTA, <u>SS</u> COUNTY-HENNEPIN.

REGISTRATION

Their is to conting that The Minneapolis & St. Louis Railway Company, a Minnesota

corporation having its principal place of business at 111 East Franklin Avenue in the City of Minneapolis, County of Hennepin

and State of Minnesota

so now the varnes of an estate, be wit : in fee simple

of und in the following described land, situated in the Country of Hennepin and State of Minnesota; to wit : That part of Lot 12 lying southerly of a line drawn from a point on the westerly line of said lot, distant 75 feet along said west line from the northwest corner of said lot, to a point in the east line of said lot, 50 feet southerly at right angles to the northerly line of said lot; also

to the northerly line of said lot; also that part of Lot 13 lying southerly of a line drawn from a point in the east line of said lot, which is 75 feet southerly at right angles to the mortherly line of said lot, to a point in the cast line of Lot 16, distant 190 feet morth from the southeast corner of said Lot 16, except the West Fifty Six (56) feet, front and rear, thereof; all in Rlock 2, Lakeview Addition to Minneapolis, according to the plat thereof on file or of record in the office of the Register of Deeds in and for said Hennepin County.

of Deeds in and for said Hennepin County. Except that part thereof lying southeasterly of a line drawn in a northeasterly and southwesterly direction from a point in the east line of said Lot 12, 95.2 feet south of the northeast corner thereof, through a point in the east line of said Lot 13, 106.3 fee south of the northeast corner thereof, and said line continued southwestwardly in a straight line to the west line of said Lot 13. The above part of lot 13 is subject to a reservation by the State of Minnesota to mineral and mineral rights. Also Subject to and together with an easement for drivency-purposes over the east Hight feet of the West Sixty (60) feet of that part of Lot 13 lying southerly of a line drawn from a point in the east line of said Lot, which is 75 feet southerly at right angles to to northerly line of said lot, to a point in the east line of Lot 16, distant 190 feet north from the southeast corner of said Lot 16, as shown in deed Doc. No. 310143, Files of Registrar of Titles. Also

Subject to the incumbiances, liens and interest noted by the memorial underwitten or indersed hereon; und subject to the following rights or incumbiances subsisting, as provided in the twenty fourth section of In act concerning the registration of land and the sittle thereto of the General laws of the State of Minnesone for the year 1905, and the amendments thereof, namely :

I Finns, claims or rights arising under the laws or the constitution of the United States, which the statutes

1. E ans, ournes or reguls ansing under the saws or the constitution of the antice contains, which the costificate of these "this state cannot requise to appear of record. "I other tax or special assessment for which a sale of the land has not been had at the dute of the costificate of title. "I other tax or special assessment for which a sale of the land has not been had at the dute of the costificate of title. "I other tax or special assessment for which a sale of the land has not been had at the dute of the costificate of title. "I other tax of so a poriod not accepting there quis when there is actual occupiction of the provides the laws, "A could be high ways embraced in the description of the lands included in the costificates shall be decoud to be

excluded. Such right of appeal or right to appear and contest the application us is allowed by law 6. The rights of any porson in possession under dead or contract for deal from the owner of the certificate of title. That the said

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VOLUME 680 PAGE 206938

Certificate <sup>or</sup>Title.

N \_\_\_\_\_ 206938

Q.

DISTRICT COURT NO 8880

The Minneapolis & St. Louis Railway Company (Av/AC)

### IMPORTANT

In dealing with the land described in this certificate, the names of the parties and description of property should be exactly the same apprinten herein.

# Bennenin County

MINNESDAL

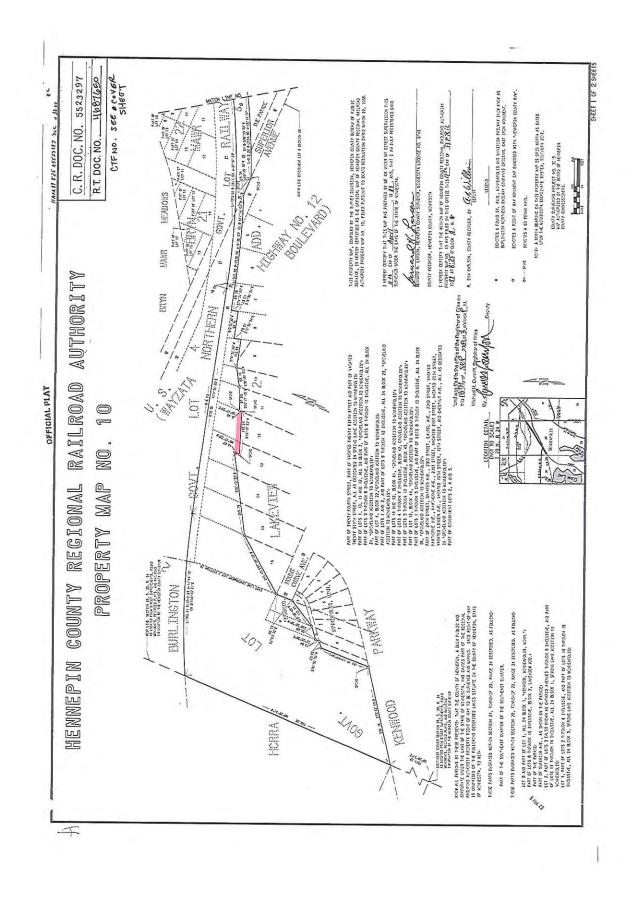
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### ATTENTION

DELAY and EXPENSE will be caused by the loss of this certificate.



+ effected by Lase. To HOPKING TO MINNEAPOLIS

SM. ADDITIONAL PARCEL !

Authorization No. 7164 Registered Title Property

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of mil

State - 9-24-85

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#### DEED NO. 83871

THE GRANTOR, CHICAGO AND NORTH HESTERN TRANSPORTATION COMPANY, a Delaware corporation, whose principal office is located at 165 N. Canal Street, Chicago, Illinois 60606, for the consideration of TEN AND NO/100 (\$10.00) DOLLARS, the provisions hereinafter set forth, and other good and valuable consideration, conveys and quitclaims to HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY, a political subdivision and local government unit of the State of Minnesota, 2400-A Government Center, Minneapolis, Minnesota 55487, GRANTEE, all interest in the following described real estate situated in the County of Hennepin, and Description: Deed to Small portion of two city lots near in Kenwood and a nucle the State of Minnesota, to wit:

That part of Lot 12 lying Southerly of a line drawn from a point on the Westerly line of said lot, distant 75 feet along said West line from the Northwest corner of said lot, to a point in the East line of said lot, 50 feet Southerly at right angles to the Northerly line of said 10t;

#### ALSO:

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That part of Lot 13 lying Southerly of a line drawn from a point in the East line of said lot, which is 75 feet Southerly at right angles to the Northerly line of said lot, to a point in the East line of Lot 16, distant 190 feet North from the Southeast corner of said Lot 16, except the West 56 feet, front and rear thereof; all in Block 2, Lakeview Addition to Minneapolis, according to the plat thereof on file or of record in the office of the Register of Deeds in and for said Hennepin County.

#### EXCEPT

That part thereof lying Southeasterly of a line drawn in a Northeasterly and Southwesterly direction from a point in the East line of said Lot 12, 96.2 feet South of the Northeast corner thereof, through a point in the East line of said Lot 13, 106.3 feet South of the Northeast corner thereof, and said line continued Southwestwardly in a straight line to the West line of said Lot 13. The above part of Lot 13 is subject to a reservation by the State of Minnesota to mineral and mineral rights. \_

Subject to covenants, easements, conditions, and restrictions

#### of record.

TOGETHER with and including all of Grantor's right, title and interest in "as is" condition as of the date of this deed, in and to all buildings, bridges and roadbed, if any, situated upon said real estate.

| DATED this <u>lst</u> day of _                                       | May , 19 <u>84</u> .                                |
|----------------------------------------------------------------------|-----------------------------------------------------|
| Signed, Sealed and Delivered in<br>Presence of:<br>Chown & Outtom an | CHICAGO AND NORTH WESTERN<br>TRANSPORTATION COMPANY |
| Port 2. Jeures                                                       | By Arthous Assistant Secretary                      |

STATE OF ILLINOIS) SS COUNTY OF C O O K)

I, Richard S. Kennerley, a Notary Public duly commissioned and qualified in and for the County and State aforesaid, DO HEREBY CERTIFY that Robert W. Mickey and J. S. Edwards , to me personally known and known to me to be, respectively, \_\_\_\_\_ Vice President and Assistan**t** Secretary of CHICAGO AND NORTH WESTERN TRANSPOR-TATION CONPANY, a Delaware corporation, and the identical persons whose names are subscribed to the foregoing instrument, appeared before me this day in person, and being first duly sworn by me, severally acknowledged to me that they are, respectively, \_\_ V1ce President and Assistant Secretary of said corporation; that as such officers they signed, sealed and delivered said instrument in behalf of said corporation by authority and order of its Board of Directors, as the free and voluntary act and deed of said corporation, and as their own free and voluntary act; that the seal affixed to said instrument is the seal of said corporation; and that said corporation executed said instrument for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal as such Notary Public, at Chicago, Illinois, this <u>lst</u>

1984. the Count Notary Public, in and for of Cook, In the State of Illinoi Richard S, Kennerley

My Commission Expires: November 8, 1984

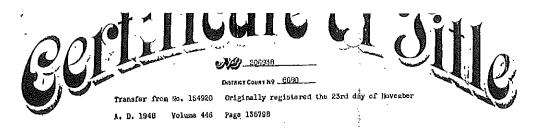
This instrument was prepared by Chicago and North Western Transportation Company, 165 North Canal Street, Chicago, Illinois 60606.

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L/19-1R/T(11/28)

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May



STATE#MINNESOTA, ) <u>SS</u> COUNTY HENNEPIN.

### REGISTRATION

This is to (4) Hiff that The Minneapolis & St. Louis Railway Corpany, a Minnesota

corporation having its principal place of business at 111 East Franklin Avenue in the City of Minneapolis, County of Mennepin

and State of Minnesota

is now the source of an estate, to wit : in feesimple

of and in the following described land, situated in the County of Hennepin and State of Minnesota, to wit :

cf und in the following drastical land, situated in the knowly of "Remarking and these of "Rimmesoks, to wid: That part of Lot 12 lying southerly of a line drawn from a point on the westerly line of said lot, distant 75 feet along soid wost line from the morthwest corner of said lot, to a point in the east line of said lot, 50 feet southerly at right angles to the mortherly line of said lot; also that part of Lot 13 lying southerly of a line drawn from a point in the east line of said lot, which is 75 feet southerly that part of Lot 13 lying southerly of a line drawn from a point in the east line of said lot, which is 75 feet southerly that part of Lot 13 lying southerly of a line drawn from a point in the east line of said lot, which is 75 feet southerly at right angles to the mortherly line of said lot, to a point in the east line of Lot 16, distant 190 feet morth from the southeast corner of said Lot 16, except the West Fifty Six (58) feet, front and rear, therpof; all in Block 2, Lakeview Addition to Binneapoling according to the Data Binney of an file or of record in the office of the Register of Decds in and for said Hennepin County. A statistic to the line thereof on file or of record in the office of the Register as there of said Lot 12, 93,2 feet south of the involtes to corner thurseof, through a point in the east line of said Lot 13, 106.3 fee south of the mortheest corner thereof, and said line continged squithesterly in a straight line to the west line of said Lot 13, 106.3 fee Studies to and together with an ossenum for driversey-purposes over the east Line of the West Sixty (60) feet of that part of Lot 13 lying southerly of a line drawn from a point in the east line of said lot, which is 75 feet southerly at right angles to the mortherly line of said lot, to a point in the east line of the 16, distant 150 feet north from the southeast corner of said Lot 16, as shown in deed Doc. No. 310145, Files of Registrar of Titles. Also

Subject to the incumbrances, fiens und interest noted by the memorial underwritten or indersed hereow, und subject to the following sights or incumbrances subsisting, as provided in the twenty fourth section of In not concerning the registration of land and the still therete of the General laws of the State of Minnesone for the year 1905 and the amendments thereof, namely :

1. Fiens, claims or hights arising under the laws or the constitution of the United States, which the statutes

of this state cannot require an sony anary me sails or me reason of me united chards, sences the estimates of this state cannot require to appear of record. I stay to a special assessment for which a sale of the land, has not been had at the dates f. the contracte of the I stay to a special assessment for which a sale of the land, has not been had at the dates f. the contracte of the I stay to a special assessment for which a sale of the land, has not been had at the dates f. the contracte of the I stay to a special assessment for which a sale of the land, has not been had on of the forming under the laws; I stay to be a point not exceeding thire gain when there is actual occupiation of the forming under the laws; I stay to be a point of the description of the date of the law the second to be to sale at the law of the second to be a second to be rectived.

3. Tuch right of appeal or right to appear and contest the application as is allowed, by law. 6. The rights of any person in possession under deed or contract for dead from the canor of the certificato of hills. Hat Howwell

> In WILLOSS WHOMOL' I have berunde subscribed my name and officed the scal Hovesber of my office this Ninetsenth 18 53 day of

Royistian of Tilles, : In and for the County of Konseyrin and State of the

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OF ESTATES, EASEMENTS ON CHARGES ON THE LAND DESCRIBED IN THE CERTIFICATE OF TITLE HERETO ATTACHED.

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### IMPORTANT

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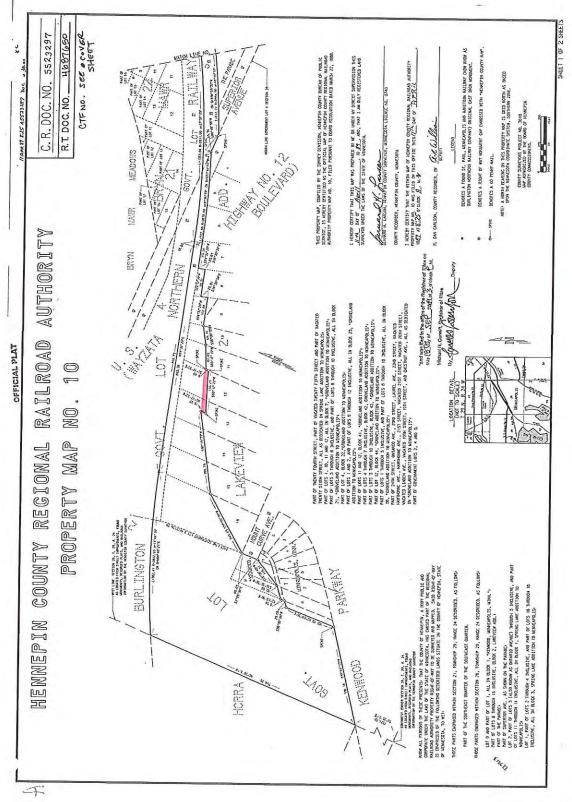
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Midtown Greenway Phase II

018971

Agreement No. <u>73-51017</u>

MIDTOWN GREENWAY- ALASE IL 5th TO HIAWATHA AUE.

File No. 73-51017

### PERMIT AGREEMENT

29<sup>th</sup> St. Greenway – Phase II Trail

This agreement, entered into by and between the Hennepin County Regional Railroad Authority, (hereinafter referred to as the "HCRRA"), a Minnesota political subdivision, and the City of Minneapolis, a Minnesota political subdivision (hereinafter referred to as the "City").

WHEREAS, HCRRA has invested in a transportation corridor paralleling Lake Street and lying between France Avenue and Hiawatha Avenue in the City of Minneapolis known as the 29<sup>th</sup> Street Rail Corridor ("Corridor") for the purpose of implementing Light Rail Transit ("LRT") and other permitted future transportation uses; and

WHEREAS, Hennepin County has identified this transportation corridor and its proposed transportation improvements as an integral part of a vision for long-range property value enhancements and business developments known as Hennepin Community Works; and

WHEREAS, the Minneapolis neighborhoods adjoining this corridor, together with the City of Minneapolis, Hennepin County and HCRRA have named this Community Works project, the "Midtown Greenway".

In consideration of the covenants by and between the parties, it is hereby agreed:

1. Premises

HCRRA hereby agrees to grant certain rights and benefits to the City hereinafter described with regard to that certain real property described as follows:

That part of HCRRA's right of way, located in the City of Minneapolis, between 5<sup>th</sup> Ave. So. and Hiawatha Ave., the northerly limits being the northerly HCRRA property line and the southerly limits being the southerly construction limits shown on the construction plans for the 29<sup>th</sup> St. Midtown Greenway – Phase II, attached hereto as, Exhibit "A"

The said real estate shall be hereinafter described as the "Premises."

2. <u>Uses</u>

The Premises shall be for the temporary use of the City, its agents, officers, employees, sub-permittees and invitees for trail purposes, including but not limited to pedestrian use, in-line skating, bicycles and other non motorized uses, and all requirements necessary to the enjoyment of the Premises for said uses. The City shall be granted temporary use of adjacent lands controlled by HCRRA as reasonably required for maintenance of the Premises.

### 3. <u>Term</u>

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The term of this Permit shall be for an indefinite period, commencing on execution of this Agreement by the Chair of HCRRA until termination in accordance with Paragraph 4.

### 4. Termination

Either party may, at any time and for any reason, terminate this Permit by giving one-hundred eighty (180) days' written notice of its intention to do so. Such notice may be served upon HCRRA by delivering a copy thereof to the Executive Director at the principal office in the Hennepin County Government Center, Minneapolis, Minnesota, 55487, or by depositing the same in the United States Post Office directed to the Executive Director at the principal office. Such notice may be served on the City of Minneapolis Department of Public Works by delivering a copy thereof to its Director of Public Works. Except as provided herein, this Agreement may not be terminated or revoked by either party hereto.

### 5. <u>Temporary Nature of Use</u>

The City acknowledges that the Premises was acquired by HCRRA specifically and solely for the purpose of constructing a light rail transit system or other permitted transportation uses and its associated facilities and that it is HCRRA's intention to allow the City to use the Premises only until it is needed for that purpose. Nothing in this Permit shall be deemed to evidence any change by HCRRA of its intended use of the Premises for light rail transit purposes or other permitted transportation uses. Rather, HCRRA has agreed to the terms of this Permit to provide a temporary use for the Premises during the time required for further planning and development of the light rail transit system or other permitted transportation uses.

### 6. <u>Rights Upon Termination</u>

On the expiration of one-hundred eighty (180) days after such service of said notice of termination, this Permit, and all rights hereunder, shall thereupon terminate and be at an end, saving and excepting such rights as may have accrued to either party prior to termination. The City shall, without further notice or demand, deliver possession of the Premises to HCRRA at the expiration of said one-hundred eighty (180) days and shall, before the expiration of said one-hundred eighty (180) days, remove all buildings and property placed upon the Premises which it has the right to remove. If it shall fail to remove the buildings and property, its right to remove them, at the option of HCRRA, shall cease and the City's interest to the buildings and property shall be forfeited and the same shall belong to HCRRA. If HCRRA elects, it may, at any time after the expiration of said period of one-hundred eighty (180) days, tear down and/or remove any or all such buildings and property without any liability for damages in any respect whatsoever at the expense of the City. The City shall thereupon promptly reimburse HCRRA for all expenses incurred by it in doing so.

### 7. <u>Rent</u>

Upon any termination of this Permit, rent shall be paid by the City to the date of termination at the rate of \$1.00 per year.

### 8. <u>Sub-Permits</u>

The City may grant permits to sub-permittees upon written approval by HCRRA. The City shall submit a copy of the permit to HCRRA for approval. Any sub-permit shall be on the same terms and conditions and limited to the same uses as are contained in this Permit.

HCRRA consents to, and the City will grant to the County of Hennepin and other third parties a temporary construction and access easement for purpose of constructing improvements necessary for the City's use of the Premises and for construction related environmental clean up in a form substantially as contained in Exhibit "B" hereto. HCRRA's consent does not relieve the City of any of the obligations it has undertaken pursuant to this Permit Agreement, including, but not limited to, the City's obligation to defend, indemnify and hold HCRRA harmless contained in Paragraph 12. Upon the City granting such easement, the County of Hennepin and the other third parties shall be considered the City's sub-permittees for purposes of Paragraph 12.

### 9. <u>Signage</u>

The City shall provide, install and maintain signage, including kiosks, on the Premises identifying the Premises as a temporary trail corridor of the City, by permission of the owner, HCRRA, until the Premises are used for light rail transit or other transportation uses. Any such signage shall also identify the improvement as part of Hennepin Community Works.

### 10. Nuisance, Waste

The City shall not permit the existence of any nuisance on the Premises. The City, at all times, shall keep the Premises clean and shall comply with all laws, ordinances and regulations respecting the City's business and use and occupation of the Premises. The City, at its sole cost, shall make any and all improvements, alterations, repairs and additions, and install all appliances required on the Premises by or under any such regulations, ordinances or laws. No bills, posters or advertising matter of any kind shall be posted on the Premises; provided, however, that the City may post on appropriate structures, informational materials relating to the permitted uses. The City shall use all reasonable precautions to prevent any waste, injury, death or property damage and shall modify, repair or replace any railings, pathways or other improvements on the Premises when necessary.

### 11. <u>Utilities, Title, Existing Rights of Others</u>

The City accepts the Premises subject to the rights of any person, firm or

corporation, including HCRRA in and to any existing telephone, telegraph and/or other wires, poles and facilities, above and underground, of any kind whatsoever, whether or not of record, and should it, at any time, become necessary because of the City's use of the Premises to relocate any of said poles, wires or facilities by reason of this Permit, the City shall bear and pay the cost of so doing. Notwithstanding the foregoing as to the Communication Systems placed on the 29<sup>th</sup> Street Corridor pursuant to Easement Agreement dated November 17, 1998 between Williams Communication, Inc. and HCRRA, and Easement Agreement dated August 22, 2000 by and between Enron Broadband Services, Inc. and HCRRA, City may ask that HCRRA provide the Communication Company with ninety (90) days notice of the need for a required change or alteration to the Communication System due to the operations or planned operations of the City related to the Midtown Greenway pursuant to Par.14.1 of the respective Easement Agreements. HCRRA shall under no circumstances be responsible for the costs of relocation of the Communication System nor shall it be responsible for any failure of the Communications Company to comply with the provisions of Par.14.

The City also accepts the Premises subject to any want or failure at any time of HCRRA's title to the Premises or any part thereof and the City shall assume any damages sustained by the City in connection therewith. The City also accepts such Premises subject to rights of any party, including HCRRA, in and to any roadways, easements, leases and permits, whether granted, at HCRRA's sole discretion, either prior to or after the date of this Permit Agreement. The City agrees to provide to HCRRA or other tenants of HCRRA access over and through the Premises on these roadways and easements should such access be deemed necessary by HCRRA. The City accepts said Premises subject to the right of HCRRA, its employees, agents, the City, lessees, and contractors when reasonably necessary to walk upon said Premises to repair adjacent property and the right of HCRRA, its employees, agents, the City, lessees, and contractors to temporarily place equipment upon the property when reasonably necessary for the purpose of maintaining, repairing, inspecting or constructing upon HCRRA's property.

### 12. Indemnification

The City shall defend, indemnify and hold harmless HCRRA, its Commissioners, officers, agents, and employees from any liability, claims, causes of action, judgments, damages, losses, costs or expenses, including reasonable attorney's fees, resulting directly or indirectly from an act or omission of the City, its contractors, subcontractors, officers, agents, employees, customers, invitees, sub-permittees, permittees, lessees or other occupiers of the Premises.

Notwithstanding the foregoing, the City is not responsible to defend, indemnify and hold HCRRA harmless for the acts or omission of "other occupiers" who are present on the Premises pursuant to an easement, lease or permit granted to them by HCRRA.

HCRRA shall not be liable to the City or those claiming by, through, or under the City for any injury, death or property damage occurring in, on or about the Premises based upon the design, construction, operation or maintenance of the Premises by the City or any other entity, nor for the loss or damage by reason of the present or future condition of repair of the Premises, or for the loss or damage arising from the acts or omissions of the City, its contractors, subcontractors, officers, agents, employees, customers, invitees, sub-permittees, permittees, lessees, or other occupiers of the Premises, including those "other occupiers" present on the Premises pursuant to an easement, lease or other permit granted to them by HCRRA.

### 13. <u>Insurance</u>

The City further agrees that if in any case the release and indemnity provided in this section shall not be valid, HCRRA shall have the full benefit of any insurance effected by the City upon the property injured, destroyed or damaged and/or against the hazard involved; and the City agrees that any and all such insurance shall be so written that the insurer shall have no claim or recourse of any kind whatsoever against HCRRA in connection therewith.

### 14. <u>Covenant</u>

The City, in consideration of the rights granted herein, covenants and agrees to pay the rent promptly, and to fully abide by and perform all and singular the conditions, covenants and agreements to be observed and performed by the City and to yield up the Premises unto HCRRA at the expiration or termination of the Permit Agreement in as good condition as when entered upon.

### 15. Quiet Enjoyment

HCRRA has the right and authority to enter into this Agreement and if the City pays the rent required hereby and otherwise performs the terms hereof to be performed by the City, the City shall, during the term hereof, be entitled to quiet enjoyment and possession of the Premises subject to the termination provisions hereof. Notwithstanding the foregoing, City acknowledges that the rights provided to it by virtue of the Permit are subject to the provisions of Paragraph 11.

### 16. Waiver

No receipt of money by HCRRA from the City after any default by the City or after the expiration of this Permit or after the service of any notice or after the commencement of any suit or after final judgment for possession of said Premises, shall waive such default or reinstate, continue or extend the term of this Permit or affect any such notice or suit, as the case may be. No waiver of any default of the City shall be implied from omission by HCRRA to take any action on account of such default, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated.

### 17. Breach

It is further agreed between the parties hereto, that if the City shall breach or make default in any of the conditions, covenants or agreements of this Permit, which breach or default shall continue for fifteen (15) days after the City's receipt of written notice thereof from HCRRA, then it shall be lawful for HCRRA, then or at any time thereafter, to declare this Permit ended, and to re-enter the Premises and take possession thereof, with or without process of law, and to use any reasonable or necessary lawful force for regaining possession; whereupon the rights and obligations of the parties shall be the same as above specified in the case of termination pursuant to Paragraph 4; and it is hereby further agreed and provided that any waiver at any time of a breach of any condition, covenant or agreement of this Permit shall extend only to the particular breach so waived and shall, in no manner, impair or affect the existence of such condition, covenant or agreements, or the right of HCRRA thereafter to avail itself of same and any subsequent breach thereof. In the event HCRRA has to take action for repossession of the Premises, the City, its assigns or heirs shall be liable for reasonable attorney's fees incurred by HCRRA.

### 18. Assignment

The benefits and obligations of this Permit shall extend to and shall bind the heirs, administrators, executors, lessees, successors or assigns of the parties hereto, but no interest in this Permit shall be assigned, nor said Premises or any part thereof shall be sub-permitted, used or occupied by any party other than the City unless specifically stated herein. HCRRA reserves the right to review and revise the rental rate applicable to this Permit upon any change in the status of the Permit, the City or person occupying the Premises during the term of this Permit or any renewal thereof.

### 19. Improvements, Maintenance

The City shall be responsible for the construction of all improvements necessary to its use of the Premises whether constructed by itself or others, and shall be responsible for the construction of all bridges and crossings including, without limitation, under or over passes, required pursuant to Paragraph 24 deemed necessary for the City to provide trails on the Premises or to otherwise use the Premises. Plans, if any, shall be submitted to HCRRA for prior review and comment. HCRRA reserves the right to reject any plans for construction proposed by The City on the grounds, in HCRRA's sole discretion, that said plans are inappropriate or incompatible with its future use of the Premises. The City shall be responsible for maintenance of the Premises at its own expense. Maintenance includes, but is not limited to, maintaining the trail during the winter months, including snow and ice removal, mowing vegetation in areas abutting trails, fences and retaining walls and maintaining vegetation at 6 inches or less, except for those areas identified by HCRRA, from time to time in writing, as Midtown Greenway Landscaping and Planting Sites which shall be maintained in a manner consistent with the character of the landscaping and plantings.

### 20. Environmental Concerns

The City shall not create or permit any condition of the Premises that could present a threat to human health or to the environment. The City shall bear the expense of all practices or work, preventative, investigative or remedial, which may be required because of any conditions of the Premises introduced by the City, sub-permittees or invitees during the City's period of use, including conditions introduced by the City, sub-permittees, or invitees which affect other lands. The City expressly agrees that the obligations it hereby assumes shall survive cancellation of this Permit. The City agrees that statutory limitation periods on actions to enforce these obligations shall not be deemed to commence until HCRRA discovers any such health or environmental impairment, and a remedial action plan necessary for development of the Premises to its highest and best use has been identified and approved by the appropriate local, state and federal regulatory agencies. The City hereby knowingly and voluntarily waives the benefits of any shorter limitation period.

HCRRA shall have the right, but not the duty, to enter upon the Premises from time to time as set forth below to inspect the Premises for environmental contamination and in the course thereof to conduct soil and groundwater testing and to perform environmental investigation, remediation or mitigation. HCRRA may enter the Premises during regular business hours of the City without prior notice, and may enter the Premises during periods other than regular business hours either with prior written consent of the City or without if HCRRA reasonably believes that an emergency exists on the Premises. HCRRA shall conduct any such inspections or testing so as to minimize interference with the City's operations. HCRRA's entry on to the Premises pursuant to this paragraph shall not relieve the City's obligation to pay rent under this Permit.

The City may make any inspections, tests, audits or reviews of the physical condition of the Premises, all at the City's sole cost and expense. Such inspections and tests may include, without limitation, soil tests, soil borings, surveys, environmental audits, and other tests of the Premises ("Environmental Inspection"). If the City elects to abandon its trail project and terminate this agreement due to its Environmental Inspection, the City shall restore the property to its prior condition, and provide HCRRA with copies of all reports and test result. The City agrees to indemnify, defend, and hold HCRRA harmless from any and all actual out-of- pocket expenses incurred by HCRRA related to containing or disposing of any contaminated materials released by such inspections.

In addition to the foregoing provisions of this Paragraph 20, and in exchange for the rights and privileges granted in this Permit Agreement the City hereby agrees to bear the expense of all practices or work, preventative, investigative or remedial necessary to comply with all federal, state, local and other governmental statutes, rules and regulations regarding any hazardous waste, pollutant, contaminant or petroleum-related material (collectively "contamination.") on the Premises necessary for the City's use of the Premises for trail and park purposes regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. However, should the City elect in its sole discretion to abandon its trail project and terminate this agreement, due to its Environmental Inspection, the City shall not be obliged to bear expenses enumerated in this sentence. Further, the City agreed to defend, indemnify and hold harmless HCRRA, its Commissioners, officers, agents and employees from any liability, claims, causes of action, judgements, damages, losses, costs or expenses, including reasonable attorney's fees arising from exercise of the rights granted by this Permit Agreement and resulting from the presence of any hazardous waste, pollutant, contaminant or petroleum-related material on the Premises regardless of whether or not the same was present on the Premises before or after the commencement of this Permit Agreement. The City expressly agrees that the obligations it hereby assumes related to construction and operation of the park trail, shall survive the cancellation of this Permit.

For the below listed sites only, and only where such costs are not covered by third parties, HCRRA agrees to be responsible for contamination cleanup costs necessary for implementing Construction Plans dated August 1, 2002 for the 29th Street Midtown Greenway-Phase II Project in that said costs are also necessary for implementing future rail transit on the Corridor:

- a) the Sears Tunnel asbestos clean up Project identified as Minnesota Pollution Control Agency VIC Project No. VP16060;
- b) that portion of the Minnesota Department of Agriculture CMC Lite Yard Site located within the boundaries of the Permitted Premises on HCRRA's right of way generally known as the south wye.

### 21. Compliance with Laws, Ordinances and Rule

The City agrees to comply with all laws, ordinances and regulations of federal, state, municipal and local government agencies as they apply to use of the Premises. The City agrees to comply with rules as may be promulgated from time to time by HCRRA. The City may enforce its ordinances on the Premises, as it applies to third parties.

### 22. Condition of Premises Inspection

The City accepts the Premises in an "AS IS" condition with no express or implied representations or warranties by HCRRA as to the physical condition or fitness or suitability for any particular purpose, express or implied. The City is responsible for and has had ample opportunity to inspect the Premises, is familiar with the same, and has determined to its satisfaction the fitness of the Premises for its intended use.

### 23. Liens and Encumbrances

The City shall not permit any liens or encumbrances to be established or remain against the Premises, including but not limited to, encumbrances with respect to work performed or equipment or materials furnished in connection with use of the Premises by the City, its agents, employees, customers, invitees, sub-permittees, or other occupiers of the Premises pursuant to this Permit.

### 24. <u>Relocation</u>

In the event HCRRA determines, at its sole discretion, that relocation of the City's trail and any trail related facilities including, but not limited to, bridges and crossings added by the City or added on behalf of the City for trail purposes, is required to accommodate HCRRA's use of the Corridor for transportation purposes, the City shall be required at its expense, and at no cost to HCRRA to relocate, remove or alter all or any part of the City's trail improvements necessary to accommodate such use.

IN WITNESS WHEREOF, the parties hereto have signed this Permit Agreement as of \_\_\_\_\_, 20\_\_\_\_.

HENNEPIN COUNTY REGIONAL **RAILROAD AUTHORITY** 

By: Chair, of Its Board

Date: // And: Deputy/Exlective Director Date: 3 02

Attest: Deputy/Clerk of Authority Board Date: 3-14-03

### **CITY OF MINNEAPOLIS**

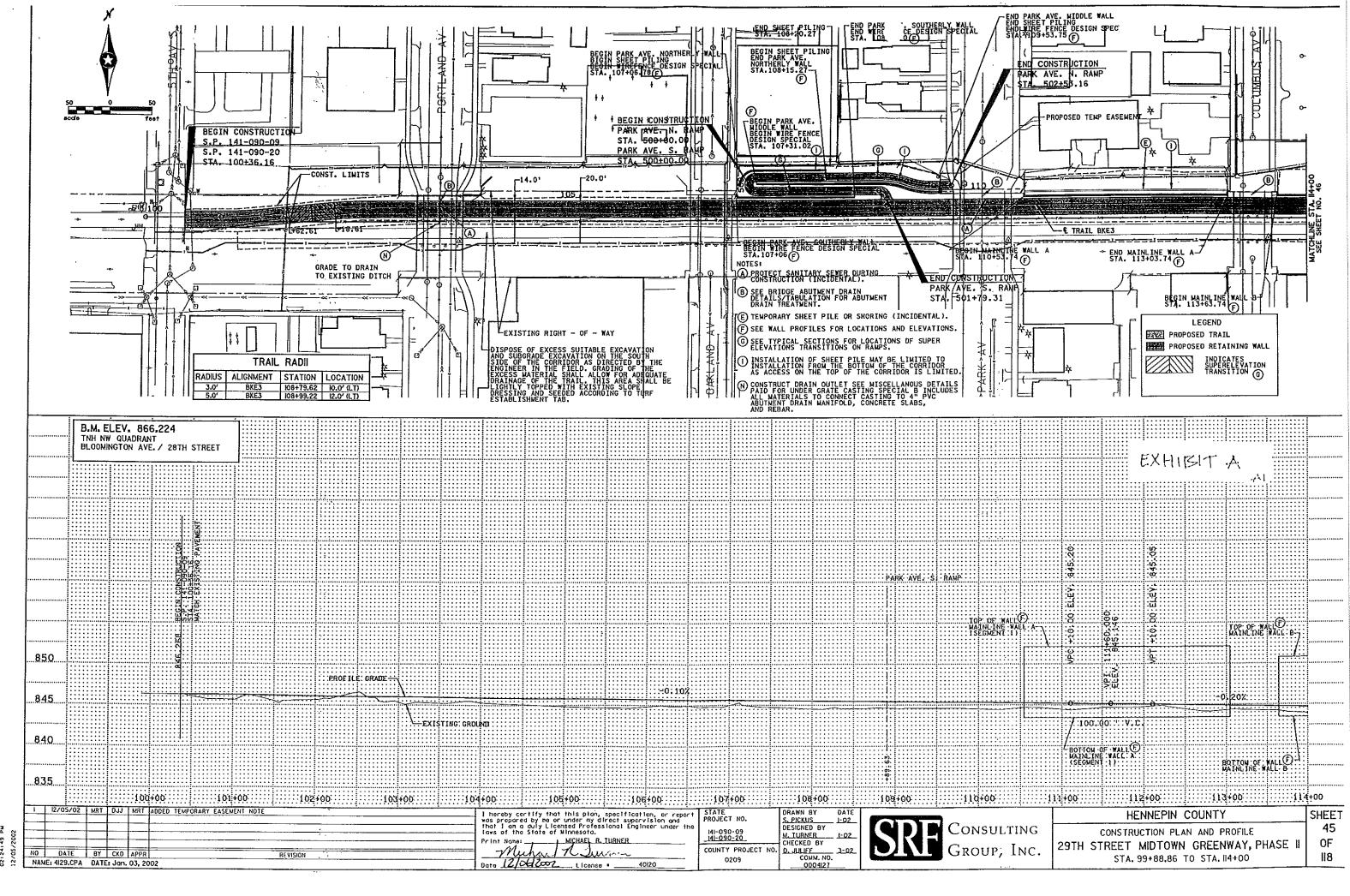
By: Mayor Date: Attest: AssistantCity Clerk Date: And: ` Director of Public Works 2-4-03 Date: And: Assistant/City Finance Officer AC IIN > Date:

Approved as to form and execution:

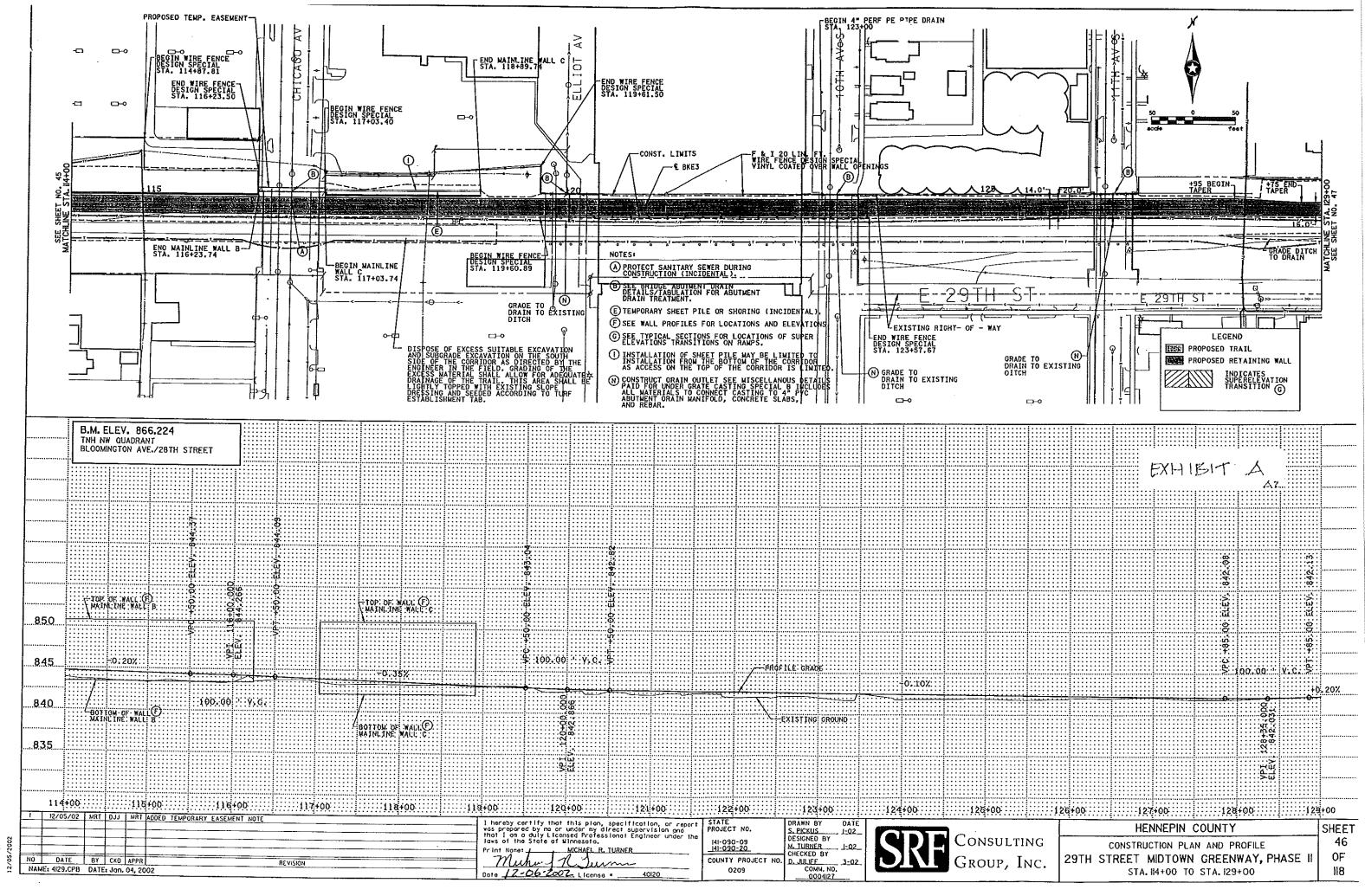
Assistant County Attorney Date: 03/03

Approved as to form,

Atterney for City of Minneapolis Date: 127/03



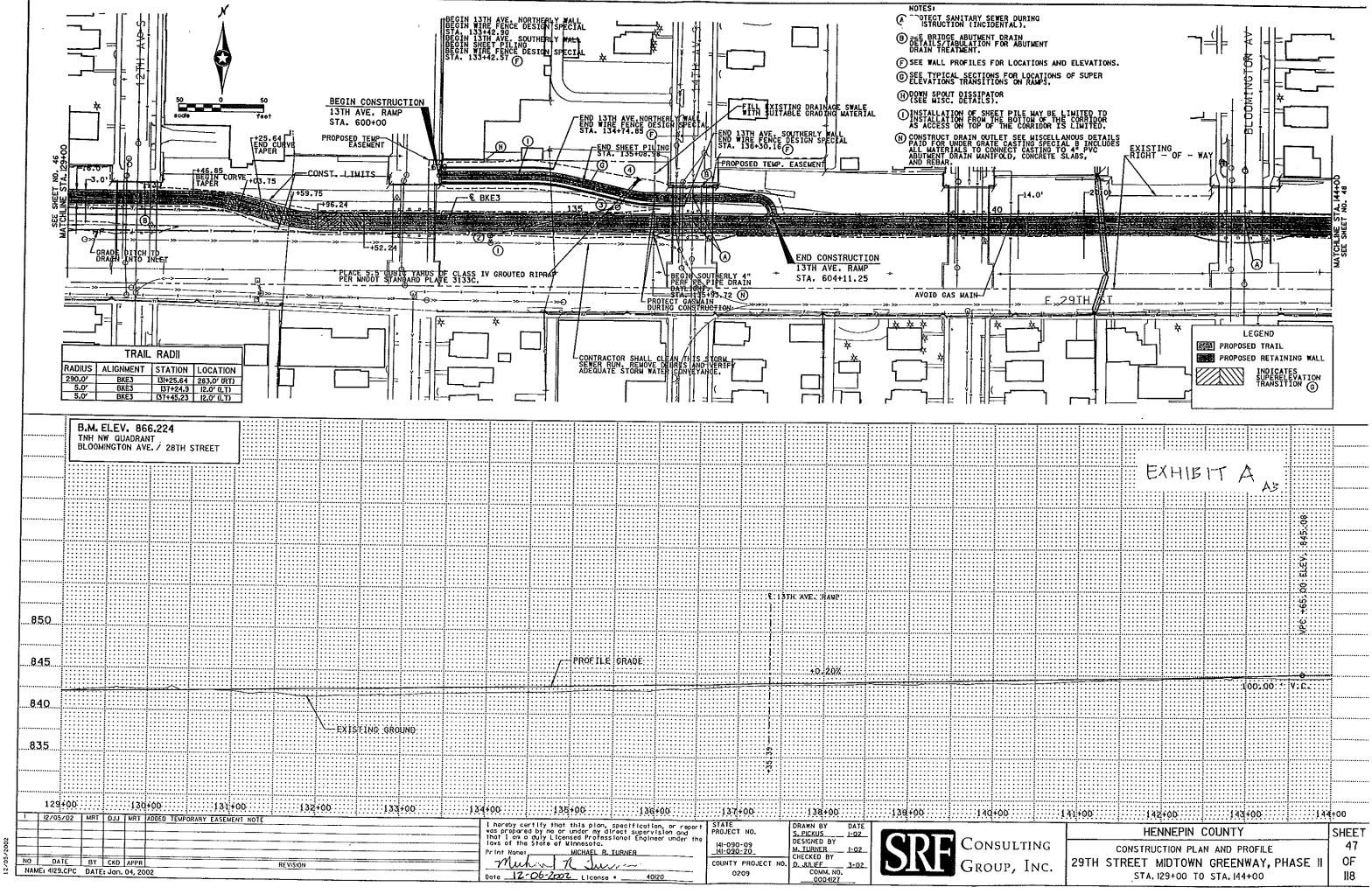
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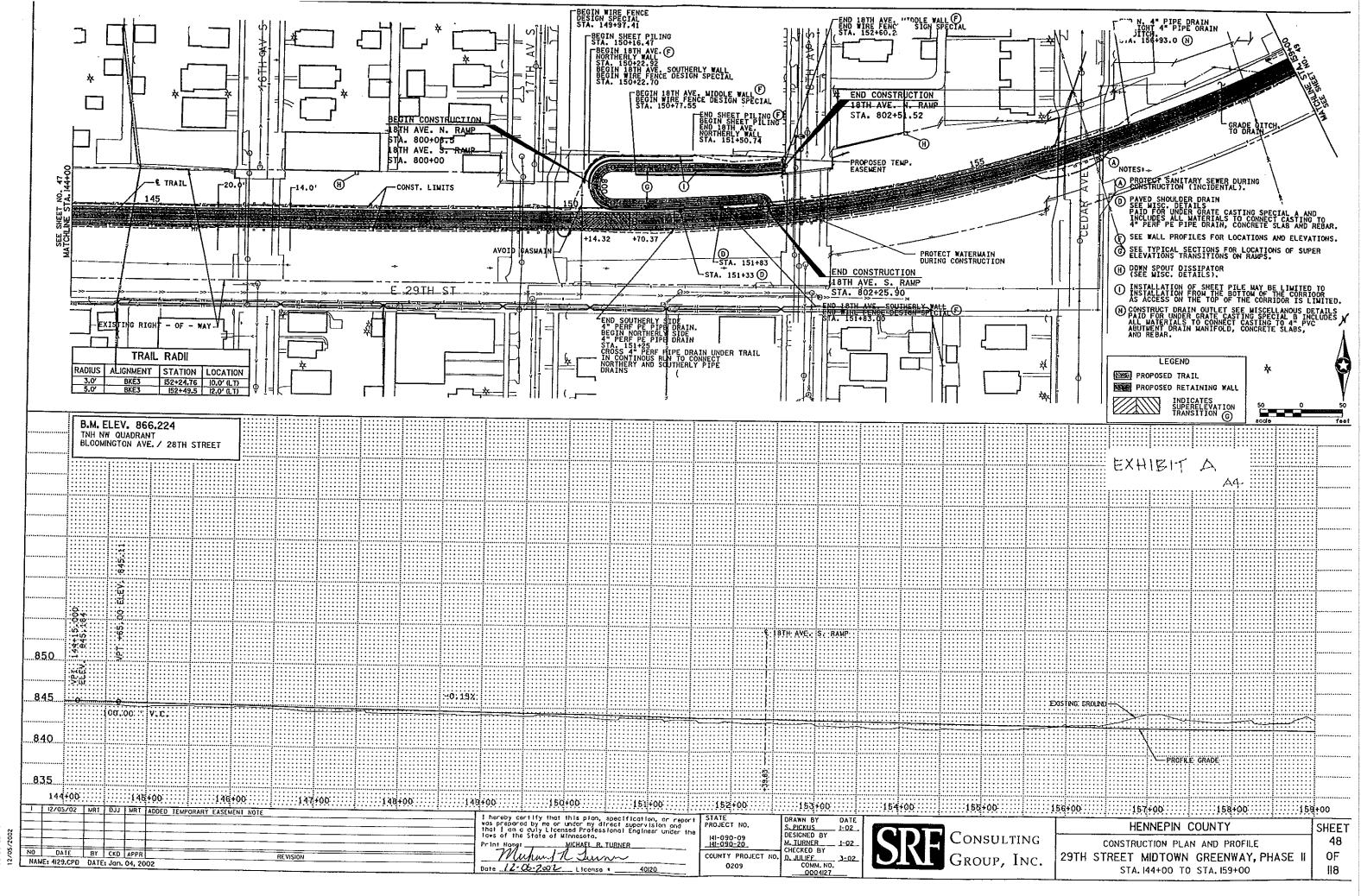
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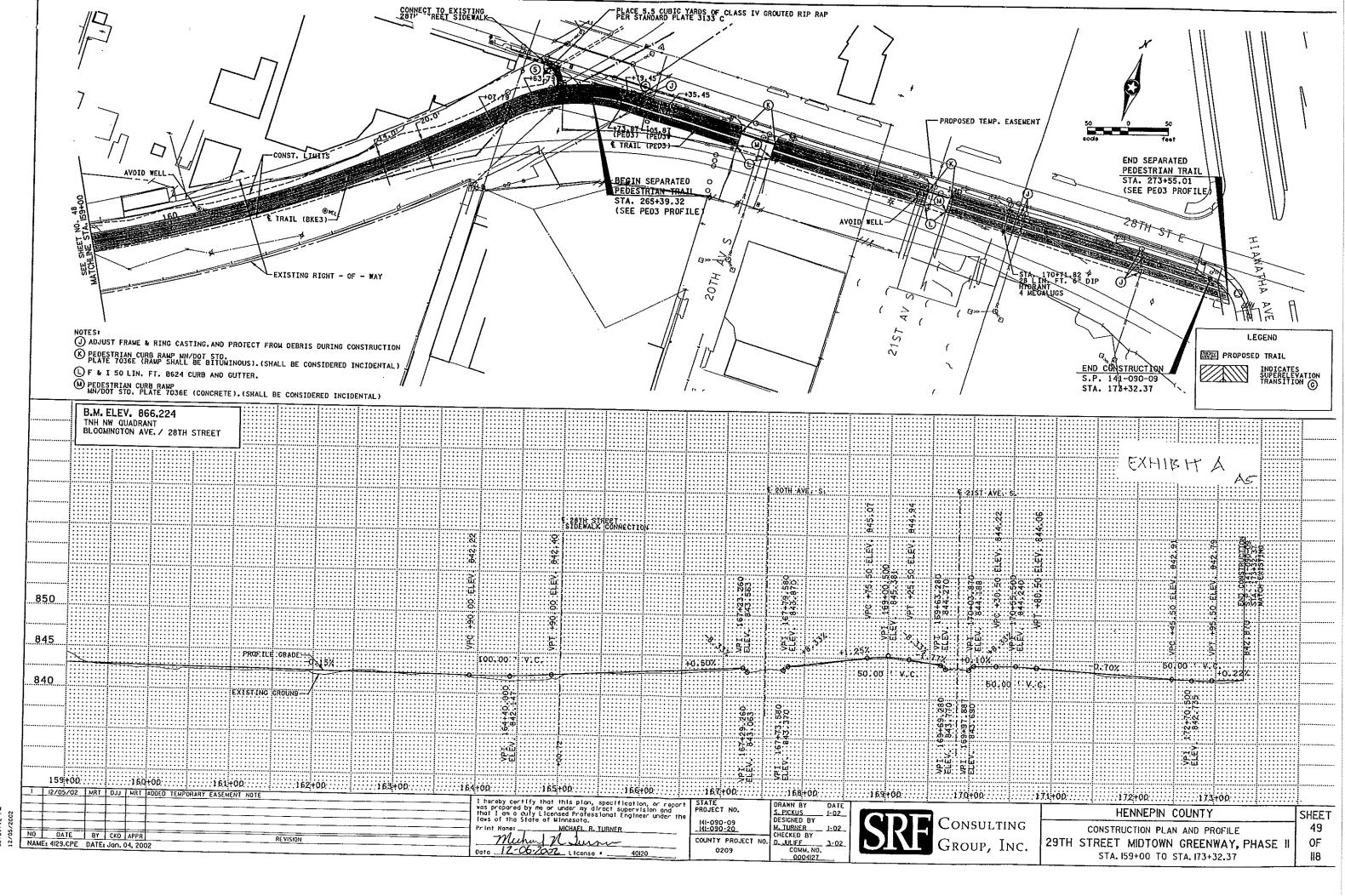
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City Agreement No. Midtown Greenway Trail Phase 2 & 3

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Page 1 of 8

ORIGINAL SIGNATURES

### AGREEMENT FOR COST PARTICIPATION FOR MIDTOWN GREENWAY TRAIL PHASE 2 & 3

### STATE PROJECT NOS. 141-090-09, 141-090-13, 141-090-20, and 27-090-02

THIS AGREEMENT, made and entered into this <u>25</u> day of <u>2003</u> by and among the County of Hennepin, a body politic and corporate under the laws of the State of Minnesota, hereinafter referred to as the "County", and the City of Minneapolis, a body politic and corporate under the laws of the State of Minnesota, hereinafter referred to as the "City".

### WINESSETH:

WHEREAS, the City and County are preparing to improve the 29<sup>th</sup> Midtown Street Railroad Corridor for use as a bike trail between 5<sup>th</sup> Avenue South and Hiawatha Avenue South (Phase 2) and Hiawatha Avenue South and the Mississippi River (Phase 3) under State Project Nos. 141-090-09, 141-090-13, 141-090-20, and 27-090-02, which improvements contemplate construction of a trail, ramp access, retaining walls, signing, lighting, and security systems along the corridor to be described in each phase's project memorandum, hereinafter referred to as the "Project" and,

WHEREAS, the County and the City agree that the Project improvements contemplated herein should be developed jointly by the County and City as defined in the attached Memorandum of Agreement, hereinafter referred to as the "MOU", whose interests include the HCRRA, Hennepin County, and City property and the immediate vicinity; and

WHEREAS, in order to properly serve the City and County as it relates to public affairs and acceptance of the Project by neighborhoods and business, the City and County will maximize community involvement and support for the Project; and

WHEREAS, the County will take the lead in project management for the Project but may not possess the expertise to design and/or engineer the improvements contemplated and therefore will enter into agreements with consultants to perform the necessary work within the desired timeframe; and

WHEREAS, the above described project lies within the corporate limits of the City; and

WHEREAS, the City and County have applied for and received commitments for Federal funding for a portion of the Project construction costs and the State of Minnesota Department of Transportation, herein after referred to as the "State", is the fiscal agent of those Federal funds; and the County and City have expressed their willingness to fund costs incurred by the Project under the aforesaid MOU; and

WHEREAS, it is contemplated that said work be carried out by the parties hereto under the provisions of Minnesota Statutes Section 162.17, Subdivision 1, and Section 471.59.

MPLS. CITY FINANCE DEF CONTRACT # 018970

November 5, 2002

City Agreement . County Agreement No. Midtown Greenway Trail Phase 2 & 3

It is further understood and agreed by the parties hereto that the Federal share of the Federal TE Safety S.P. 141-090-20 and Federal STP Trail S.P.141-090-09 and S.P. 141-090-13 are for Project construction improvements only and that the Federal High Priority S.P. 27-090-02 funds may be used for any Project cost.

It is further understood that the local matching funds shall be provided by the City and County. The MOU states that the County and City will participate financially in 50 percent of all Phase II Project costs that are not covered by Federal funds and that exceed the costs defined in the MOU.

If construction costs exceed the budgeted and programmed funds defined in the MOU, all parties will negotiate a cost sharing arrangement that will be defined in supplemental agreement(s) to the construction bidding contract(s).

5

The Project total revenues and costs are expected to be Seven Million, Six Hundred Eighty-Five Thousand, Six Hundred Seventy-eight and 00/100 Dollars (\$7,685,678.00). The sharing of these estimated costs is defined below and in the MOU.

The City, by executing this Agreement, hereby agrees to fund its share of the costs incurred by Project as defined in the MOU. The City's share of the Project costs is estimated at Seven Hundred Thousand and 00/100 Dollars (\$700,000.00).

The County, by executing this Agreement, hereby agrees to fund its share of the costs incurred by Project as defined in the MOU. The County's share of the Project costs is estimated at Two Million, One Hundred Forty Thousand and 00/100 Dollars (\$2,140,000.00).

The State, as the Federal funding fiscal agent, hereby agrees to transfer the federal funds as defined above. The Federal funds are estimated at Four Million, Seven Hundred Fifty Thousand, Six Hundred Seventy-Eight and 00/100 Dollars (\$4,750,678.00).

The City agrees to continue its actions to obtain the necessary NRP neighborhood funds in the amount of Ninety-Five Thousand and 00/100 Dollars (\$95,000.00) as defined in the MOU.

All parties understand and agree that during the duration of the Project there may be reason for any party to request amendment to aforesaid agreements that may result in additional costs in excess of the maximum amounts set forth above. All parties further understand that such needs may subsequently result in an amendment to this Agreement for additional funding for the Project. Project construction changes will be addressed through the State's Supplemental Agreement process with the execution and signatures by the individuals designated in Section 15 below.

6

It is understood by the parties that the County will accept the lead role for the Project (Phase 2 and Phase 3 as defined herein). All correspondence between any of the parties related to this Project shall be carbon copied to all the parties.

City Agreema County Agreement No. Midtown Greenway Trail Phase 2 & 3

It is understood by the parties hereto that the County has budgeted for the years 2001 and 2002, One Million, Seven Hundred Eighty-Four Thousand Dollars and 00/100 Dollars (\$1,784,000.00) for its share of the costs to be incurred by the Project under the above-cited agreements. It is further understood and agreed by the parties hereto that the County will provide documentation of County paid expenses to the City and State for the 2001 and 2002 calendar years with supporting documentation of such expenses.

The remaining funds designated by the County and committed to the Project will be paid by the County as the work is completed in the subsequent years of the contract. Similar documentation as provided for year 2002 shall be provided to the City and State for subsequent years as described above.

10

It is anticipated that all work and services required under the terms of the above-cited agreements with consultants and/or contractors will be completed by December 31, 2004.

Unless terminated pursuant to the immediately following paragraph, this Agreement shall be in full force and effect from the date of execution to December 31, 2005 or until the services provided pursuant to this Agreement have been completed, whichever occurs earlier.

All parties may terminate this Agreement with or without cause upon sixty (60) days written notice to the other parties that said Agreement shall cease and terminate at the end of said sixty-day period. Expenses incurred up to the date of termination shall be shared in the same proportions and be subject to the same conditions as those expenses prior to termination.

The County's failure to insist upon strict performance of any provision or to exercise any right under this Agreement shall not be deemed a relinquishment or waive of the same, unless consented to in writing. Such consent shall not constitute a general waiver or relinquishment throughout the entire term of the Agreement.

The City's failure to insist upon strict performance of any provision or to exercise any right under this Agreement shall not be deemed a relinquishment or waive of the same, unless consented to in writing. Such consent shall not constitute a general waiver or relinquishment throughout the entire term of the Agreement

11

The County and the City shall comply with all applicable federal, state and local statutes, regulations, rules and ordinances in force or hereafter enacted in the completion of the work and services herein agreed to.

City Agreement No. County Agreement No. Midtown Greenway Trail Phase 2 & 3

It is understood and agreed that the entire Agreement between the parties is contained herein and that this Agreement supersedes all oral agreements and negotiations between the parties relating to the subject matter thereof. All items referred to in this Agreement are incorporated or attached and are deemed to be part of this Agreement.

Any alterations, variations, modifications, or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing as an amendment to this Agreement signed by the parties hereto.

17

The provisions of Minnesota Statutes 181.59 and of any applicable local ordinance relating to civil rights and discrimination and the Affirmative Action Policy statement of Hennepin County shall be considered a part of this Agreement as though fully set forth herein.

### 18

The Laws of the State of Minnesota shall govern all questions and interpretations concerning the validity and construction of this contract and the legal relations between the herein parties and performance under it. The appropriate venue and jurisdiction for any litigation hereunder will be those courts located within the County of Hennepin, State of Minnesota. Litigation, however, in the federal courts involving the herein parties will be in the appropriate federal court within the State of Minnesota. If any provision of this contract is held invalid, illegal or unenforceable, the remaining provisions will not be affected.

### **19** .

To the extent that there are any inconsistencies between the MOU and this agreement, the terms of contained in this agreement shall govern.

### **ATTACHMENTS:**

• Memorandum of Understanding, City of Minneapolis and Hennepin County, dated November 5, 2002

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### 29<sup>th</sup> STREET MIDTOWN GREENWAY MEMORANDUM OF UNDERSTANDING

### Principal Responsibilities

### Phase II Trail

### Hennepin County

- 1. Be the responsible party for managing overall Phase II design and construction.
- 2. Execute agreement with consultant for the design of Phase II.
- 3. Prepare the Section 106 report necessary for the project.
- 4. Arrange for consultants to design security system.
- 5. Arrange for consultant and/or artists to design artistic elements into the project per the Midtown Community Works Partnership efforts.
- 6. Establish, with City approval, the design standards for Phase II.
- 7. Confer and gain approval with City staff on major aspects of the Project.
- 8. Provide full, unmatched funding for the Phase II design, if City is unable to participate, subject to overall funding requirement listed next.
- 9. Participate financially in 50 percent of all Phase II Project costs, including overruns, not covered by Federal or other funds, exclusive of County's own funding.
- 10. Select and contract with consultant to provide in-construction services for PhaseII. County and City forces will have the right of first refusal to perform these services.
- 11. Arrange for, or otherwise be responsible for, the entire railroad abandonment process (Phase II).
- 12. Arrange for, or otherwise be responsible for removal of remaining grain in the CEPRO elevator of the Rahr Malting Company.
- 13. Demolish and remove the CEPRO elevator, if the county decides to have the facility removed. At a minimum, the metal loading and unloading shed may need to be removed to accommodate the trail.
- 14. Pay severance and relocation costs, if any, resulting from removal of the CP's railroad tracks and/or the CEPRO elevator.
- 15. Afford City opportunity to review and approve the construction in progress and respond to City initiated comments.
- 16. Designate a Project Manager responsible for the overall Project.
- 17. Coordinate and manage the public participation process.

### City of Minneapolis

- 1. Initiate and make arrangements with Minnesota Department of Transportation (Mn/DOT) to preserve the availability of federal funds obtained by the City for use on the project.
- 2. Provide timely review and approval of Phase III design standards.
- 3. Operate and maintain the Phase III Trail, at no cost to the County, or HCRRA.
- 4. Participate financially in 50 percent of all Project costs, including overruns, not covered by Federal or other funds, exclusive of City's own funding. In no event shall the City's participation exceed that of Hennepin County or Hennepin County Regional Railroad Authority combined.
- 5. Real estate and right-of-way related costs for Phase III are included in Project costs.
- 6. Designate a staff person who will be responsible for all City activities including, but not limited to, design reviews, funding approvals, etc.
- 7. Provide; free of charge, any available mapping information required by the County for preliminary or final design.
- 8. Administer and coordinate the safety and security elements for the Project. Assist the County and consultant in the design of the security system.
- 9. Exclusive of right of way to be acquired by the County from CP Rail, the City shall pursue and secure all additional right of way required for Phase III Trail.

### Design of Grade-Separated Bridge Crossing over Hiawatha Avenue

### Hennepin County

- 1. Be the responsible party for managing the design efforts.
- 2. Hire consultant to study alignment options, perform preliminary design and provide initial cost estimates.
- 3. Coordinate and manage the public participation process.
- 4. Establish, with City approval, the design standards.
- 5. Confer and gain approval with City staff on major aspects of the Project.
- 6. Apply for TEA-21 funds for this project. Local match of TEA-21 application will be determined at a later date.
- 7. Designate a Project Manager.

### City of Minneapolis

- 1. Provide timely review and approval of alignment and design standards.
- 2. Designate a staff person who will be responsible for all City activities including, but not limited to, all permits design reviews, funding approvals, etc.
- 3. Provide; free of charge, any available mapping information required by the County for preliminary or final design.

### Schedule Responsibilities

### Phase II Trail

- Final Design Fall 2001 and Spring 2002
- SHPO review Fall 2001 and Spring 2002
- Cepro Grain Elevator grain removed in 2001, prepare reuse plan for the Cepro facility by Fall 2001
- CP Rail Roadway abandonment and required track removal by Spring 2002
- Construction Begin Spring 2003/Summer 2003

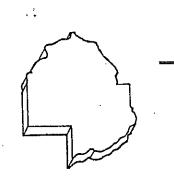
### Phase III Trail

- Preliminary Design Summer 2002
- Negotiate with CP Rail Summer/Fall 2002
- Final Design Fall 2002/Winter 2003
- Construction Begin Fall 2003/Spring 2004

### Design of Grade-Separated Bridge Crossing over Hiawatha Avenue

- Study alignment options, perform preliminary design and provide initial cost estimates – Summer 2001
- Submit TEA-21 Application Summer 2001

Hopkins to Chaska Trail Three Rivers Park District



### HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY

417 North Fifth Street, Suite 320, Minneapolis, MN 55401-1362 (612) 348-9260 FAX: (612) 348-9710

PERMIT

File No. 73-33001B

Permit No. 24-06

Name of Applicant <u>Three Rivers Park District</u>, Permittee, (Address) <u>3000 Xenium Lane</u>, <u>Plymouth, Minnesota 55441</u>, for installation, use, relocation and maintenance of: <u>A regional</u> <u>trail signage program consisting of directional standards (direction signs), individual trail</u> <u>orientation kiosk, system-wide orientation kiosks, and related appurtenances, more or</u> <u>less as shown on Exhibit A</u> (Permitted Facility), at Permittee's sole cost, over, on or under Hennepin County Regional Railroad Authority (HCRRA) property (the "Permitted Property") described as:

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### That part of the below described property:

- Hennepin County Regional Railroad Authority's Hopkins to Victoria right-of-way, said right-of-way being described on HCRRA Property Map No. 1 (C.R. Doc. No. 5404251), and HCRRA Property Map No. 12 (C.R. Doc. No. 5518920);
- 2) <u>Hennepin County Regional Railroad Authority's Hopkins to Chaska right-of-way, said right-of-way being described on HCRRA Property Maps No.'s 13 through 30 (C.R. Doc. No.'s 189393, 189394, 189395, 189396, 6525334, 6525335, 6525336, 6525337, 6525338, 6525339, 6540289, 6540290, 6540291, 6540292, 6540293, 6540294, 6540295, 6540296);</u>
- 3) <u>Hennepin County Regional Railroad Authority's Hopkins to Minneapolis right-of-way, said right-of-way being described on HCRRA Property Maps No.'s 2 through 6 (C.R. Doc. No.'s 5496762, 5496763, 5503256, 5503257, 5504276), and HCRRA Property Map No. 40 (C.R. Doc. No. 8350163), and HCRRA Property Maps No. 31 (C.R. Doc. No. 6760097),</u>

which generally conforms to the center portion of the corridor and more or less as shown on Exhibit A.

Exhibit A is attached and incorporated by reference in this Permit.

### GENERAL REQUIREMENTS

1. Permittee shall not make changes in the use of this Permit without the permission of HCRRA.

### BOARD OF COMMISSIONERS

Peter McLaughlin Chair

- 2. Permittee acknowledges and understands that HCRRA at its sole discretion may modify or remove any sign of Permitted Facility placed on the Permitted Property due to future implementation of Light Rail Transit or other transportation improvements, or for any other reason.
- 3. Permittee is responsible to abide by all local, state or federal ordinances or regulations in the exercise of the rights herein given.
- 4. Permittee must protect all existing utilities, including fiber optics, waterways and drainage lines.
- 5. Permittee is responsible for correcting any failures due to settlement, erosion, lack of vegetation growth, rutting, or other problems related to the use of this Permit, at the expense of the Permittee.
- 6. Permittee shall restore all disturbed areas to original or better condition.
- 7. Permittee shall not use, employ, store, dispose of, or otherwise release any hazardous substance or pollutants or contaminants on HCRRA property.
- 8. The cost of this Permit shall be One and 00/100 Dollars (\$1.00).

### SPECIAL PROVISIONS

- Permittee is aware that underground fiber optic communication cables, in addition to other underground utilities, may have been installed on the Permitted Property, it is the Permittee's sole responsibility, at the Permittee's sole expense, to properly locate and protect these and all utilities.
- 2. At all times during its occupancy of the Permitted Property, Permittee shall be responsible for 100 percent of the expense of maintaining the Permitted Property.
- 3. Permittee and HCRRA entered into a certain Permit Agreement bearing Agreement No. 73-32001 dated September 1, 1998, as amended with First Amendment to Permit Agreement 73-32001, dated October 3, 2000, on file in the office of HCRRA, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Railroad Authority "Hopkins to Minneapolis Rail Corridor" located in Hennepin County, Minnesota; not withstanding the above and below, other than generally conforming to the center of said Hopkins to Minneapolis Rail Corridor, but not necessarily conforming to the center 16 feet of said Rail Corridor as stated in said Permit Agreement No. 73-32001, Permitted Facility, located more or less as shown on Exhibit A, will conform to and be subject to all other terms, all conditions, rights, and obligations of said Permit Agreement No. 73-32001, especially those pertaining to *Term, Termination, Temporary Nature of Use, Rights Upon Termination, Indemnification, Insurance, Quiet Enjoyment, Environmental Concerns, and Relocation.*

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- 4. Permittee and HCRRA entered into a certain Permit Agreement bearing Agreement No. 73-33001, dated July 14, 1992, on file in the office of HCRRA, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Railroad Authority "Hopkins to Chaska Rail Corridor", located in Hennepin and Carver Counties, Minnesota; not withstanding the above and below, other than generally conforming to the center of said Hopkins to Chaska Rail Corridor as stated in said Permit Agreement No. 73-33001, Permitted Facility, located more or less as shown on Exhibit A, will conform to and be subject to all other terms, all conditions, rights, and obligations of said Permit Agreement No. 73-33001, especially those pertaining to *Term, Termination, Temporary Nature of Use, Rights Upon Termination, Indemnification, Insurance, Quiet Enjoyment, Environmental Concerns, and Relocation.*
- 5. Permittee and HCRRA entered into a certain Permit Agreement bearing Agreement No. 73-34001, dated July 14, 1992, on file in the office of HCRRA, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Railroad Authority "Hopkins to Victoria Rail Corridor", located in Hennepin and Carver Counties, Minnesota; not withstanding the above and below, other than generally conforming to the center of said Hopkins to Victoria Rail Corridor as stated in said Permit Agreement No. 73-34001, Permitted Facility, located more or less as shown on Exhibit A, will conform to and be subject to all other terms, all conditions, rights, and obligations of said Permit Agreement No. 73-34001, especially those pertaining to *Term, Termination, Temporary Nature of Use, Rights Upon Termination, Indemnification, Insurance, Quiet Enjoyment, Environmental Concerns, and Relocation.*
- 6. Permittee agrees to include the Hennepin County logo on the *Trail Kiosks* with the following accompanying language:

This trail corridor was acquired by the Hennepin County Regional Railroad Authority for future light rail transit use. A cooperative agreement with Three Rivers Park District allows the corridor to be used for interim recreational purposes.

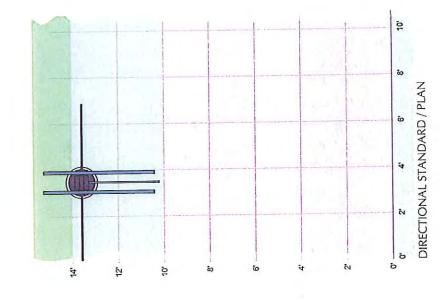
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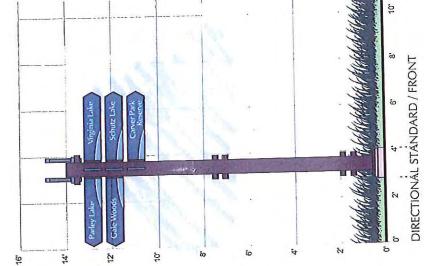
(I, We), the undersigned, herewith accept the terms and conditions of the regulations as laid down by HCRRA and agree to fully comply therewith to the satisfaction of the HCRRA.

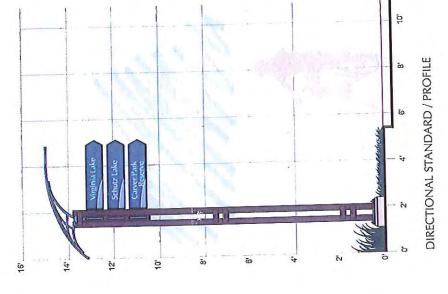
Date<u>8-30-06</u> Date<u>6/15/06</u> Permittee Three Rivers Park District Date 61 **HCRRA** TT. Director, Housing, Transit and Community Works

DIRECTIONAL STANDARD (DS)

ILLUSTRATIONS





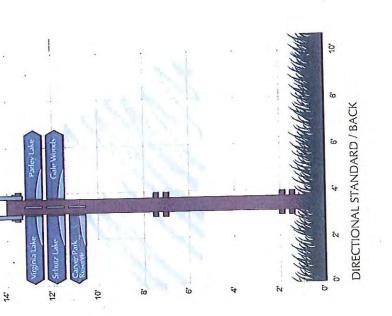


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EXHIBIT A SHEET 1 OF 10

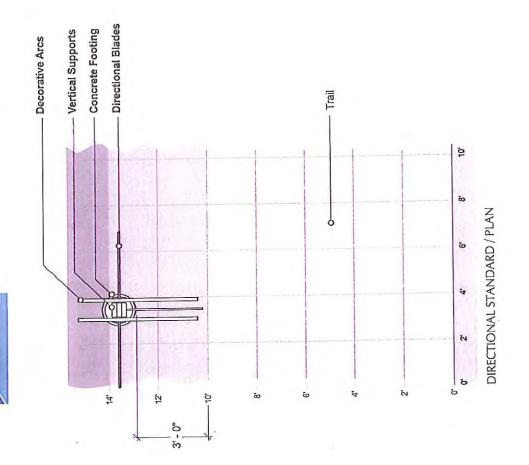


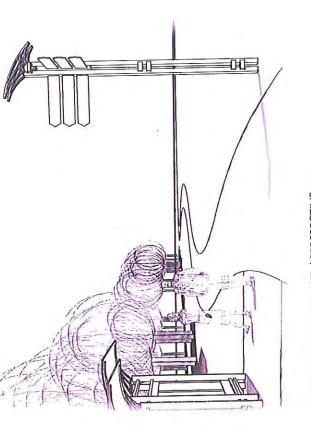
DIRECTIONAL STANDARD / BLADES



DESIGN

### DIRECTIONAL STANDARD (DS)





DIRECTIONAL STANDARD / PERSPECTIVE

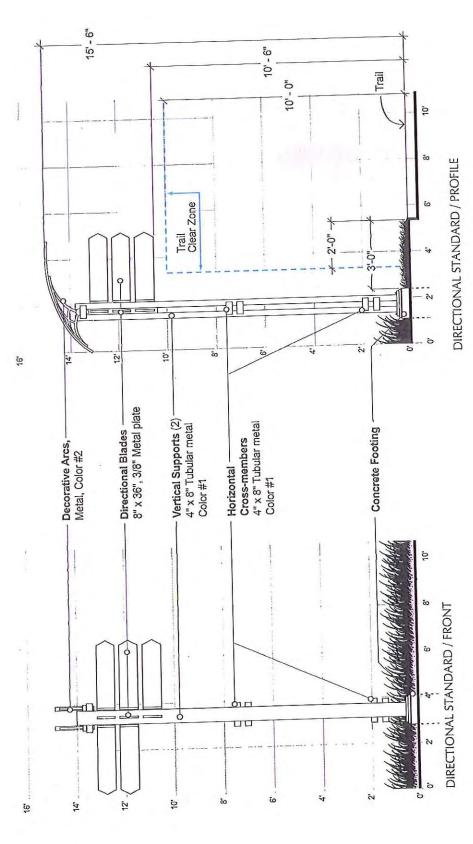
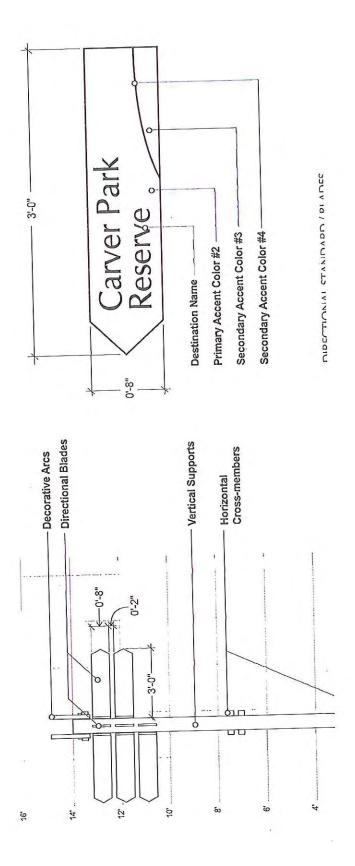


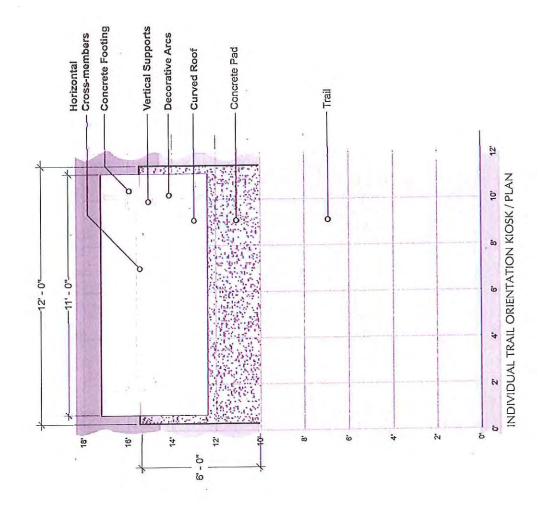
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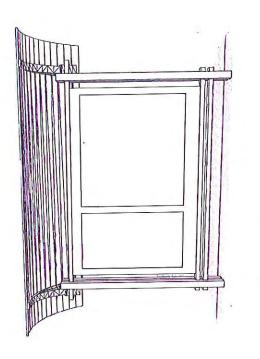
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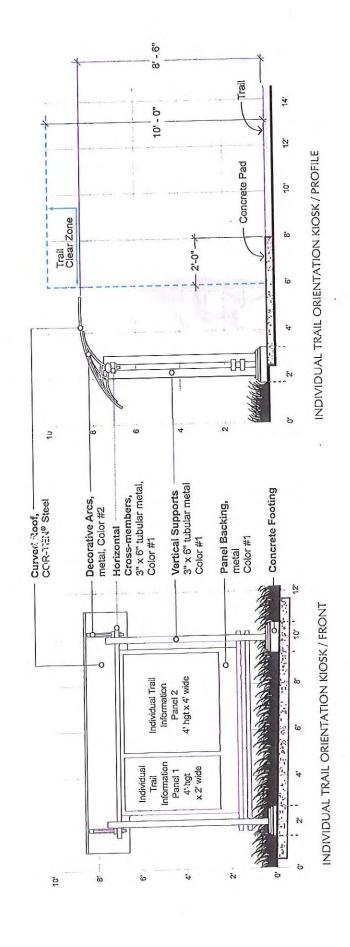
DESIGN

# INDIVIDUAL TRAIL ORIENTATION KIOSK (IT)

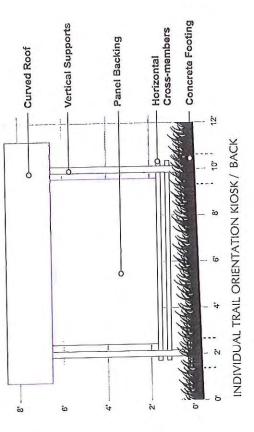




INDIVIDUAL TRAIL ORIENTATION KIOSK / PERSPECTIVE



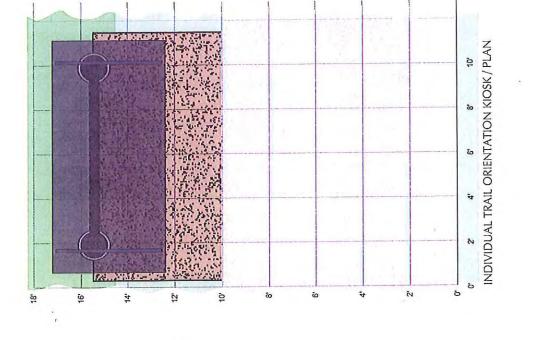
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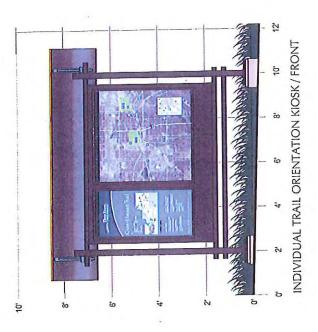


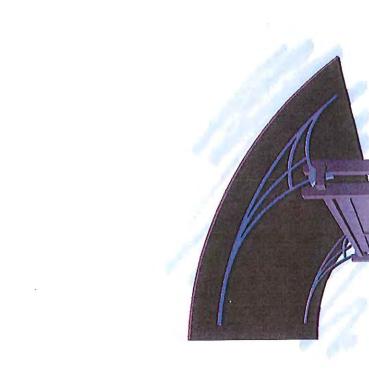
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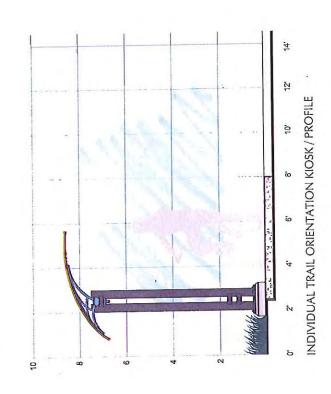
## INDIVIDUAL TRAIL ORIENTATION KIOSK (IT)



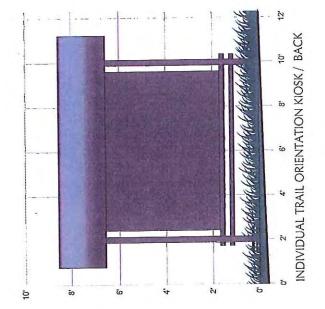




INDIVIDUAL TRAIL ORIENTATION KIOSK / ROOF SUPPORT DETAIL

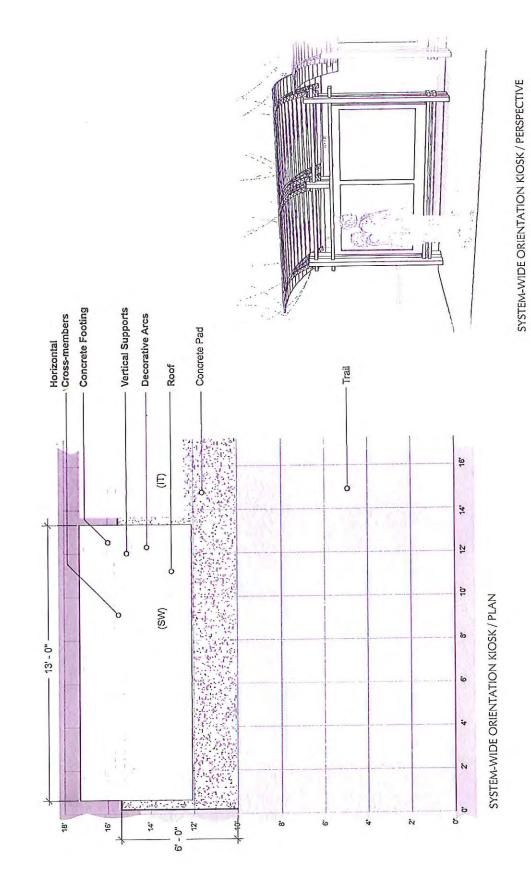


### EXHIBIT A SHEET 4 OF 10



DESIGN DEVELOPMENT

### SYSTEM-WIDE ORIENTATION KIOSK (SW)

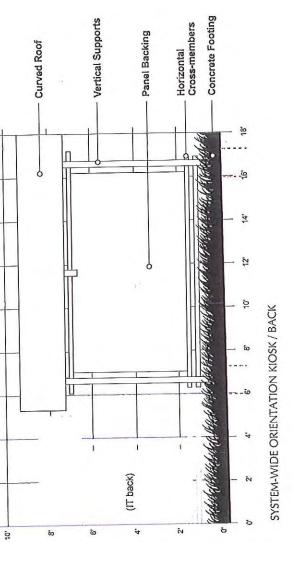


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6 6 **[**rail .0 10. ete Pad SYSTEM-WIDE ORIENTATION KIOSK / PROFILE 0 Cor Trail Clear Zone 2-0. 山口 ò 12 9 Curved Roof, COR-TEN® Ste Panel Back Metal Color #1 Decorative . Metal Color #2 ดี Horizontal Cross-mei 3" x 6" tubi Color #1 Vertical 3" x 6" tu Color #1 花 all = iystem-Wide Information Panel 2 hgt x 4' wide ò System-Wide Information Panel 1 'hgt x 4' wid -----1 N UUN 1PT in the second ò N ò 4 10. õ õ 12

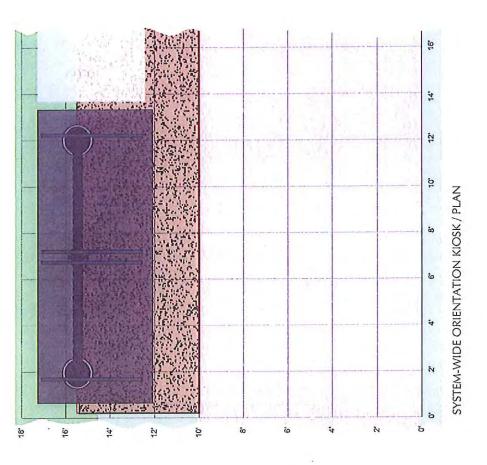
SYSTEM-WIDE ORIENTATION KIOSK / FRONT
12

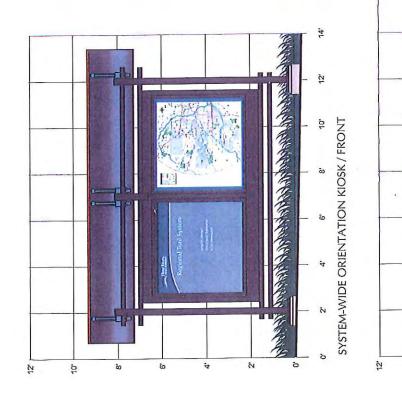
### EXHIBIT A SHEET 5 OF 10

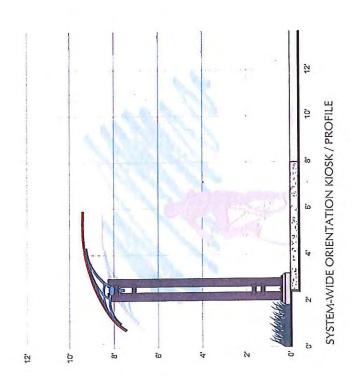


ILLUSTRATION

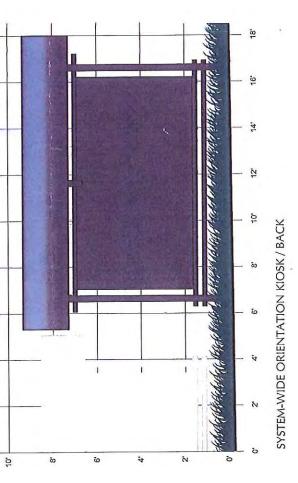
SYSTEM-WIDE ORIENTATION KIOSK (SW)



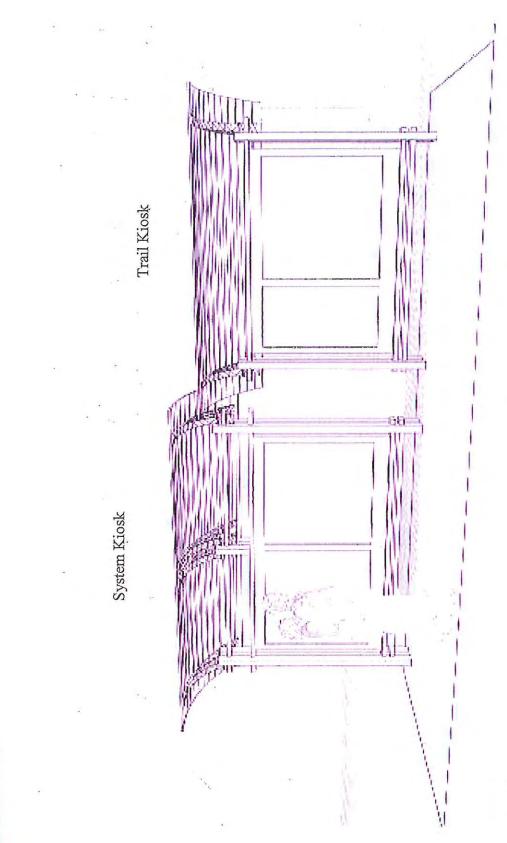




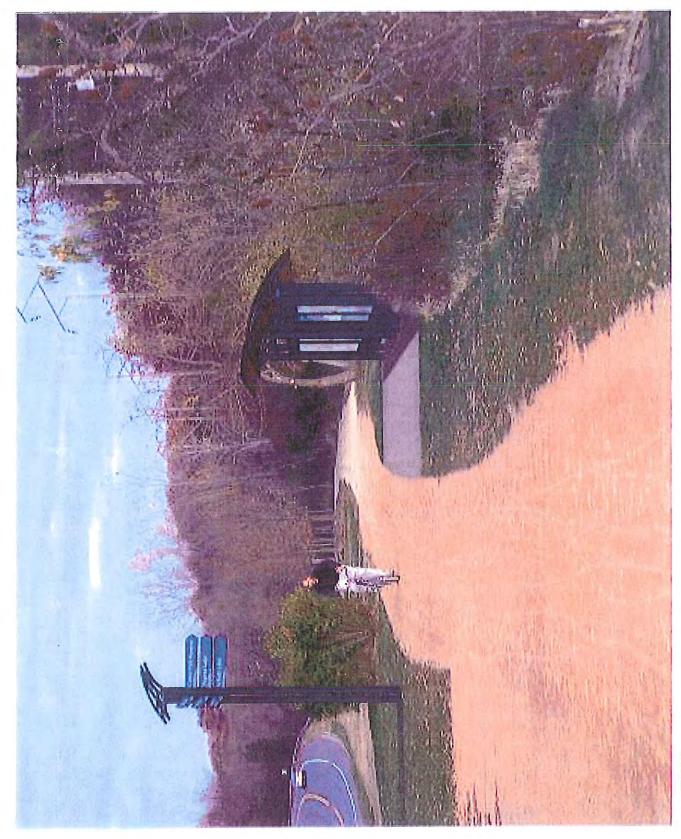
### EXHIBIT A SHEET 6 OF 10





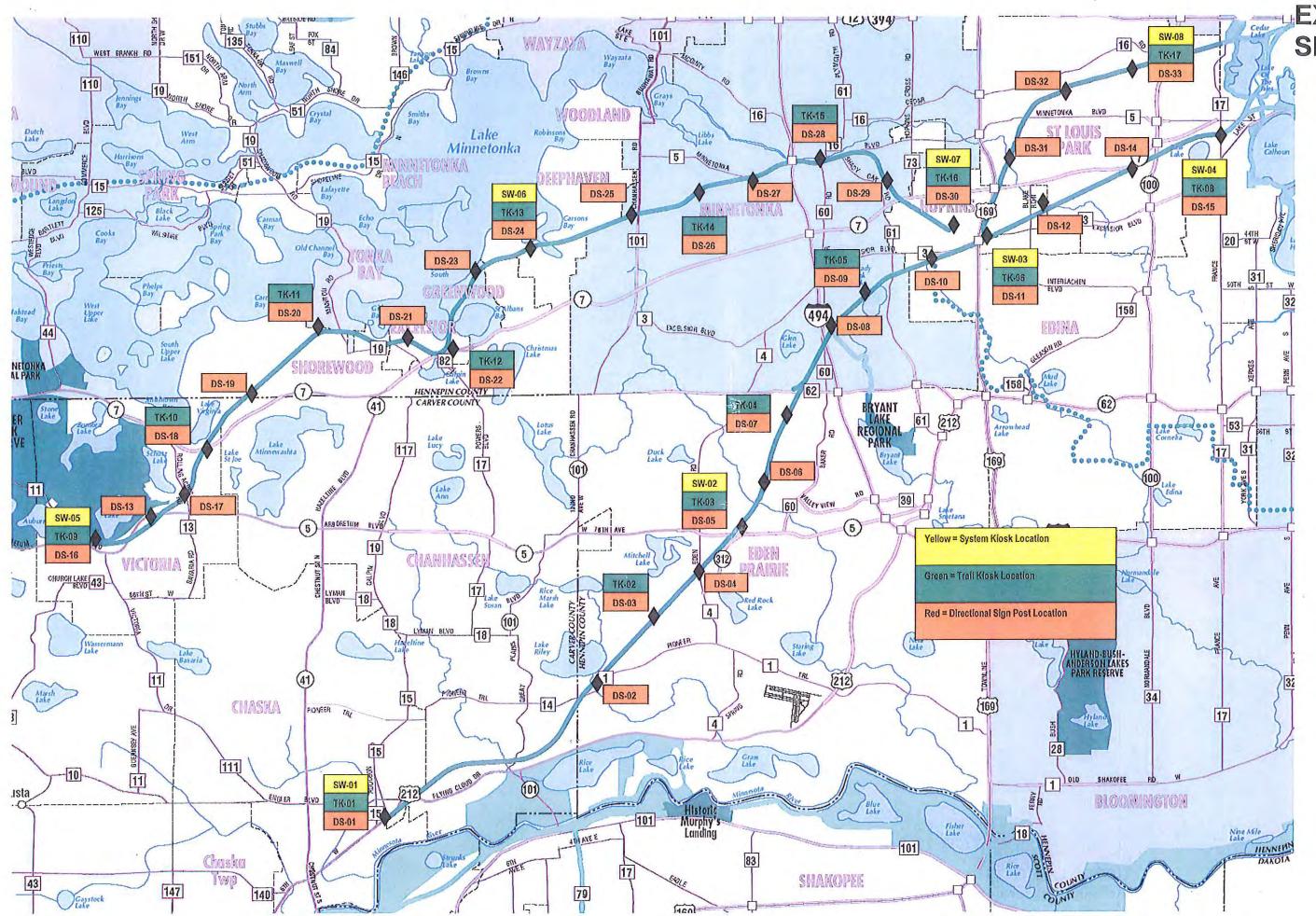


APPROACH &



# EXHIBIT A SHEET 7 OF 10

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SHEET 8 OF 1

| [               |                                                   |                                              |                                                                                                                     | 1                                                                                      | <b></b>                                                                                                                                                                                                |                                                                                                              | ·                                                                                                                                                                                               | 1                                                                                                                                                                                                                                                                | <del>,</del>                                                                                                                    | 1                                          |                                                                                                |                                                                                                      |                                                                                                                                      |                                                                                                                                                                                           |                                                                                                                                                                                                                                                                        |                                                                  | ſ                                                                                                                                                                                                                             | T                                                                                                                                       |                                                                                      | EX                                                                                                                            |                                                                                                                                    |                                                                                                                                                    | <b>(</b>                                                                                               | SHE                                                                               |                                                            | j                                                                                                                                                                              | 10 |
|-----------------|---------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Special Notes   | Staff to rip out old kiosk and move benches.      |                                              | Will need to move No motor V sign.<br>Directional post needs careful placement due<br>to buned cable in area.       | Detour blade needed. No blades pointing<br>SW until Hwy 212 construction is completed. | -                                                                                                                                                                                                      |                                                                                                              |                                                                                                                                                                                                 | Need directional blade pointing south saying<br>"Bryant Lake Park" Also need small<br>directional signs along Roland, at turn into<br>small parking lot @ Cleanwater, and at Y in<br>trail 200 yards past turn (replace Hennepin<br>Parks sign at that location) |                                                                                                                                 | verify ROW                                 | Part of Depot remodel                                                                          |                                                                                                      | Mpls border                                                                                                                          | Check status of new local trail behind Klosk location.                                                                                                                                    | Leave old kiosk for time being, may<br>eventually replace with Park trail kiosk. Staff<br>to remove Buckthorn bush next to Directional<br>sign location. Original Site 13 was wrongly<br>placed on map, that is why this is out of<br>peopraphic order along the trail |                                                                  | Staff will need to stake this one carefully and<br>will need to do make sure spur trail works<br>with concrete pad of sign. Want to direct<br>people to use tunnel, not Hwy crossing.                                         |                                                                                                                                         | Have a blade point to DT Excelsior.                                                  |                                                                                                                               |                                                                                                                                    | Staff needs to rip out old kiosk - move<br>benches across trail on each side of new<br>directional sign.                                           |                                                                                                        |                                                                                   | Blade pointing north to Mtka City Hall and services.       | Blade pointing north to Burwell house site.                                                                                                                                    |    |
| Site Category   | 1.5 feet of fill<br>needed to level<br>with trail |                                              | Flat                                                                                                                | Flat                                                                                   | Flat                                                                                                                                                                                                   | Flat                                                                                                         | 1 foot fill<br>needed                                                                                                                                                                           | Flat                                                                                                                                                                                                                                                             | 2 to 3 foot fill<br>needed                                                                                                      | Flat                                       | Flat<br>Flat                                                                                   | Flat                                                                                                 | Flat                                                                                                                                 | Flat, with slight<br>rise at back of<br>about 1 foot.                                                                                                                                     | Flat                                                                                                                                                                                                                                                                   | 1' drop                                                          | 1' drop for DS                                                                                                                                                                                                                | Flat<br>3 feet fill<br>needed for<br>Klosk; 1 foot                                                                                      |                                                                                      | 1 foot fill for<br>kiosk, flat for<br>DS.                                                                                     |                                                                                                                                    |                                                                                                                                                    | Flat                                                                                                   | 1.5 feet fill<br>needed for<br>kinck                                              |                                                            | Flat                                                                                                                                                                           |    |
| Description     | At end of parking lot where old kiosk is located. | 20 feet west of road on south side of trail. | It leat east of road. Nosk on sourn side<br>of trail (Center on "no motor" sign).<br>Directional across from klosk. | East side of road. 25 feet east of sidewalk. South side of trail.                      | Place kiosks on south side of trail.<br>System Kiosk starts 65 feet south of<br>Venture Ln (aligned with third small tree<br>behind). Directional on north side of trail<br>75 feet from edge of road. | Place in Y between local trail connection<br>east of Valleyview. 15 feet from end of Y<br>and centered in Y. | East of Edenvale. Klosk on north side of<br>trail 35 feet in from road edge. 1 foot fill<br>needed for klosk. Directional sign across<br>from klosk - also 35 feet from road. Flat<br>for that. | East side of road. 20 feet east of curb on<br>north side of trail                                                                                                                                                                                                | East of Dominick Rd. North side of trail<br>85 ' east from road. Directional and kiosk<br>on same side with DS closest to road. | South side of trail. 15' east of sidewalk. | Nate has exact location.<br>East of Blake Road but west of<br>Minnehaha Creek by existing park | benches on south side.<br>East of Wooddale. South side of trail. 15<br>feet east start of trail edue | South side of trail. Start where trail<br>pavement changes. System K, then Trail<br>K, the Directional sign in a row moving<br>west. | 25 feet west of sidewalk/path coming<br>down from main street. Locate kiosks on<br>north side, with System K farthest east.<br>Directional sign on south side across from<br>trail kiosk. | 10 feet west of park trail access on north side of trail.                                                                                                                                                                                                              | East of road, 10 feet east of spur trail.<br>South side of trail | Start trail kiosk even with blacktop. Locate kiosk posts on south edge of spur trail that runs to Hwy 7, with concrete pad going 8 feet into spur trail. Directional on north side of regular trail, which has a 1 foot drop. | 20 feet west of road on north side of trail<br>90 feet west of intersection on north side<br>of trail (kiosk), Direction on south side. | West of Water St at end of paved portion<br>of trail. Start at pavement end on south | 50 feet west of Excelsior on north side of<br>trail (kiosk). Directional should be on<br>same side but 5 feet closer to road. | West of Linwood there is a lake overlook.<br>Directional sign should be centered<br>across from overlook on south side of<br>trail | Locate at old kiosk site on north side of<br>trail. System kiosk should be furthest<br>east. Directional sign should be across<br>from trail kiosk | West side of 1010, center in V created by<br>101 spur trail and LRT trail - 5 feet in from<br>V point. | 140 feet west of Tonkawood Rd, kiosk on<br>north side, directional on south side. | 40 feet west of Williston Road edge on south side of trail | Place klosk next to bench on trail up on<br>hill east of Shady Oak. Place klosk on<br>south side of trail in line with local spur<br>that crosses Mitka Blvd at Plymouth Road. |    |
| Location        | Bluff Creek Drive<br>trailhead parking<br>Int     | Riley Lk Rd                                  | Dell Rd                                                                                                             | Eden Prairie Rd                                                                        | Venture Lane                                                                                                                                                                                           | Valleyview Rd<br>bridge                                                                                      | Edenvale Bivd                                                                                                                                                                                   | Roland Road                                                                                                                                                                                                                                                      | Dominick Rd                                                                                                                     | 11th Ave<br>crossing in<br>Hopkins         | pot                                                                                            | Wooddaie                                                                                             | France Ave spur<br>trail/Mpls border                                                                                                 | DT Vicoria by<br>THRP<br>Amphitheater                                                                                                                                                     | Old kiosk site<br>west of Park Rd                                                                                                                                                                                                                                      | Rolling Acres Rd                                                 | lwy                                                                                                                                                                                                                           | West 62nd St<br>Eureka<br>Rd/Smithtown                                                                                                  | Water Street in<br>DT Excelsior                                                      | Excelsior Blvd                                                                                                                | Linwood Circle in<br>Greenwood                                                                                                     | Minnetonka Blvd                                                                                                                                    | Hwy 101                                                                                                | Tonkawood Rd                                                                      | Williston Rd                                               | Shady Oak Rd/<br>Plymouth Rd                                                                                                                                                   |    |
| UTM             | 4962406                                           | 4964597                                      | 4965579                                                                                                             | 4966898                                                                                | 4967769                                                                                                                                                                                                | 4968604                                                                                                      | 4970356                                                                                                                                                                                         | 4972472                                                                                                                                                                                                                                                          | 4973217                                                                                                                         | 4974086                                    | na<br>4975229                                                                                  | 4976183                                                                                              | 4976957                                                                                                                              | 4967679                                                                                                                                                                                   | 4968500                                                                                                                                                                                                                                                                | 4968975                                                          | 0051                                                                                                                                                                                                                          | 4972102<br>4972102                                                                                                                      | 4972294                                                                              | 4972294                                                                                                                       | 4973962                                                                                                                            | 4974478                                                                                                                                            | 4975266                                                                                                | 4975892                                                                           | 4976122                                                    | NA                                                                                                                                                                             |    |
| GPS             | 15T0456391                                        | 15T0459500                                   | 15T0460431                                                                                                          | 15T0461682                                                                             | 15T0462587                                                                                                                                                                                             | 15T0463139                                                                                                   | 15T0463724                                                                                                                                                                                      | 15T0464852                                                                                                                                                                                                                                                       | 15T0465595                                                                                                                      | 15T0467275                                 | па<br>15T0469932                                                                               | 15T0471947                                                                                           | 15T0474027                                                                                                                           | 15T0447768                                                                                                                                                                                | 15T0448808                                                                                                                                                                                                                                                             | 15T0449513                                                       | 2                                                                                                                                                                                                                             | 15T0451037<br>15T0452215                                                                                                                | 15T0455040                                                                           | 15T0455807                                                                                                                    | 15T0456541                                                                                                                         | 15T0457711                                                                                                                                         | 15T0460280                                                                                             | 15T0461892                                                                        | 15T0463131                                                 | NA                                                                                                                                                                             |    |
| Direction<br>S# | <del>.</del>                                      | 2                                            | ю                                                                                                                   | 4                                                                                      | ۵                                                                                                                                                                                                      | Q                                                                                                            | 7                                                                                                                                                                                               | ω                                                                                                                                                                                                                                                                | ത                                                                                                                               | 10                                         | 11 12                                                                                          | 14                                                                                                   | 15                                                                                                                                   | 16                                                                                                                                                                                        | 13                                                                                                                                                                                                                                                                     | 17                                                               | 80                                                                                                                                                                                                                            | 20 19                                                                                                                                   | 24                                                                                   | 23                                                                                                                            | 53                                                                                                                                 | 24                                                                                                                                                 | 25                                                                                                     | 26                                                                                | 27                                                         | 73                                                                                                                                                                             |    |
| Tail<br>⊈       | <b>~</b> ~~                                       | T                                            | 7                                                                                                                   | r                                                                                      | m                                                                                                                                                                                                      | 3                                                                                                            | 4                                                                                                                                                                                               | 1                                                                                                                                                                                                                                                                | ว                                                                                                                               | t                                          | <b>ن ن</b>                                                                                     |                                                                                                      | ω                                                                                                                                    | on ,                                                                                                                                                                                      | 1                                                                                                                                                                                                                                                                      | 1                                                                | 0                                                                                                                                                                                                                             | 1 <del></del>                                                                                                                           | T                                                                                    | 12                                                                                                                            | ı                                                                                                                                  | 5                                                                                                                                                  | 1                                                                                                      | 4                                                                                 | 8                                                          | 15                                                                                                                                                                             |    |
| System<br>K#    | ~                                                 | •                                            | 4.<br>1                                                                                                             |                                                                                        | 2                                                                                                                                                                                                      | ı                                                                                                            | 1                                                                                                                                                                                               | ı                                                                                                                                                                                                                                                                | 1                                                                                                                               | 1                                          | ო 1                                                                                            | 1                                                                                                    | 4                                                                                                                                    | £                                                                                                                                                                                         |                                                                                                                                                                                                                                                                        | r                                                                | I                                                                                                                                                                                                                             | 3                                                                                                                                       | 1                                                                                    |                                                                                                                               | 1                                                                                                                                  | ى                                                                                                                                                  | E                                                                                                      | 1                                                                                 | <i>I</i> .                                                 | 1                                                                                                                                                                              |    |
| Site            | <                                                 | 2                                            | ო                                                                                                                   | 4                                                                                      | വ                                                                                                                                                                                                      | 9                                                                                                            | 7                                                                                                                                                                                               | ω                                                                                                                                                                                                                                                                | თ                                                                                                                               | 10                                         | 13                                                                                             | 14                                                                                                   | 15                                                                                                                                   | 16                                                                                                                                                                                        | 5                                                                                                                                                                                                                                                                      | 17                                                               | 18                                                                                                                                                                                                                            | 50 13                                                                                                                                   | 21                                                                                   | 53                                                                                                                            | 53                                                                                                                                 | 24                                                                                                                                                 | 25                                                                                                     | 56                                                                                | 27                                                         | 58                                                                                                                                                                             |    |

|           |               |                                                                                                                  | a d<br>to                                                                                                                               |                                               |                                                                                                                              |                                                                                                                                                               |                                   |
|-----------|---------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|           | Special Notes |                                                                                                                  | Staff to demolish old kiosk, move rules and<br>stop ahead signs, clean up trail in this area to<br>make worthy of a trailhoad status.   | verify ROW                                    | Need SLP permission                                                                                                          | Site requested by SLP Parks                                                                                                                                   |                                   |
|           | Site Category | Flat                                                                                                             | Flat                                                                                                                                    | Flat                                          | Flat                                                                                                                         | Flat                                                                                                                                                          |                                   |
|           | Description   | South side of road, Directional on south<br>side of trail 20 feet before existing rules<br>and regulations sign. | North side of trail at old kiosk location. All<br>in a row with system kiosk furthest east,<br>then trail kiosk, then directional sion. | 15 feet east of sidewalk; south side of trail | Just west of Virginia Ave. Trail splits<br>north to parking lot. Put post 20 feet east<br>of V split on north side of trail. | 75 feet west of telephone pole that is<br>directly north of new rec center. System<br>kiosk, then trail kiosk, then directional<br>sign in a row moving west. |                                   |
|           | Location      | Minnetonka Mills<br>Rd                                                                                           | 4974790 DT Hopkins old kiosk site                                                                                                       | 36th St                                       | Virginia Ave                                                                                                                 | Dakota Park by<br>new Rec Center                                                                                                                              |                                   |
|           | UTM           | 4975922                                                                                                          | 4974790                                                                                                                                 | 4976301                                       | 4977808                                                                                                                      | 4978334                                                                                                                                                       |                                   |
|           | GPS           | 15T0466197 4975922                                                                                               | 15T0467596                                                                                                                              | 15T0469020                                    | 15T0469789 4977808 Virginia Ave                                                                                              | 15T0471201                                                                                                                                                    |                                   |
| Direction | 誘             | 59                                                                                                               | 30                                                                                                                                      | 31                                            | 32                                                                                                                           | 33                                                                                                                                                            | 15k # 7                           |
| Trail     | ₹             | I                                                                                                                | 16                                                                                                                                      | •                                             | 1                                                                                                                            | 4                                                                                                                                                             | Trail Kic                         |
| System    | \$            | •                                                                                                                | 7                                                                                                                                       | L                                             | 7                                                                                                                            | œ                                                                                                                                                             | Note. There is no Trail Kinsk # 7 |
|           | Site          | 53                                                                                                               | 30                                                                                                                                      | ઝ                                             | 32                                                                                                                           | ĸ                                                                                                                                                             | Note.                             |

.

# EXHIBIT A SHEET 10 OF 10

Minneapolis to Hopkins Trail Three Rivers Park District

| 2<br>* • | MPLS, TO  | HOPKINS   | (1)年20人。<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1)<br>(1) | ·          | AILROAD AUTHORITY                                |
|----------|-----------|-----------|--------------------------------------------------------------------------------|------------|--------------------------------------------------|
| م کر     | 2 PERMITE | OIZ FUSKS | PIN COUNTY                                                                     | REGIÓNAL R | AILROAD AUTHORITY                                |
| Í        |           |           |                                                                                |            | 55401-1362 (612) 348-9260<br>FAX: (612) 348-9710 |
|          |           | . PERMIT  |                                                                                | File No.   | 73-33001B                                        |
| V-       |           |           |                                                                                | Permit No. | . 24-06                                          |

Name of Applicant <u>Three Rivers Park District</u>, Permittee, (Address) <u>3000 Xenium Lane</u>, <u>Plymouth, Minnesota 55441</u>, for installation, use, relocation and maintenance of: <u>A regional</u> <u>trail signage program consisting of directional standards (direction signs), individual trail</u> <u>orientation kiosk, system-wide orientation kiosks, and related appurtenances, more or</u> <u>less as shown on Exhibit A</u> (Permitted Facility), at Permittee's sole cost, over, on or under Hennepin County Regional Railroad Authority (HCRRA) property (the "Permitted Property") described as:

That part of the below described property:

- 1) <u>Hennepin County Regional Railroad Authority's Hopkins to Victoria right-of-way,</u> said right-of-way being described on HCRRA Property Map No. 1 (C.R. Doc. No. 5404251), and HCRRA Property Map No. 12 (C.R. Doc. No. 5518920);
- 2) <u>Hennepin County Regional Railroad Authority's Hopkins to Chaska right-of-way, said right-of-way being described on HCRRA Property Maps No.'s 13 through 30 (C.R. Doc. No.'s 189393, 189394, 189395, 189396, 6525334, 6525335, 6525336, 6525337, 6525338, 6525339, 6540289, 6540290, 6540291, 6540292, 6540293, 6540294, 6540295, 6540296);</u>
- 3) <u>Hennepin County Regional Railroad Authority's Hopkins to Minneapolis right-of-way, said right-of-way being described on HCRRA Property Maps No.'s 2 through 6 (C.R. Doc. No.'s 5496762, 5496763, 5503256, 5503257, 5504276), and HCRRA Property Map No. 40 (C.R. Doc. No. 8350163), and HCRRA Property Maps No. 31 (C.R. Doc. No. 6760097),</u>

which generally conforms to the center portion of the corridor and more or less as shown on Exhibit A.

Exhibit A is attached and incorporated by reference in this Permit.

### GENERAL REQUIREMENTS

1. Permittee shall not make changes in the use of this Permit without the permission of HCRRA.

## BOARD OF COMMISSIONERS

Mark Stenglein Secretary

Penny Steele

- 2. Permittee acknowledges and understands that HCRRA at its sole discretion may modify or remove any sign of Permitted Facility placed on the Permitted Property due to future implementation of Light Rail Transit or other transportation improvements, or for any other reason.
- 3. Permittee is responsible to abide by all local, state or federal ordinances or regulations in the exercise of the rights herein given.
- 4. Permittee must protect all existing utilities, including fiber optics, waterways and drainage lines.
- 5. Permittee is responsible for correcting any failures due to settlement, erosion, lack of vegetation growth, rutting, or other problems related to the use of this Permit, at the expense of the Permittee.
- 6. Permittee shall restore all disturbed areas to original or better condition.
- 7. Permittee shall not use, employ, store, dispose of, or otherwise release any hazardous substance or pollutants or contaminants on HCRRA property.
- The cost of this Permit shall be <u>One and 00/100 Dollars (\$1.00)</u>.

### SPECIAL PROVISIONS

- Permittee is aware that underground fiber optic communication cables, in addition to other underground utilities, may have been installed on the Permitted Property, it is the Permittee's sole responsibility, at the Permittee's sole expense, to properly locate and protect these and all utilities.
- 2. At all times during its occupancy of the Permitted Property, Permittee shall be responsible for 100 percent of the expense of maintaining the Permitted Property.
- , 3. Permittee and HCRRA entered into a certain Permit Agreement bearing Agreement No. 73-32001 dated September 1, 1998, as amended with First Amendment to Permit Agreement 73-32001, dated October 3, 2000, on file in the office of HCRRA, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Railroad Authority "Hopkins to Minneapolis Rail Corridor" located in Hennepin County, Minnesota; not withstanding the above and below, other than generally conforming to the center of said Hopkins to Minneapolis Rail Corridor, but not necessarily conforming to the center 16 feet of said Rail Corridor as stated in said Permit Agreement No. 73-32001, Permitted Facility, located more or less as shown on Exhibit A, will conform to and be subject to all other terms, all conditions, rights, and obligations of said Permit Agreement No. 73-32001, especially those pertaining to *Term, Termination, Temporary Nature of Use, Rights Upon Termination, Indemnification, Insurance, Quiet Enjoyment, Environmental Concerns, and Relocation.*

- 4. Permittee and HCRRA entered into a certain Permit Agreement bearing Agreement No. 73-33001, dated July 14, 1992, on file in the office of HCRRA, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Railroad Authority "Hopkins to Chaska Rail Corridor", located in Hennepin and Carver Counties, Minnesota; not withstanding the above and below, other than generally conforming to the center of said Hopkins to Chaska Rail Corridor as stated in said Permit Agreement No. 73-33001, Permitted Facility, located more or less as shown on Exhibit A, will conform to and be subject to all other terms, all conditions, rights, and obligations of said Permit Agreement No. 73-33001, especially those pertaining to *Term, Termination, Temporary Nature of Use, Rights Upon Termination, Indemnification, Insurance, Quiet Enjoyment, Environmental Concerns, and Relocation.*
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accompanying language:

This trail corridor was acquired by the Hennepin County Regional Railroad Authority for future light rail transit use. A cooperative agreement with Three Rivers Park District allows the corridor to be used for interim recreational purposes.

(I, We), the undersigned, herewith accept the terms and conditions of the regulations as laid down by HCRRA and agree to fully comply therewith to the satisfaction of the HCRRA.

Permittee

Date <u>8-30-06</u> Date <u>6/19/06</u> Three Rivers Park District

**HCRRA** 

Date 6

Director, Housing, Transit and Community Works

| ,<br>,<br>, | A State of     | (1450)<br>(11)<br>(11)<br>(11)<br>(11)<br>(11)<br>(11)<br>(11)<br>(1 | · · · · · · · · · · · · · · · · · · · |                                                  |
|-------------|----------------|----------------------------------------------------------------------|---------------------------------------|--------------------------------------------------|
| 5           | · •            | IEPIN COUNTY                                                         | REGIÓNAL RA                           | AILROAD AUTHORITY                                |
|             | 417 North Fift | h Street, Suite 320,                                                 | Minneapolis, MN                       | 55401-1362 (612) 348-9260<br>FAX: (612) 348-9710 |
|             | PERMIT         |                                                                      | File No.                              | 73-33001B                                        |
|             |                |                                                                      | Permit No.                            | 24-06                                            |

Name of Applicant <u>Three Rivers Park District</u>, Permittee, (Address) <u>3000 Xenium Lane</u>, <u>Plymouth, Minnesota 55441</u>, for installation, use, relocation and maintenance of: <u>A regional</u> <u>trail signage program consisting of directional standards (direction signs), individual trail</u> <u>orientation kiosk, system-wide orientation kiosks, and related appurtenances, more or</u> <u>less as shown on Exhibit A</u> (Permitted Facility), at Permittee's sole cost, over, on or under Hennepin County Regional Railroad Authority (HCRRA) property (the "Permitted Property") described as:

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# BOARD OF COMMISSIONERS

Peter McLaughlin Chair Mark Stenglein Secretary Gail Dorfman Treasurer Mike Opat

Randy Johnson

Penny Steele

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- 5. Permittee is responsible for correcting any failures due to settlement, erosion, lack of vegetation growth, rutting, or other problems related to the use of this Permit, at the expense of the Permittee.
- 6. Permittee shall restore all disturbed areas to original or better condition.
- 7. Permittee shall not use, employ, store, dispose of, or otherwise release any hazardous substance or pollutants or contaminants on HCRRA property.
- 8. The cost of this Permit shall be One and 00/100 Dollars (\$1.00).

# SPECIAL PROVISIONS

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- , 3. Permittee and HCRRA entered into a certain Permit Agreement bearing Agreement No. 73-32001 dated September 1, 1998, as amended with First Amendment to Permit Agreement 73-32001, dated October 3, 2000, on file in the office of HCRRA, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Railroad Authority "Hopkins to Minneapolis Rail Corridor" located in Hennepin County, Minnesota; not withstanding the above and below, other than generally conforming to the center of said Hopkins to Minneapolis Rail Corridor, but not necessarily conforming to the center 16 feet of said Rail Corridor as stated in said Permit Agreement No. 73-32001, Permitted Facility, located more or less as shown on Exhibit A, will conform to and be subject to all other terms, all conditions, rights, and obligations of said Permit Agreement No. 73-32001, especially those pertaining to Term, Termination, Temporary Nature of Use, Rights Upon Termination, Indemnification, Insurance, Quiet Enjoyment, Environmental Concerns, and Relocation.

- 4. Permittee and HCRRA entered into a certain Permit Agreement bearing Agreement No. 73-33001, dated July 14, 1992, on file in the office of HCRRA, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Railroad Authority "Hopkins to Chaska Rail Corridor", located in Hennepin and Carver Counties, Minnesota; not withstanding the above and below, other than generally conforming to the center of said Hopkins to Chaska Rail Corridor as stated in said Permit Agreement No. 73-33001, Permitted Facility, located more or less as shown on Exhibit A, will conform to and be subject to all other terms, all conditions, rights, and obligations of said Permit Agreement No. 73-33001, especially those pertaining to *Term, Termination, Temporary Nature of Use, Rights Upon Termination, Indemnification, Insurance, Quiet Enjoyment, Environmental Concerns, and Relocation.*
- 5. Permittee and HCRRA entered into a certain Permit Agreement bearing Agreement No. 73-34001, dated July 14, 1992, on file in the office of HCRRA, for the right to construct and operate a temporary trail on property commonly described as the Hennepin County Regional Railroad Authority "Hopkins to Victoria Rail Corridor", located in Hennepin and Carver Counties, Minnesota; not withstanding the above and below, other than generally conforming to the center of said Hopkins to Victoria Rail Corridor as stated in said Permit Agreement No. 73-34001, Permitted Facility, located more or less as shown on Exhibit A, will conform to and be subject to all other terms, all conditions, rights, and obligations of said Permit Agreement No. 73-34001, especially those pertaining to *Term, Termination, Temporary Nature of Use, Rights Upon Termination, Indemnification, Insurance, Quiet Enjoyment, Environmental Concerns, and Relocation.*
- 6. Permittee agrees to include the Hennepin County logo on the *Trail Kiosks* with the following accompanying language:

This trail corridor was acquired by the Hennepin County Regional Railroad Authority for future light rail transit use. A cooperative agreement with Three Rivers Park District allows the corridor to be used for interim recreational purposes.

(I, We), the undersigned, herewith accept the terms and conditions of the regulations as laid down by HCRRA and agree to fully comply therewith to the satisfaction of the HCRRA.

Permittee

Date <u>8-30-06</u> Date <u>6/15/06</u> Three Rivers Park District

**HCRRA** 

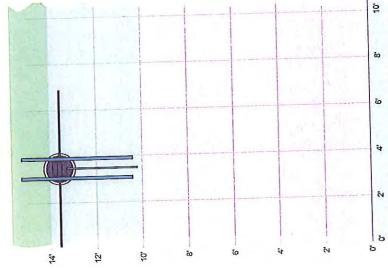
Date\_6/

Director, Housing, Transit and Community Works

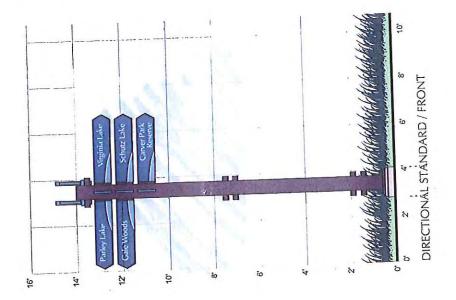
DIRECTIONAL STANDARD (DS)

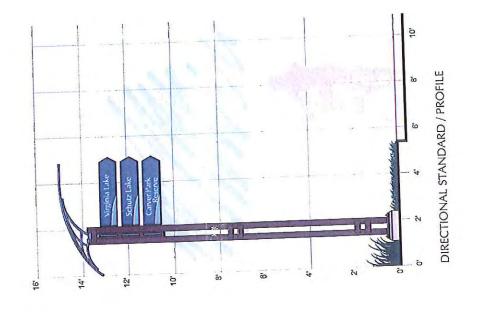
ILLUSTRATIONS

-





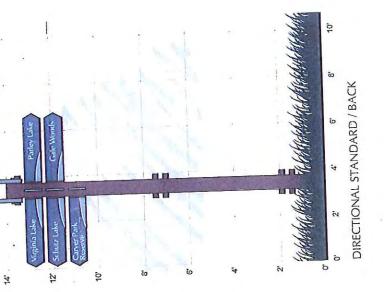




4 E E

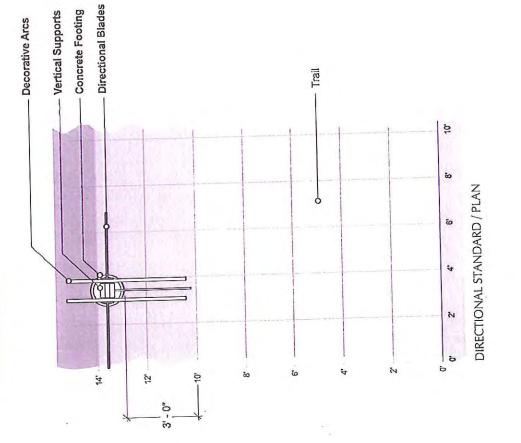


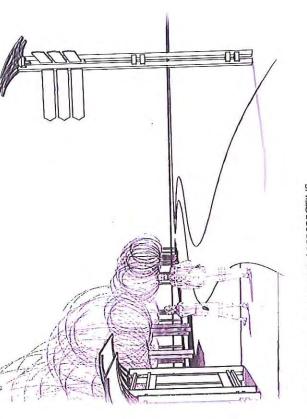




DEVELOPMENT DIRECTI

# DIRECTIONAL STANDARD (DS)





DIRECTIONAL STANDARD / PERSPECTIVE

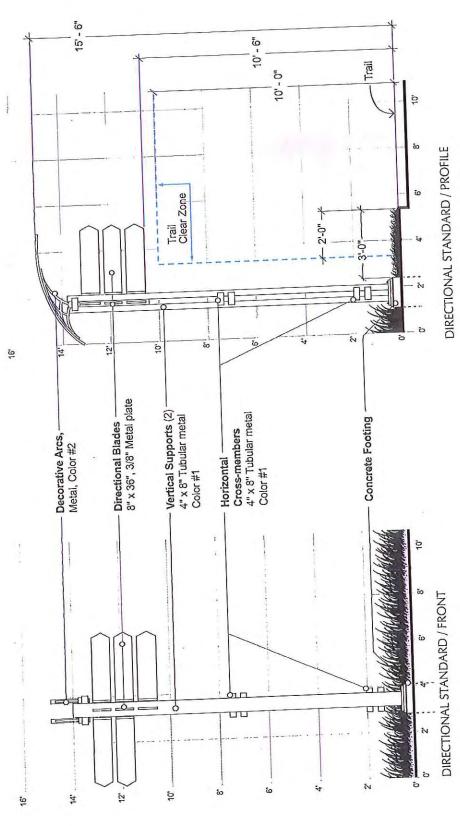
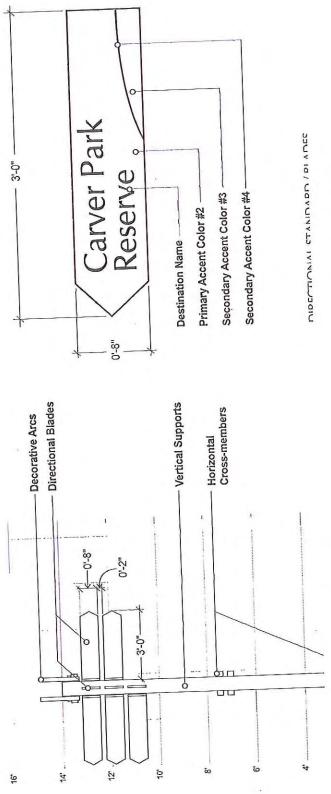


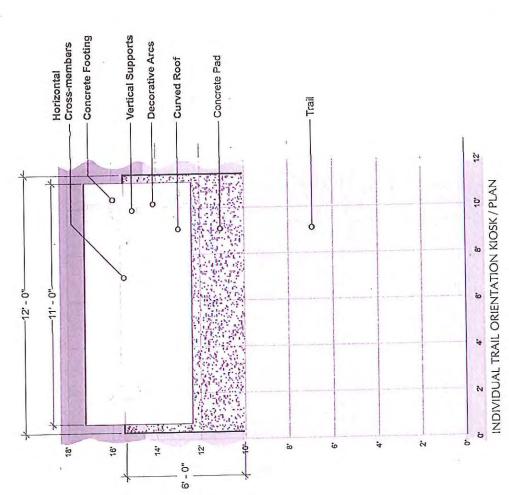
EXHIBIT A SHEET 2 OF 10

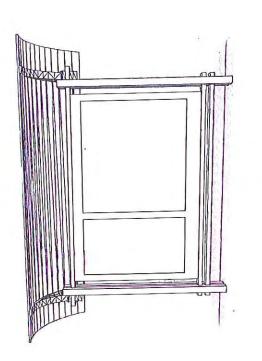


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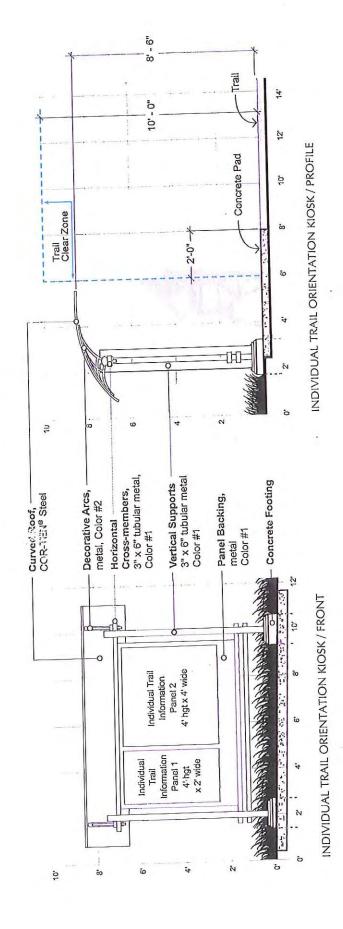
DESIGN

# INDIVIDUAL TRAIL ORIENTATION KIOSK (IT)

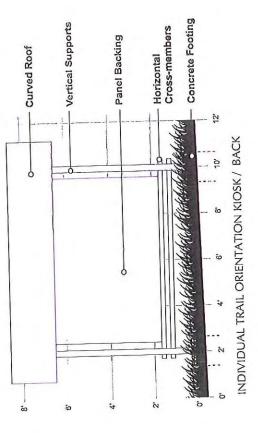






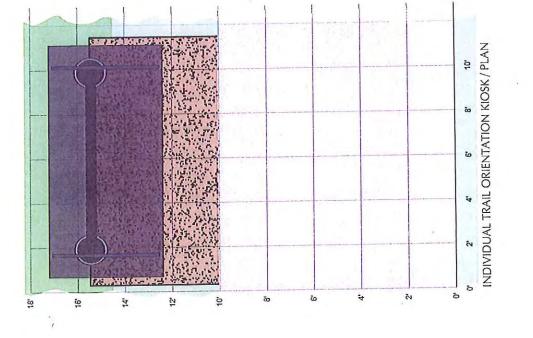


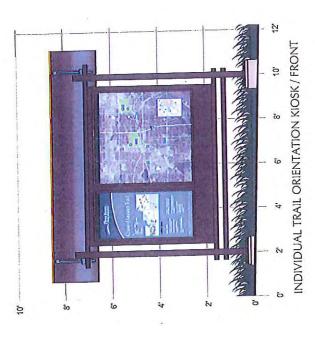
# EXHIBIT A SHEET 3 OF 10

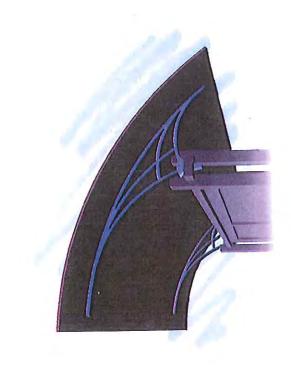




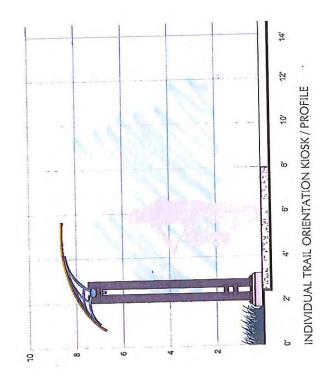
# INDIVIDUAL TRAIL ORIENTATION KIOSK (IT)



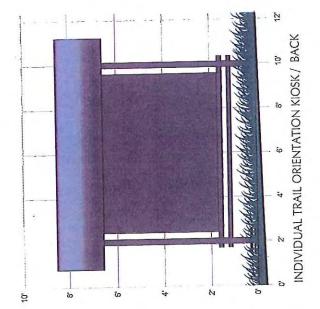




INDIVIDUAL TRAIL ORIENTATION KIOSK / ROOF SUPPORT DETAIL

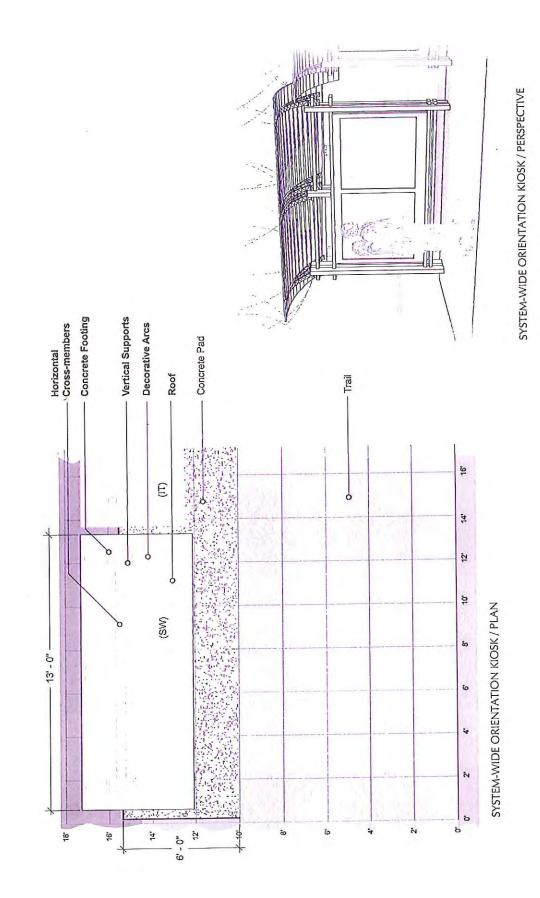


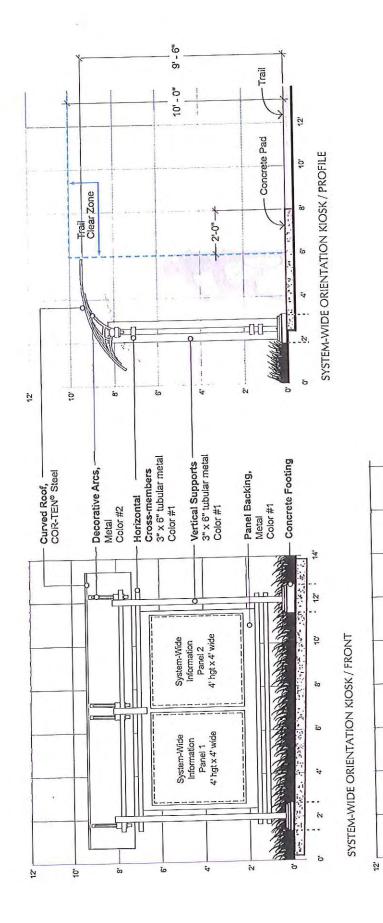
# EXHIBIT A SHEET 4 OF 10



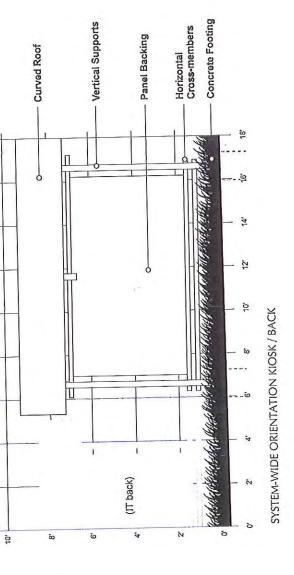
DESIGN

# SYSTEM-WIDE ORIENTATION KIOSK (SW)



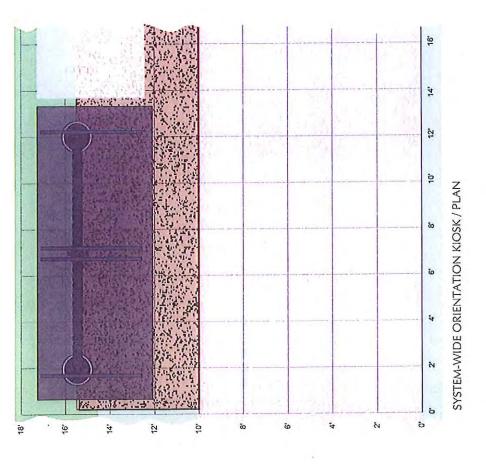


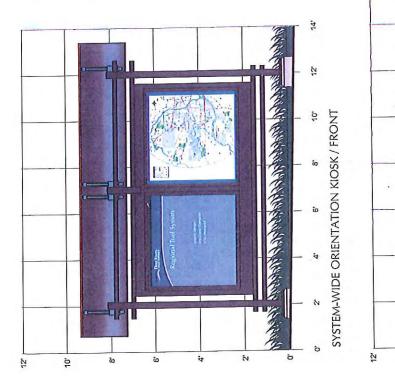
# **EXHIBIT A** SHEET 5 OF 10

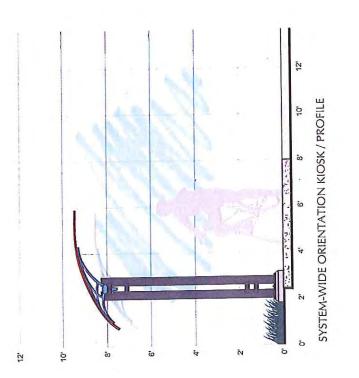


ILLUSTRATION

SYSTEM-WIDE ORIENTATION KIOSK (SW)

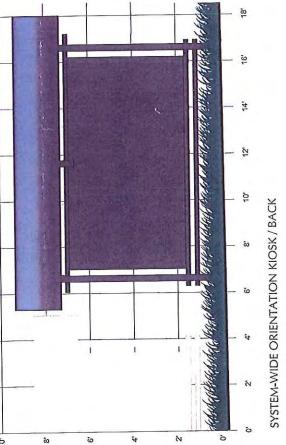




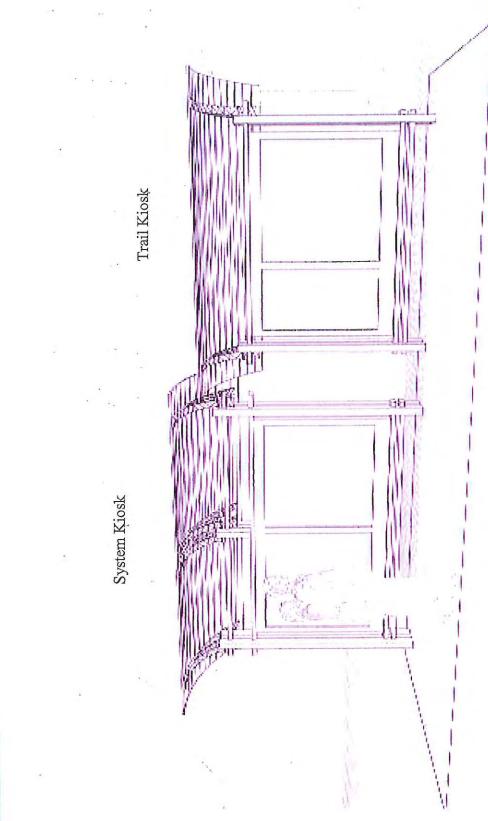


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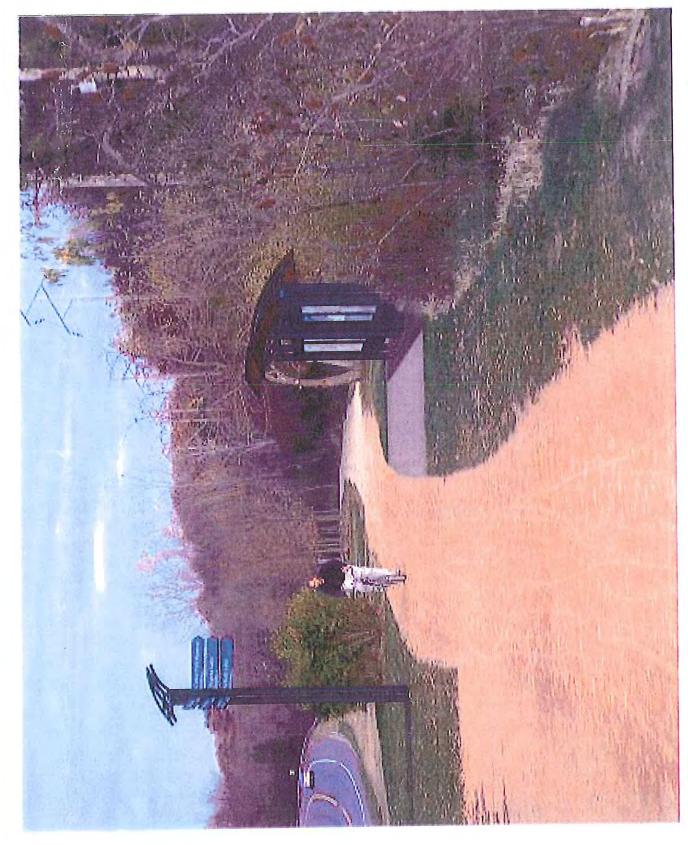
# EXHIBIT A SHEET 6 OF 10





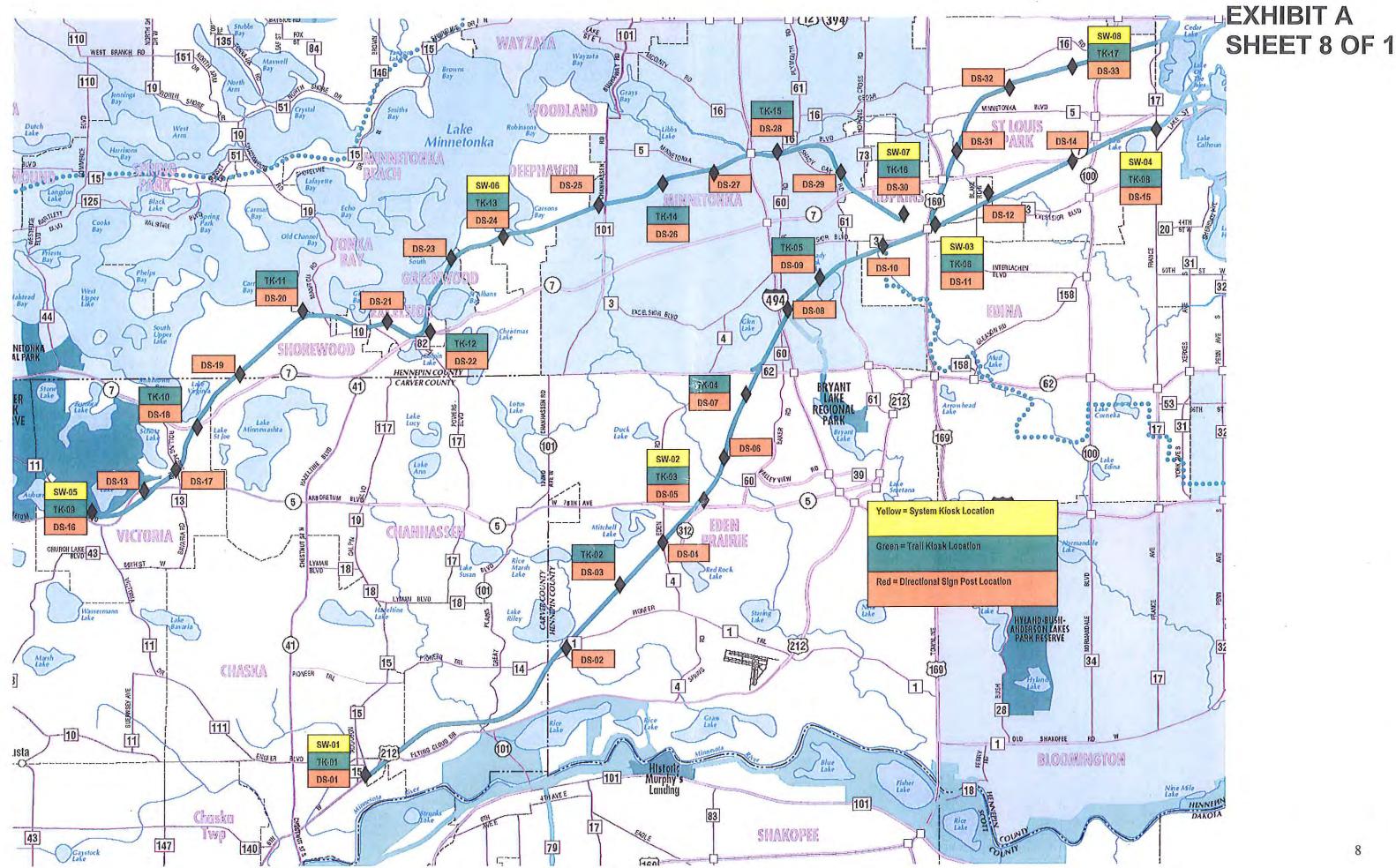


APPROACH A



# EXHIBIT A SHEET 7 OF 10

TICH FLAM



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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image: Instruction of the provided cable part mode to moder V sign.           Flat         Will need to moder V sign.           Flat         Directorable metadore faith with y 212 construction is completed.           Flat         Denour database metador. No blands cable metador. No blands cable metador. No blands cable metador. No blands cable metador. No blands cable metador. No bland cable metador. No blands cable metador. No blands cable metador. No blands cable metador. No blands cable metador. No blands cable metador. No blands cable metador. No bland cable metador. No bland cable metador. No bland cable metador. No bland cable metador. No bland cable metador. No bland cable metador. No bland cable metador. No bland cable metador. Plat.           Flat         Metad directional signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral signs along south saying directoral sout f foor.           Flat         Mips border         Mips border           Flat         Mips border         Mips border           Flat         Mips border         Mips border         Mips border           Flat         Mips border         Mips border         Mips border         Mips border           Flat         Mips border         Mips border         Mips borde                                                                                                                                                                                                                                                                                       | 1 1 15T0456391 4962406 trailhead parking At e loca - 2 15T0459500 4964597 Rilevi t Rd 2016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1 15T0456391 4962406 trailhead parking<br>lot<br>2 15TD459500 4964597 Rilev i k Rd | 15T0456391 4962406 trailhead parking<br>lot<br>15T0459500 4964597 Rilev i k Rd | 4962406 trailhead parking<br>lot<br>Rilev I k Rd | trailhead parking<br>lot<br>Rilev I k Rd | trailhead parking At 6<br>lot<br>Rilav i k Rd 2016                         | At 6<br>loce                                                                            | At end of parking lot where old kiosk is<br>located.<br>20 feet weet of road on south side of trail                                                                      |                                                       | Staff to rip out old kiosk and move benches.                                                                                                                                                                                                                            |
| Flat         De outrinden instant           Flat         De outrinden instant           Flat         Swundl hivy 212 construction is completed.           Flat         Swundl hivy 212 construction is completed.           Flat         Need directional bisde pointing south saying directional bisde pointing south saying directional signs and sty in resolution south saying directional signs and sty in resolution south saying directional signs and sty in resolution south saying directional signs and sty in resolution to control the flat           Flat         Need directional signs and sty in resolution to control the flat directional signs and sty in resolution to control the flat directional signs and sty in resolution to control the flat hield bisting to control the flat hield bisting to control the hield to state this one carefully and the bisting in the state structure in the bisting to control the hield to state this one carefully and bisting to content along the state this one carefully and bisting to content along the state structure in the bisting to content along the state this on to contents. And sto is content, and st vin the state structure in the bisting to content along the state structure in the bisting state structure in the bisting state structure in the bisting state structure in the bisting state structure is and st vin the state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state state                                                                   | 15T0460431 4965579 Dell Rd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3 15T0460431 4965579 Dell Rd                                                       | 15T0460431 4965579 Dell Rd                                                     | 4965579 Dell Rd                                  | Dell Rd                                  | Dell Rd of trail                                                           | 12 fee                                                                                  | t east of road on sourt side of uair.<br>It east of road. Klosk on south side<br>(Center on "no motor" sign).                                                            | Flat                                                  | Will need to move No motor V sign.<br>Directional post needs careful placement due                                                                                                                                                                                      |
| Flat         Flat           Flat         Need directional blade poining south saying           Plat         Need directional blade poining south saying           Plat         Need directional blade poining south saying           Plat         Need directional blade poining south saying           Plat         Need directional blade poining south saying           Plat         Need directional blade poining south saying           Plat         Need directional blade poining south saying           Plat         Need directional blade poining south saying           Plat         Need directional blade poining south saying           Plat         Part of Deporter along that ture into a small part of the pecine directional signs along Advarts part with the trait.           Plat         Part of Deporter along the brancel           Flat         Mips bronder           Flat         Mips bronder           Flat         Night bronder           Plat         Pertodo for map, that is wrip this is out of a sout of the brancelinal stime or the order along the trait.           I'drop for DS         Staff will need to state this one carefully and writ is wrip this is out of a sout of a state this one carefully and writ is wrip this is out of a sout of a state this one carefully and the order for the period on map. That all the order of the period on map. That all the order of the order of the order oreorecarefully and writ of the order or or oredition. <td>- 4 15T0461682 4966898 Eden Prairie Rd East si sidewa</td> <td>4 15T0461682 4966898 Eden Prairie Rd</td> <td>15T0461682 4966898 Eden Prairie Rd</td> <td>4966898 Eden Prairie Rd</td> <td>Eden Prairie Rd</td> <td></td> <td>East si<br/>sidewa</td> <td>de of road. 25 feet east of<br/>lk. South side of trail.</td> <td>Flat</td> <td>to burred cable in area.<br/>Detour blade needed. No blades pointing<br/>SW until Hwy 212 construction is completed.</td> | - 4 15T0461682 4966898 Eden Prairie Rd East si sidewa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4 15T0461682 4966898 Eden Prairie Rd                                               | 15T0461682 4966898 Eden Prairie Rd                                             | 4966898 Eden Prairie Rd                          | Eden Prairie Rd                          |                                                                            | East si<br>sidewa                                                                       | de of road. 25 feet east of<br>lk. South side of trail.                                                                                                                  | Flat                                                  | to burred cable in area.<br>Detour blade needed. No blades pointing<br>SW until Hwy 212 construction is completed.                                                                                                                                                      |
| Flat         Flat           1 foot fill         Need direct/oral blace pointing south saying needed           1 foot fill         Need direct/oral blace pointing south saying shared armal needed as the say in the direct on al syns and provide saying and the direct on al syns and provide saying and the direct on al syns and provide saying and the direct on al syns and provide saying and the direct on al syns and provide saying and the location)           2 to 3 foot 3fil         2 to 3 foot 3fil           2 to 3 foot 3fil         Part of Depot termodel           1 earl of the cost on apply and with sight         Najs border           1 fait         Part of Depot termodel           1 drop for DS         Description behind Klosk for time being may cost and and and and and and and and and and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3 5 15T0462587 4967769 Venture Lane Venture behind)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5 15T0462587 4967769 Venture Lane                                                  | 15T0462587 4967769 Venture Lane                                                | 4967769 Venture Lane                             | Venture Lane                             |                                                                            | Place ki<br>System<br>Venture<br>behind)<br>75 feet                                     | iosks on south side of trail.<br>Kiosk starts 65 feet south of<br>Ln (aligned with third small tree<br>. Directional on north side of trail<br>from edge of road.        | Flat                                                  |                                                                                                                                                                                                                                                                         |
| 1 foot fill<br>needed         1           1 foot fill<br>needed         Need directional blade pointing south saying<br>directoral signs bank, Alon Shoan Alon<br>directoral signs and that locations<br>are all parking tot @ Chertwater, and thin<br>trait 200 yards past time locations<br>in the sign at that locations<br>mail parking tot @ Chertwater, and thin<br>trait 200 yards past time locations<br>mail parking tot @ Chertwater, and thin<br>trait 200 yards past time location           2 to 3 foot Till<br>needed         Part of Depot remodel           Flat         Part of Depot remodel           Flat         Mola border           Flat         Mola border           Flat         Noted to cherk status of new local trail behind Klosk<br>cabout 1 foot.           Flat         Mola border           Flat         Mola border           Flat         Mola border           Flat         Mola border           Flat         Mola border           Flat         Mola border           Flat         Leave of kick for time being mey<br>treat at the carefully and<br>with concrete bad of sign. Want to direct<br>people to use turnel, not it wy cossing.           Flat         Have a blade point to DT Exosision.           Flat         Alon of kick - move<br>dosk. 1 foot           Mola for<br>dosk. 1 foot         People to use turnel, not of sign. Want to direct<br>people to use turnel, not it with a cut of<br>dosk. 1 foot           Flat         Shaff for<br>dosk. 1 foot                                                                                                                                                                                                                                                                                                                                                                                                                                                            | - 6 15T0463139 4968604 Valleyview Rd east of V east of V east of V east of V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 15T0463139 4968604 Valleyview Rd                                                   | 15T0463139 4968604 Valleyview Rd                                               | 4968604 Valleyview Rd<br>bridge                  | Valleyview Rd<br>bridge                  |                                                                            | Place in<br>east of V<br>and cent                                                       | Y between local trail connection<br>alleyview. 15 feet from end of Y<br>ered in Y.                                                                                       | ł                                                     |                                                                                                                                                                                                                                                                         |
| Read         Need directional blace pointing south saying           Flat         Need directional signs and store Allow and at Y in<br>provide signs and store and at Y in<br>real 200 yards past turn (replace Hermeph)           2 to 3 foot fill         Perind Signs and the location)           Flat         Perind Signs and the location)           Flat         Perind Signs and the location           Flat         Perind Signs and the location)           Flat         Perind Signs and the location           Flat         Need directional signs and the location           Flat         Need direction and kick for three being may real works           Flat         Mpls bonder           Flat         Mpls bonder           Flat         Need direction all sign to a sourt rail works           Flat         Mpls bonder           Flat         Mpls bonder           Flat         Mpls bonder           Flat         Not for the being may real works           foop         Staff will need to state state sout of sign. Want to all works           food         Staff meeds to for onder state sout of sign. Staff           food for         Perint to DT Excelsion.           food         Staff meeds to for out old kick for three being may real works           food         Staff will need to state sure sout of sign. Want so at of sign                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4     7     15T0463724     4970355     Edenvale Bivd     Teeded       from kioc     from kioc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 7 15T0463724 4970356 Edenvale Bivd                                                 | 15T0463724 4970356 Edenvale Bivd                                               | 4970355 Edenvale Bivd                            | Edenvale Bivd                            |                                                                            | East of E<br>trail 35 ft<br>needed 1<br>from kios<br>for that.                          | cdenvale. Kiosk on north side of<br>set in from road edge. 1 foot fill<br>for kiosk. Directional sign across<br>sk - also 35 feet from road. Flat                        | 1 foot fill<br>needed                                 |                                                                                                                                                                                                                                                                         |
| 2 bs 3 foot fill<br>needed     2 bs 3 foot fill<br>rededed       Flat     verfty ROW       Flat     verfty ROW       Flat     Part of Depot remodel       Flat     Part of Depot remodel       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       Flat     Mpls border       foot     Decetion       foot     Decetion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion       foot     Decotion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | - 8 15T0464852 4972472 Roland Road East side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 8 15T0464852 4972472 Roland Road                                                   | 15T0464852 4972472 Roland Road                                                 | 4972472 Roland Road                              | Roland Road                              |                                                                            | East side<br>north side                                                                 | e of road. 20 feet east of curb on e of trail                                                                                                                            | Flat                                                  | Need directional blade pointing south saying<br>"Bryant Lake Park" Also need small<br>directional signs along Roland, at turn into<br>small parking lot @ Clearwater, and at Y in<br>trail 200 yards past turn (replace Hennepin<br>Parks sign at that location)        |
| Flat         werfy ROW           Flat         Part of Depot remodel           Flat         Part of Depot remodel           Flat         Part of Depot remodel           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           from box         Check status of new local trail kols.           from box         Check status of new local trail wols.           from box         Check status of new local trail wols.           from box         Check status of new local trail wols.           from box         Check status of new local trail wols.           frat         Vidop for DS.           frat         Blace do nmap, trait is why this is out of staff           frat         Have a blade point to DT Excelsion.           fracks, flat for         People to use turnel, nort Hwy crosslig.           flat         Have a blade point to DT Excelsion.           flat         Have a blade po                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 9 15T0465595 4973217 Dominick Rd                                                   | 15T0465595 4973217 Dominick Rd                                                 | 4973217 Dominick Rd                              | Dominick Rd                              |                                                                            | East of D<br>85 ' east<br>on same                                                       | ominick Rd. North side of trail<br>from road. Directional and kiosk<br>side with DS closest to road.                                                                     |                                                       |                                                                                                                                                                                                                                                                         |
| Flat         Part of Depot remodel           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Flat         Mpls border           Statt         Check status of new local trail behind Klosk           Blat         Check status of new local trail behind Klosk           Statt         Valually replace with Park trail klosk. Statt           I' drop         Leave old kiosk for time being may           Flat         Valuation this new to Directional           1' drop for DS         With concrete pad of sign. Not trail klosk. Statt           1' drop         Staff will need to stake this one carefully and           Mill need to a make unset un trail.         Mill need to a make unset un trail.           1' drop for DS         With concrete pad of sign. Words in the trail.           1' drop for DS         Mill need to a take this one carefully and           Klosk, 1 foot         Mill need to tuse turnel, not Hwy crossing.      <                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 10 15T0467275 4974086 crossing in<br>Hopkins                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10 15T0467275 4974086 crossing in<br>Hopkins                                       | 11th Ave<br>15T0467275 4974086 crossing in<br>Hopkins                          | 4974086 crossing in<br>Hopkins                   | 11th Ave<br>crossing in<br>Hopkins       |                                                                            | South sid                                                                               | e of trail. 15' east of sidewalk.                                                                                                                                        | Flat                                                  |                                                                                                                                                                                                                                                                         |
| Flat         Mpls border           Flat         Mpls border           Flat, with slight         Check status of new local trail behind Ktosk abuut 1 foot.           Leave old kicsk for time being may bender the extended of the perturbation being may be control be control benchind in the extension.         Staff will need to stake this one carefully and geographic order along the trail.           1 drop         geographic order along the trail.         Mont to direct per the order along the trail.           1 drop         geographic order along the trail.         Mant to direct per the order along the trail.           1 drop         geographic order along the trail.         Mant to direct per the order along the trail.           1 drop for DS         Staff will need to stake this one carefully and with cources pad of sign. Want to direct per the order along the trail.           1 drop for DS         Staff will need to use turnel.         Mant to direct per the order along the trail.           1 drop for DS         Staff mult need to the aburd of the order along the trail.         Mant to direct per the order along the trail.           1 drop for DS         Mant to direct per the order along the trail.         Mant to direct per the order along the trail.           1 drop for DS         Mant to direct proper to use turnel.         Mant to direct per the order along the trail.         Mant to direct per the order along the trail.           1 drop for DS         Mant to dinect per the order along the                                                                                                                                                                                                                                                                                                                                                                                                 | Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1                                            | па па норкпs Uepot<br>15T0469932 4975229 Blake Road                            | 4975229 Blake Road                               | Hopkins Depot<br>Blake Road              | Q                                                                          | Nate has (<br>East of Bi<br>Minnehah<br>benches.                                        | exact location.<br>ake Road but west of<br>a Creek by existing park<br>10 feet west of existing park<br>on south side                                                    | Flat<br>Flat                                          | Part of Depot remodel                                                                                                                                                                                                                                                   |
| Flat     Mpls border       Flat, with slight<br>rise at back of<br>about 1 foot.     Check status of new local trail behind Klosk<br>about 1 foot.       Flat, with slight<br>rise at back of<br>about 1 foot.     Check status of new local trail behind Klosk<br>eventually replace with Park trail klosk. Staff<br>to remove Buckthom bush next to Directional<br>sign location. Original Site 13 was wrongly<br>placed on map, that is with this is out of<br>geographic order atong the trail.       1' drop     Staff will need to stake this one carefully and<br>will need to do make sure spur trail works<br>will need to do make sure spur trail works<br>will need to to make sure spur trail works<br>flat       Flat     Have a blade point to DT Excelsion.       1 foot flitor     Staff needs to rip out old klosk - move<br>drop for DS.       Flat     Have a blade point to DT Excelsion.       1 foot drop     Staff needs to rip out old klosk - move<br>drop for DS.       Flat     Have a blade point to DT Excelsion.       1 foot drop -<br>field     Staff needs to rip out old klosk - move<br>drop for DS.       1 foot drop -<br>needed for<br>Klosk, flat for<br>DS.     Staff needs to rip out old klosk - move<br>drop for DS.       1 foot drop -<br>needed for<br>Klosk.     Blade pointing north to Mika City Hall and<br>Flat       1.5 feet fill     I.5 feet fill       1.5 feet fill     I.5 feet fill       1.5 feet fill     I.5 feet fill       1.5 feet fill     I.5 feet fill       1.5 feet fill     I.5 feet fill       1.5 feet fill     I.5 feet fill       <                                                                                                                                                                                                                                                                                                                                                                    | - 14 15T0471947 4976183 Wooddale East of W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 15T0471947 4976183 Wooddale                                                        | 15T0471947 4976183 Wooddale                                                    | 4976183 Wooddale                                 | Wooddale                                 |                                                                            | East of W<br>feet east s                                                                | ooddale. South side of trail. 15<br>start of trail edge.                                                                                                                 | Flat                                                  |                                                                                                                                                                                                                                                                         |
| Flat, with slight<br>rise at bactor<br>about 1 toot.     Check status of new local trail behind Klosk<br>about 1 toot.       Leave old kiosk for time being, may<br>ventually replaced on map, that is why this is out of<br>geographic order along the trail.       1 <sup>d</sup> drop     Staff will need to stake this one carefully and<br>will need to to map, that is why this is out of<br>geographic order along the trail.       1 <sup>d</sup> drop     Staff will need to stake this one carefully and<br>will need to to map, that is why this is out of<br>geographic order along the trail.       1 <sup>d</sup> drop     Staff will need to stake this one carefully and<br>will need to to map want to direct<br>people to use turnel, not Hwy crossing.       Flat     Have a blade point to DT Excelsion.       1 foot fill for<br>bosk, flat for<br>DS.     Staff needs to rip out old kiosk- move<br>directorial sign.       Flat     Have a blade point to DT Excelsion.       1 foot fill for<br>klosk, flat for<br>DS.     Staff needs to rip out old klosk- move<br>directorial sign.       Flat     Have a blade point to DT Excelsion.       Flat     Have a blade point to DT Excelsion.       Flat     Have a blade point to DT Excelsion.       Flat     Have a blade point to DT Excelsion.       Flat     Have a blade point to DT Excelsion.       Flat     Have a blade point to DT Excelsion.       Flat     Have a blade point to DT Excelsion.       Flat     Have a blade point to DT Excelsion.       Flat     Blade pointing north to Burwell house site.                                                                                                                                                                                                                                                                                                                                                                                 | 8 15 15T0474027 4976957 France Ave spur pavement<br>trail/Mpls border K, the Dire west.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 15 15T0474027 4976957 France Ave spur<br>trail/Mpls border                         | 15T0474027 4976957 France Ave spur<br>trail/Mpls border                        | 4976957 France Ave spur<br>trail/Mpls border     | France Ave spur<br>trail/Mpls border     |                                                                            | South side<br>pavement<br>K, the Dire<br>west.                                          | : of trail. Start where trail<br>changes. System K, then Trail<br>ctional sign in a row moving                                                                           |                                                       | Mpls border                                                                                                                                                                                                                                                             |
| Flat     Leave old ktosk for time being, may<br>eventually replace with Park trail ktosk. Staff<br>to remove Buckthorn bush next to Directional<br>sign location. Original Site 13 was wrongly<br>placed on map, trails with this is out of<br>geographic order along the trail.       1' drop     Staff will need to stake this one carefully and<br>will need to or map, trail works<br>will noncrite pad of sign. What to direct<br>people to use tunnel, not Hwy crossing.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Have a blade point to DT Excelsior.       Flat     Benches across trail on each side of new<br>directional sign.       Flat     Benches across trail on each side of new<br>directional sign.       Flat     Blade pointing north to Mitka City Hall and<br>Services.       Flat     Blade pointing north to Burwell house site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 9 16 15T0447768 4967679 DT Vicoria by down from north side, Amphitheater Directional trail kiosk.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16 15T0447768 4967679 DT Vicoria by<br>THRP<br>Amphitheater                        | 15T0447768 4967679 DT Vicoria by<br>THRP<br>Amphitheater                       | 4967679 DT Vicoria by<br>THRP<br>Amphitheater    | DT Vicoria by<br>THRP<br>Amphitheater    |                                                                            | 25 feet wee<br>down from<br>north side,<br>Directional<br>trail kiosk.                  | st of sidewalk/path coming<br>main street. Locate kiosks on<br>with System K farthest east.<br>sign on south side across from                                            | Flat, with slight<br>rise at back of<br>about 1 foot. | Check status of new local trail behind Klosk location.                                                                                                                                                                                                                  |
| 1' drop     1' drop       1' drop     Staff will need to stake this one carefully and<br>will need to do make sure spur trail works<br>will need to do make sure spur trail works<br>will concrete pad of sign. Want to direct<br>people to use tunnel, not Hwy crossing.       Flat     3 feet fill<br>needed for<br>Klosk, 1 foot<br>drop for DS.       Flat     Have a blade point to DT Excelsior.       1 foot fill for<br>klosk, flat for<br>SS.     1 foot fill for<br>benches across trail on each side of new<br>directoral sign.       Flat     Have a blade point to DT Excelsior.       1 foot drop -<br>benches across trail on each side of new<br>directoral sign.       Flat     Have a blade point to DT Excelsior.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | - 13 15T0448808 4968500 Old kiosk site 10 feet we west of Park Rd side of trai                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 15T0448808 4968500 Old kiosk site<br>west of Park Rd                               | 15T0448808 4968500 Old kiosk site<br>west of Park Rd                           | 4968500 Old kiosk site west of Park Rd           | Old kiosk site<br>west of Park Rd        |                                                                            | 10 feet we<br>side of trai                                                              | st of park trail access on north<br>I.                                                                                                                                   | Flat                                                  | Leave old kiosk for time being, may<br>eventually replace with Park trail kiosk. Staff<br>to remove Buckthorn bush next to Directional<br>sign location. Original Site 13 was wrongly<br>placed on map, that is why this is out of<br>geographic order along the trail. |
| 1' drop for DS     Staff will need to stake this one carefully and<br>will need to do make sure spur trail works<br>will concrete pad of sign. Want to direct<br>people to use tunnel, not Hwy crossing.       Flat     Name a blade point to DT Excelsior.       3 feet fill<br>needed for<br>klosk, 1 foot<br>drop for DS.     Have a blade point to DT Excelsior.       1 foot fill for<br>klosk, flat for<br>DS.     A foot drop -<br>need sign<br>extension.       1 foot fill for<br>klosk, flat for<br>bosk.     Staff needs to rip out old klosk - move<br>directional sign.       1.5 feet fill<br>needed for<br>klosk.     Blade pointing north to Mitka City Hall and<br>services.       Flat     Blade pointing north to Burweil house site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | - 17 15T0449513 4968975 Rolling Acres Rd South side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 17 15T0449513 4968975 Rolling Acres Rd                                             | 15T0449513 4968975 Rolling Acres Rd                                            | 4968975 Rolling Acres Rd                         | Rolling Acres Rd                         |                                                                            | East of roa<br>South side                                                               | id, 10 feet east of spur trail.<br>of trail                                                                                                                              | 1' drop                                               |                                                                                                                                                                                                                                                                         |
| Flat     Bilate       3 feet fill     needed for       3 feet fill     needed for       Kiosk; 1 foot     Have a blade point to DT Excelsion.       1 foot fill for     Have a blade point to DT Excelsion.       1 foot drop     A foot drop -       need sign     A foot drop -       active     Staff needs to rip out old kiosk - move       Flat     Benches across trail on each side of new       directional sign.     1.5 feet fill       needed for     Kiosk.       Flat     Blade pointing north to Mitka City Hall and Services.       Flat     Blade pointing north to Burwell house site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 15T0450207 4970051 East side of Hwy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 18 15T0450207 4970051 East side of Hwy                                             | 15T0450207 4970051 East side of Hwy                                            | 4970051 East side of Hwy                         | East side of Hwy<br>.7                   | East side of Hwy that runs to<br>7 going 8 fee<br>north side<br>foot drop. | Start trail k<br>kiosk postt<br>that runs to<br>going 8 fet<br>north side<br>foot drop. | tiosk even with blacktop. Locate<br>s on south edge of spur trail<br>o Hwy 7, with concrete pad<br>at into spur trail. Directional on<br>of regular trail, which has a 1 | 1 1                                                   | Staff will need to stake this one carefully and will need to do make sure spur trail works with concrete pad of sign. Want to direct people to use tunnel, not Hwy crossing.                                                                                            |
| Interact I foot     Have a blade point to DT Excelsior.       flat     Have a blade point to DT Excelsior.       1 foot fill for     Kiosk, flat for       1 foot fill for     Kiosk, flat for       1 foot fill for     A foot drop -       is kiosk, flat for     Staff needs to rip out old kiosk - move       1 foot drop -     needs to rip out old kiosk - move       1 foot drop -     Incertional sign.       1 foot drop -     Blade pointing north to Mtka City Hall and services.       Flat     Blade pointing north to Burwell house site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 19 15T0451037 4971076 West 62nd St                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 19 15T0451037 4971076 West 62nd St                                                 | 15T0451037 4971076 West 62nd St                                                | 4971076 West 62nd St<br>Europo                   | West 62nd St<br>Euroica                  |                                                                            | 20 feet we                                                                              |                                                                                                                                                                          | Flat<br>3 feet fill                                   |                                                                                                                                                                                                                                                                         |
| Flat     Have a blade point to DT Excelsior.       1 foot fill for<br>kiosk, flat for<br>DS.     1 foot fill for<br>kiosk, flat for       4 foot drop -<br>need sign<br>extension.     4 foot drop -<br>need sign<br>extension.       2 fat     Staff needs to rip out old kiosk - move<br>benches across trail on each side of new<br>directional sign.       Flat     Blade pointing north to Mitka City Hall and<br>Flat       Flat     Blade pointing north to Burweil house site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 11         20         15T0452215         4972102         Eureka         90 teet wee           Rd/Smithtown         of trail (kios                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 20 15T0452215 4972102 Eureka<br>Rd/Smithtown                                       | 15T0452215 4972102 Eureka<br>Rd/Smithtown                                      | 4972102 Eureka<br>Rd/Smithtown                   | Eureka<br>Rd/Smithtown                   |                                                                            | 90 teet wes<br>of trail (kios                                                           |                                                                                                                                                                          | needed for<br>Kiosk; 1 foot<br>drop for DS.           |                                                                                                                                                                                                                                                                         |
| 1 foot fill for<br>kiosk, flat for<br>DS.       1 foot fill for<br>kiosk, flat for<br>DS.         4 foot drop -<br>need sign<br>extension.       4 foot drop -<br>need sign<br>extension.         1 flat       Staff needs to rip out old kiosk - move<br>benches across trail on each side of new<br>directional sign.         Flat       Staff needs to rip out old kiosk - move<br>directional sign.         Flat       Blade pointing north to Mitka City Hall and<br>Flat         Flat       Blade pointing north to Burwell house site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | - 21 15T0455040 4972294 Water Street in West of West of West of West of trail. Sta                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 21 15T0455040 4972294 Water Street in DT Excelsion                                 | 15T0455040 4972294 Water Street in DT Excelsion                                | 4972294 Water Street in DT Excelsion             | Water Street in<br>DT Excelsior          | c                                                                          | West of Wa<br>of trail. Sta<br>side.                                                    |                                                                                                                                                                          | Flat                                                  | Have a blade point to DT Excelsior.                                                                                                                                                                                                                                     |
| 4 foot drop -         need sign         extension.         Staff needs to rip out old kiosk - move         benches across trail on each side of new         directional sign.         1.5 feet fill         needd for         Klosk.         Blade pointing north to Mitka City Hall and         Flat         Blade pointing north to Burwell house site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 12         22         15T0455807         4972294         Excelsion Blvd         trail (kiosk) same side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 22 15T0455807 4972294 Excelsior Blvd                                               | 15T0455807 4972294 Excelsior Blvd                                              | 4972294 Excelsior Blvd                           | Excelsior Blvd                           |                                                                            | 50 feet wee<br>trail (kiosk)<br>same side                                               |                                                                                                                                                                          | 1 foot fill for<br>kiosk, flat for<br>DS.             |                                                                                                                                                                                                                                                                         |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 15     28     NA     NA     Shady Oak Rd/     hill east hill east south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site south site sout | 28 NA NA Plymouth Rd                                                               | NA NA Płymouth Rd                                                              | NA Shady Cak Rd/<br>Piymouth Rd                  | Shady Oak Rd/<br>Piymouth Rd             |                                                                            | Place ki<br>hill east<br>south sid                                                      | 1                                                                                                                                                                        | Flat                                                  | Blade pointing north to Burwell house site.                                                                                                                                                                                                                             |

| F                      | `             |                                                                                                                  | · _ · · · · · · · · · · · · · · · · · ·                                                                                                |                                               |                                                                                                                             | · ·                                                                                                                                                          | _                               |
|------------------------|---------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
|                        | Special Notes |                                                                                                                  | Staff to demolish old kiosk, move rules and<br>stop ahead signs, clean up trail in this area to                                        | verify ROW                                    | Need SLP permission                                                                                                         | Site requested by SLP Parks                                                                                                                                  |                                 |
|                        | Site Category | Fiat                                                                                                             | Flat                                                                                                                                   | Flat                                          | Flat                                                                                                                        | Flat                                                                                                                                                         |                                 |
|                        | Description   | South side of road, Directional on south<br>side of trail 20 feet before existing rules<br>and regulations sign. | North side of trail at old kicsk location. All<br>in a row with system kicsk furthest east,<br>then trail kicsk, then directional sign | 15 feet east of sidewalk; south side of trail | Just west of Virginia Ave. Trail splits<br>north to parking lot. Put post 20 feet east<br>of V split on north side of trail | 75 feet west of telephone pole that is<br>directly north of new rec center. System<br>kiosk, then trail kiosk, then directional<br>sign in a row moving west |                                 |
|                        | Location      | 22 Minnetonka Mills<br>Rd                                                                                        | 15T0467596 4974790 DT Hopkins old kiosk site                                                                                           | 36th St                                       | Virginia Ave                                                                                                                | 4978334 Dakota Park by new Rec Center                                                                                                                        |                                 |
|                        | UTM           | 4975922                                                                                                          | 4974790                                                                                                                                | 4976301                                       | 4977808                                                                                                                     | 4978334                                                                                                                                                      |                                 |
|                        | GPS           | 15T0466197 4975922                                                                                               | 15T0467596                                                                                                                             | 15T0469020 4976301 36th St                    | 15T0469789 4977808 Virginia Ave                                                                                             | 15Т0471201                                                                                                                                                   |                                 |
| System Trail Direction | 费             | 53                                                                                                               | 30                                                                                                                                     | 31                                            | 32                                                                                                                          | 33                                                                                                                                                           | 1 # 1                           |
| Trail                  | ₿<br>E        | J                                                                                                                | 16                                                                                                                                     | ,                                             | •                                                                                                                           | 17                                                                                                                                                           | Troil 1/1                       |
| System                 | 袋             | J                                                                                                                | 2                                                                                                                                      | 3                                             | I                                                                                                                           | œ                                                                                                                                                            | Note There is no Trail Most # 7 |
|                        | Site          | 8                                                                                                                | õ                                                                                                                                      | સ                                             | 32                                                                                                                          | 33                                                                                                                                                           | Note                            |

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# EXHIBIT A SHEET 10 OF 10

12. City of Eden Prairie Temporary Occupancy Exception Concurrence Letter for Purgatory Creek Park

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U.S. Department of Transportation Federal Transit Administration REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

December 3, 2015

City of Eden Prairie Robert Ellis City Center 8080 Mitchell Road Eden Prairie, MN 55344

### Re: Section 4(f) Temporary Occupancy Exception – City of Eden Prairie Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

Dear Mr. Ellis:

The Federal Transit Administration (FTA) is writing to request formal concurrence for the Southwest Light Rail Transit Project (Project) Section 4(f) temporary occupancy exemption for the Purgatory Creek Park, from the City of Eden Prairie (City). This letter provides the background and rationale that supports the temporary occupancy exemption determination. FTA acknowledges the receipt of the July 21, 2015, letter from the City concerning the Southwest LRT Supplemental Draft Environmental Impact Statement (SDEIS), which includes comments on the Draft Section 4(f) Evaluation Update that was included in the SDEIS. Please note that substantive comments from the City concerning the Draft Section 4(f) Evaluation Update will be addressed in the project's Final Section 4(f) Evaluation, planned to be included as part of the Final Environmental Impact Statement (FEIS). Please respond in writing to this request for concurrence by January 4, 2016.

The Metropolitan Council (Council) is seeking federal funding under the Capital Investment Grant program from the FTA; therefore, the Project must comply with the federal statute for Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966.

### A. Section 4(f) Description

Section 4(f) of the USDOT Act is a federal law that protects publicly-owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are located in 23 CFR Part 774.

Temporary occupancy results when a Section 4(f) property, in whole or in part, is required for project construction-related activities. The property is not permanently incorporated into a transportation facility but the activity is considered to be adverse in terms of the preservation purpose of Section 4(f). Title 23 CFR 774.13(d) provides the conditions under which temporary

### Section 4(f) Temporary Occupancy Exception -SWLRT Page 2 of 3

occupancies of land are minimal so as to not constitute a use within the meaning of Section 4(f). The conditions under which a temporary occupancy may occur are: 1) duration of occupancy must be temporary and there is no change in ownership of the land; 2) the scope of work must be minor; 3) there can be no anticipated permanent adverse physical impacts, nor can there be interference with the activities, features or attributes of the property, on either a temporary or permanent basis; 4) the land being used must be fully restored and returned to a condition that is at least as good as that which existed prior to the project; 5) written concurrence must be obtained from the official(s) with jurisdiction, documenting agreement with the above conditions (23 CFR 774.13(d)). Upon City concurrence on the temporary occupancy exemption determination for the Purgatory Creek Park, FTA will publish the Final Section 4(f) Evaluation in the FEIS.

### B. Section 4(f) Property Description

Located at 13001 Technology Drive, Purgatory Creek Park contains a 125 person-capacity pavilion, bicycle and walking trails, the Mayor Jean Harris Gathering Bridge, gardens, a dock, a fountain, the Eden Prairie Veterans' Memorial, the Lambert Pavilion, a 54-space parking lot, and restrooms. Activities within the park include walking, running, bicycling, picnicking, various organized events and leisure activities. Events at the memorial, which is within the park, include an annual Memorial Day celebration. Purgatory Creek Park is publicly owned, accessible, and of local significance; therefore, FTA considers the park as a Section 4(f) property. Further information about Purgatory Creek Park can be found in Appendix L of the Supplemental Draft EIS.

## C. Description of Project Changes to the Purgatory Creek Park

The Project will not result in a permanent incorporation of land from Purgatory Creek Park, therefore, there will not be a Section 4(f) permanent use of the property. The Project will require a temporary easement of approximately 0.3 acre along the northeastern edge of Purgatory Creek Park to facilitate Project construction activities, which could result in sidewalk and trail detours affecting pedestrian access to the park. Detour routes and continued access will be provided for users of the park during construction. Temporary short-term disruption of vehicle access to Purgatory Creek Park via Prairie Center Drive and the adjacent commercial parking may occur, but automobile access will be maintained at the other entrances to the park. Council staff will coordinate construction activities with park staff from the City to schedule construction activities so that they avoid park programs, events and other activities identified by the City. Impacts related to temporary changes to parking and access will be mitigated by development of a Construction Communication Plan, which will include advance notice of construction activities and highlighting road, sidewalk, and trail closures and detour routes. Parkland within the area of construction will be restored to prior conditions or better, in consultation with City staff.

Further information on the long term and short term impacts to the Purgatory Creek Park can be found in the SDEIS, including the Draft Section 4(f) Evaluation Update (see Section 3.5).

### D. Temporary Occupancy Exception Determination

Following are the Section 4(f) temporary occupancy exception criteria as applied to Purgatory Creek Park: 1) the duration of the construction activities for the portion of the project at the Purgatory Creek Park property is temporary, estimated at approximately less than 24 months (additional time may be needed for restoration activities within the park) and ownership will remain with the City; 2) the scope of the work will be minor relative to the size of the Park, with approximately 0.3 acres to be temporarily occupied during construction; 3) there will be no

### Section 4(f) Temporary Occupancy Exception -SWLRT Page 3 of 3

anticipated permanent adverse physical impacts to the property; the activities, features or attributes of the property will be maintained through construction and operation of the Project; and detours will be provided to maintain access to the park throughout construction; all roadway connections will be restored after construction; 4) the area of the park being impacted by construction will be restored to previous or better condition; 5) this letter, signed by the City, constitutes City's written concurrence with FTA's temporary occupancy exception determination.

Based on the above findings, FTA has determined that the temporary occupancy conditions under 23 CFR 774.13(d) are met for this property and there will be no permanent Section 4(f) use of the Purgatory Creek Park.

This letter, as signed by City, serves as documented concurrence by City that the above criteria have been met for a temporary occupancy exception for Project construction activities at the Purgatory Creek Park.

If you require additional assistance, please contact William Wheeler at (312) 353-2639 (<u>William,Wheeler@dot.com</u>) or Maya Sarna at (202) 366-5811 (<u>Maya,Sarna@dot.gov</u>). Thank you for your consideration of this request.

Sincerely,

Marisol R. Simón Regional Administrator

The City, as owner and manager of Purgatory Creek Park, concurs with the FTA's assessment that a Section 4(f) use will not occur within Purgatory Creek Park and that construction activities that will occur within the Purgatory Creek Park as a result of the Project will meet the criteria for a temporary occupancy exception described in 23 CFR 774.13(d).

Signature: Name:

Date: 12-31-Title: PARICS & RECAFATTON

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13. Minnesota State Historic Preservation Office Temporary Occupancy Exception Concurrence Letter for Minikahda Club This page intentionally left blank.

2009-0080



U.S. Department of Transportation Federal Transit Administration REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

December 3, 2015

Minnesota State Historic Preservation Office Sarah Beimers 345 Kellogg Boulevard West St. Paul, MN 55102

DEC 0 7 2015

# Re: Section 4(f) Temporary Occupancy Exception for Minikahda Club – Minnesota State Historic Preservation Office Southwest Light Rail Transit Project, Hennepin County, Minnesota

Dear Ms. Beimers:

The Federal Transit Administration (FTA) is writing to request formal concurrence for the Southwest Light Rail Transit Project (Project) Section 4(f) temporary occupancy exemption for the Minikahda Club historic property, from the Minnesota State Historic Preservation Office (MnSHPO). This letter provides the background and rationale that supports the temporary occupancy exemption determination. Please respond in writing to this request for concurrence by January 4, 2016.

The Metropolitan Council (Council) is seeking federal funding under the Capital Investment Grant program from the FTA; therefore, the Project must comply with the federal statute for Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966.

## A. Section 4(f) Description

Section 4(f) of the USDOT Act is a federal law that protects publicly-owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are located in 23 CFR Part 774.

Temporary occupancy results when a Section 4(f) property, in whole or in part, is required for project construction-related activities. The property is not permanently incorporated into a transportation facility but the activity is considered to be adverse in terms of the preservation purpose of Section 4(f). Title 23 CFR 774.13(d) provides the conditions under which temporary occupancies of land are minimal so as to not constitute a use within the meaning of Section 4(f). The conditions under which a temporary occupancy may occur are: 1) duration of occupancy must be temporary and there is no change in ownership of the land; 2) the scope of work must be minor; 3) there can be no anticipated permanent adverse physical impacts, nor can there be interference with the activities, features or attributes of the property, on either a temporary or permanent basis;

4) the land being used must be fully restored and returned to a condition that is at least as good as that which existed prior to the project; 5) written concurrence must be obtained from the official(s) with jurisdiction, documenting agreement with the above conditions (23 CFR 774.13(d)). Upon MnSHPO concurrence on the temporary occupancy exemption determination for the Minikahda, FTA will publish the Final Section 4(f) Evaluation in the Final Environmental Impact Statement (EIS).

# **B.** Section 4(f) Property Description

The Minikahda Club, located at 3205 Excelsior Boulevard in Minneapolis, has been determined eligible for the National Register of Historic Places (NRHP). Further information related to the historic significance of the Minikahda Club can be reviewed in Section 3.4 of the Supplemental Draft EIS.

# C. Description of Project Changes to the Minikahda Club

Project will not result in a permanent incorporation of land from the Minikahda Club historic resource therefore, there will not be a Section 4(f) permanent use of the property. During construction of the Project, a small portion of Minikahda Club property (at the very northern edge of the property in the landscaped triangle at the driveway entrance to the club) will be required to be closed during construction while the intersection of Excelsior Boulevard and W. 32nd Street is repaved and restriped. Further information on the long term and short term impacts to the Minikahda Club can be found in the Supplemental Draft EIS, including the Draft Section 4(f) Evaluation Update (see Section 3.5).

# D. Temporary Occupancy Exception Determination

Following are the Section 4(f) temporary occupancy exception criteria as applied to the Minikahda Club historic property: 1) the duration of the construction activities for the portion of the project at the Minikahda Club property is temporary, estimated at approximately less than one month; 2) the scope of the work will be minor, as the part of the Minikahda Club property to be temporarily occupied is only a small portion of the property at the entrance to the club, not affecting the accessibility to the Minikahda Club; 3) there will be no anticipated permanent adverse physical impacts to the property, and the activities, features or attributes of the property will be maintained through construction and operation of the project; 4) the property will be restored to the same or better condition that existed prior to the project; 5) this letter, signed by the MnSHPO, constitutes MnSHPO's written concurrence with FTA's temporary occupancy exception determination.

Based on the above findings, FTA has determined that the temporary occupancy conditions under 23 CFR 774.13(d) are met for this property and there will be no permanent Section 4(f) use of the Minikahda Club.

This letter, as signed by MnSHPO, serves as documented concurrence by MnSHPO that the above criteria have been met for a temporary occupancy exception for Project construction activities at the Minikahda Club.

Section 4(f) Temporary Occupancy Exception for Minikahda Club – SWLRT Page 3 of 3

If you require additional assistance, please contact William Wheeler at (312) 353-2639 (<u>William.Wheeler@dot.com</u>) or Maya Sarna at (202) 366-5811 (<u>Maya.Sarna@dot.gov</u>). Thank you for your consideration of this request.

Sincerely,

maring the

Marisol R. Simón Regional Administrator

The MnSHPO concurs with the FTA's assessment that a Section 4(f) use will not occur within Minikahda Club and that construction activities that will occur within the Minikahda Club as a result of the Project will meet the criteria for a temporary occupancy exception described in 23 CFR 774.13(d).

 Signature: SWANT.
 Date: 12/15/2015

 Name: SAVANT.
 Date: 12/15/2015

 Title: Mar. of Covernment
 Programs & compliance

 Minnessota SHPO
 Minnessota SHPO

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14. Minnesota State Historic Preservation Office Temporary Occupancy Exception Concurrence Letter for Cedar Lake Parkway

2009-0080



U.S. Department of Transportation Federal Transit Administration

December 3, 2015

REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

Minnesota State Historic Preservation Office Sarah Beimers 345 Kellogg Boulevard West St. Paul, MN 55102

DEC 0 7 2015

## Re: Section 4(f) Temporary Occupancy Exception for Cedar Lake Parkway – Minnesota State Historic Preservation Office Southwest Light Rail Transit Project, Hennepin County, Minnesota

Dear Ms. Beimers:

The Federal Transit Administration (FTA) is writing to request formal concurrence for the Southwest Light Rail Transit Project (Project) Section 4(f) temporary occupancy exemption for the Cedar Lake Parkway historic property, from the Minnesota State Historic Preservation Office (MnSHPO). This letter provides the background and rationale that supports the temporary occupancy exemption determination. Please respond in writing to this request for concurrence by January 4, 2016.

The Metropolitan Council (Council) is seeking federal funding under the Capital Investment Grant program from the FTA; therefore, the Project must comply with the federal statute for Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966.

#### A. Section 4(f) Description

Section 4(f) of the USDOT Act is a federal law that protects publicly-owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are located in 23 CFR Part 774.

Temporary occupancy results when a Section 4(f) property, in whole or in part, is required for project construction-related activities. The property is not permanently incorporated into a transportation facility but the activity is considered to be adverse in terms of the preservation purpose of Section 4(f). Title 23 CFR 774.13(d) provides the conditions under which temporary occupancies of land are minimal so as to not constitute a use within the meaning of Section 4(f). The conditions under which a temporary occupancy may occur are: 1) duration of occupancy must be temporary and there is no change in ownership of the land; 2) the scope of work must be minor; 3) there can be no anticipated permanent adverse physical impacts, nor can there be interference with the activities, features or attributes of the property, on either a temporary or permanent basis;

4) the land being used must be fully restored and returned to a condition that is at least as good as that which existed prior to the project; 5) written concurrence must be obtained from the official(s) with jurisdiction, documenting agreement with the above conditions (23 CFR 774.13(d)). Upon MnSHPO concurrence on the temporary occupancy exemption determination for the Cedar Lake Parkway, FTA will publish the Final Section 4(f) Evaluation in the Final Environmental Impact Statement (EIS).

## B. Section 4(f) Property Description

Cedar Lake Parkway, located in Minneapolis, is considered a contributing historic site within the overall Grand Rounds Historic District, which has been determined eligible for the National Register of Historic Places (NRHP). Further information related to the historic significance of the Cedar Lake Parkway can be reviewed in Section 3.4 of the Supplemental Draft EIS.

## C. Description of Project Changes to the Cedar Lake Parkway

Project will not result in a permanent incorporation of land from the Cedar Lake Parkway historic property therefore, there will not be a Section 4(f) permanent use of the property. The Project will remove and reconstruct an approximately 220 foot long segment of the parkway in order to construct a shallow light rail tunnel under it at the existing Kenilworth Corridor crossing. The 220 foot long segment of roadway to be reconstructed is relatively minor in relation to the entire extent of the parkway. The Project will design the segment of Cedar Lake Parkway to be reconstructed in accordance with the *Secretary of Interior's Standards*. Therefore, reconstruction of a portion of Cedar Lake Parkway will result in a minimal, non-adverse change to the design, feeling, and association of the parkway where it crosses the existing freight railroad corridor. To avoid diminishing the visual character of the setting of the parkway, which could result in an adverse effect, the Project will design elements of the Project within and in the vicinity of the parkway in accordance with the *SOI's Standards* and will continue to consult with MnSHPO on the design of project elements in the view shed of the Kenilworth Corridor crossing.

Further information on the long term and short term impacts to the Cedar Lake Parkway can be found in the SDEIS, including the Draft Section 4(f) Evaluation Update (see Section 3.5).

# D. Temporary Occupancy Exception Determination

Following are the Section 4(f) temporary occupancy exception criteria as applied to the Cedar Lake Parkway historic property: 1) the duration of the construction activities for the portion of the project at the Cedar Lake Parkway property is temporary, estimated at approximately less than 18 months and ownership will remain the same; 2) the scope of the work will be minor, with approximately 220 feet of the much larger parkway to be reconstructed and the elevation of the parkway will change by less that approximately eight inches; 3) there will be no anticipated permanent adverse physical impacts, and detours will be provided and maintained through construction of the Project and all roadway and trail connections will be restored after construction; 4) the area of the parkway being impacted by construction will be reconstructed to existing or better condition; 5) this letter, signed by the MnSHPO, constitutes MnSHPO's written concurrence with FTA's temporary occupancy exception determination. Based on the above findings, FTA has determined that the temporary occupancy conditions under 23 CFR 774.13(d) are met for this property and there will be no permanent Section 4(f) use of the Cedar Lake Parkway.

This letter, as signed by MnSHPO, serves as documented concurrence by MnSHPO that the above criteria have been met for a temporary occupancy exception for Project construction activities at the Cedar Lake Parkway.

If you require additional assistance, please contact William Wheeler at (312) 353-2639 (<u>William.Wheeler@dot.com</u>) or Maya Sarna at (202) 366-5811 (<u>Maya.Sarna@dot.gov</u>). Thank you for your consideration of this request.

Sincerely,

Marisol R. Simón Regional Administrator

The MnSHPO concurs with the FTA's assessment that a Section 4(f) use will not occur within Cedar Lake Parkway and that construction activities that will occur within the Cedar Lake Parkway as a result of the Project will meet the criteria for a temporary occupancy exception described in 23 CFR 774.13(d).

| Signature: Sarang. Bamur | Date: 12/15/2015                                           |
|--------------------------|------------------------------------------------------------|
| Name: Sarah J. Beimers   | Title: <u>Mgr. of Governm-ent</u><br>Programs & compliance |

Minnesota SHPO

15. Minneapolis Park and Recreation Board Temporary Occupancy Exception Concurrence Letter for Cedar Lake Park



U.S. Department of Transportation Federal Transit Administration

December 3, 2015

REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

Minneapolis Park and Recreation Board Superintendent Jayne Miller 2117 West River Rd. N. Minneapolis, MN 55441

# Re: Section 4(f) Temporary Occupancy Exemption for Cedar Lake Park – Minneapolis Park and Recreation Board Southwest Light Rail Transit Project, Hennepin County, Minnesota

Dear Superintendent Miller:

The Federal Transit Administration (FTA) is writing to request formal concurrence for the Southwest Light Rail Transit Project (Project) Section 4(f) temporary occupancy exemption for the Cedar Lake Park, from the Minneapolis Park and Recreation Board (MPRB). This letter provides the background and rationale that supports the temporary occupancy exemption determination. FTA acknowledges the receipt of the July 21, 2015, letter from the MPRB concerning the Southwest LRT Supplemental Draft Environmental Impact Statement (SDEIS), which includes comments on the Draft Section 4(f) Evaluation Update that was included in the SDEIS. Please note that substantive comments from the MPRB concerning the Draft Section 4(f) Evaluation Update will be addressed in the project's Final Section 4(f) Evaluation, planned to be included as part of the Final Environmental Impact Statement (FEIS). Please respond in writing to this request for concurrence by January 4, 2016.

The Metropolitan Council (Council) is seeking federal funding under the Capital Investment Grant program from the FTA; therefore, the Project must comply with the federal statute for Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966.

# A. Section 4(f) Description

Section 4(f) of the USDOT Act is a federal law that protects publicly-owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are located in 23 CFR Part 774.

Temporary occupancy results when a Section 4(f) property, in whole or in part, is required for project construction-related activities. The property is not permanently incorporated into a transportation facility but the activity is considered to be adverse in terms of the preservation purpose of Section 4(f). Title 23 CFR 774.13(d) provides the conditions under which temporary occupancies of land are minimal so as to not constitute a use within the meaning of Section 4(f). The conditions under which a temporary occupancy may occur are: 1) duration of occupancy must

be temporary and there is no change in ownership of the land; 2) the scope of work must be minor; 3) there can be no anticipated permanent adverse physical impacts, nor can there be interference with the activities, features or attributes of the property, on either a temporary or permanent basis; 4) the land being used must be fully restored and returned to a condition that is at least as good as that which existed prior to the project; 5) written concurrence must be obtained from the official(s) with jurisdiction, documenting agreement with the above conditions (23 CFR 774.13(d)). Upon MPRB concurrence on the temporary occupancy exemption determination for the Cedar Lake Park, FTA will publish the Final Section 4(f) Evaluation in the FEIS.

# B. Section 4(f) Property Description

Cedar Lake Park is a 288-acre regional park located at Cedar Lake Parkway and Basswood Road in Minneapolis and is part of the Chain of Lakes Regional Park. Cedar Lake Trail traverses the northernmost portion of the park. Facilities within the park include Cedar Lake, beaches, wooded areas, picnic areas, a canoe/kayak launch and racks, trails, paths, and off-street parking. Recreational activities within the park include boating, fishing, cross country skiing, skating, picnicking, hiking, running, and bicycling. Cedar Lake Park is publicly owned, accessible, and of local significance; therefore, FTA considers the park as a Section 4(f) property. Further information about Cedar Lake Park can be found in Appendix L of the Supplemental Draft EIS.

# C. Description of Project Changes to the Cedar Lake Park

The Project will result in the extension of a sidewalk into Cedar Lake Park in the vicinity of East Cedar Beach, which will require temporary construction activities within the park. The Draft Section 4(f) Evaluation Update identified the need for a permanent maintenance easement associated with the sidewalk extension. The MPRB notified the Council that it would maintain the proposed new sidewalk within the park, obviating the need for a permanent maintenance easement within the park, and thereby maintaining the ownership of the park with MPRB.

The existing alignment of Cedar Lake Trail in the northwest corner of the park will be slightly altered within the park to accommodate a new location of the trail's crossing of freight rail and light rail tracks, which will require temporary construction activities within the park. Council staff will coordinate construction activities with park staff from the MPRB to schedule construction activities so that they avoid park activities identified by the MPRB that should be considered when setting the schedule for construction activities. The Council will also consult with MPRB staff in determining the post-construction conditions of the parkland. The Council will also develop and implement a Construction Communication Plan, which will include advance notice of constructions associated with the Cedar Lake Trail will be maintained during and after construction. Parkland within the area of construction, both at Cedar Lake Beach and associated with realignment of Cedar Lake Trail, will be restored to prior conditions or better.

Further information on the long term and short term impacts to the Cedar Lake Park can be found in the Project's upcoming Final EIS, and the Final Section 4(f) Evaluation.

# D. Temporary Occupancy Exception Determination

Following are the Section 4(f) temporary occupancy exception criteria as applied to Cedar Lake Park: 1) the duration of the construction activities for the portion of the project at the Cedar Lake Park property is temporary, estimated at approximately less than 18 months (additional time may be needed for restoration activities within the park), and ownership will remain with MPRB; 2) the

#### Section 4(f) Temporary Occupancy Exemption for Cedar Lake Park-**SWLRT** Page 3 of 3

scope of the work will be minor relative to the size of the Park, with approximately 1.1 acres to be temporarily occupied during construction; 3) there will be no anticipated permanent adverse physical impacts, and the activities, features or attributes of the property will be maintained through construction and operation of the Project;; 4) the area of the park being impacted by construction will be restored to previous or better condition; 5) this letter, signed by the MPRB, constitutes MPRB's written concurrence with FTA's temporary occupancy exception determination.

Based on the above findings, FTA has determined that the temporary occupancy conditions under 23 CFR 774.13(d) are met for this property and there will be no permanent Section 4(f) use of the Cedar Lake Park.

This letter, as signed by MPRB, serves as documented concurrence by MPRB that the above criteria have been met for a temporary occupancy exception for the Project's construction activities at the Cedar Lake Park.

If you require additional assistance, please contact William Wheeler at (312) 353-2639 (William.Wheeler@dot.com) or Maya Sarna at (202) 366-5811 (Maya.Sarna@dot.gov). Thank you for your consideration of this request.

Sincerely.

Marisol R. Simón **Regional Administrator** 

The MPRB, as owner and manager of Cedar Lake Park, concurs with the FTA's assessment that a Section 4(f) use will not occur within Cedar Lake Park and that construction activities that will occur within the Cedar Lake Park as a result of the Project will meet the criteria for a temporary occupancy exception described in 23 CFR774.13(d).

Signature Date: Title: Soperinte Name:

16. Minneapolis Park and Recreation Board *De Minimis* Concurrence Letter for Bryn Mawr Meadows Park



U.S. Department of Transportation Federal Transit Administration

December 3, 2015

REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

Minneapolis Park and Recreation Board Superintendent Jayne Miller 2117 West River Rd. N. Minneapolis, MN 55441

# Re: Section 4(f) *de minimis* Use Determination for Bryn Mawr Meadows Park – Minneapolis Park and Recreation Board Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

Dear Superintendent Miller:

The Federal Transit Administration (FTA) is writing to request formal concurrence for the Southwest Light Rail Transit Project (Project) Section 4(f) *de minimis* impact determination for Bryn Mawr Meadows Park, from the Minneapolis Park and Recreation Board (MPRB). This letter provides the background and rationale that supports the *de minimis* impact determination. FTA acknowledges the receipt of the July 21, 2015, letter from the MPRB concerning the Southwest LRT Supplemental Draft Environmental Impact Statement (SDEIS), which includes comments on the Draft Section 4(f) Evaluation Update that was included in the SDEIS. Please note that substantive comments from the MPRB concerning the Draft Section 4(f) Evaluation Update will be addressed in the project's Final Section 4(f) Evaluation, planned to be included as part of the Final Environmental Impact Statement (FEIS). Please respond in writing to this request for concurrence by January 4, 2016.

The Metropolitan Council (Council) is seeking federal funding under the Capital Investment Grant program from the FTA; therefore, the Project must comply with the federal statute for Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966.

#### A. Section 4(f) Description

Section 4(f) of the USDOT Act is a federal law that protects publicly-owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are located in 23 CFR Part 774.

*De minimis* impacts to parks are defined as those that do not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). (23 CFR 774.17). The official(s) with jurisdiction over the property and the public must be informed of the intent to make a *de minimis* use determination. If the official(s) with jurisdiction concurs in writing that the project will not adversely affect the activities, features, or attributes that the property eligible for Section 4(f) protection, then the FTA may finalize the *de minimis* impact determination. Upon MPRB concurrence on the *de minimis* determination for Bryn Mawr Meadows Park, FTA will publish the Final Section 4(f) Evaluation in the FEIS.

## B. Section 4(f) Property Description

Bryn Mawr Meadows Park is a 51-acre regional park located at 601 Morgan Avenue South in Minneapolis. Bryn Mawr Meadows Park is owned and operated by MPRB and contains two baseball fields, two broomball rinks, cricket field, ice rink, a 10-table picnic area, restroom facilities, soccer field, eleven softball fields, biking path, sports facility, tennis court, tot lot/playground, wading pool, and walking path. Bryn Mawr Meadows Park is publicly owned, accessible, and of local significance; therefore, FTA considers the park as a Section 4(f) property. Further information about Bryn Mawr Meadows Park can be found in Appendix L of the Supplemental Draft EIS.

# C. Description of Project Changes to Bryn Mawr Meadows Park

The Project will result in a variety of permanent and short-term (construction-related) changes to Bryn Mawr Meadows Park. In summary, the proposed changes will affect the Luce Line Trail in Bryn Mawr Meadows Park, as well as two internal park trails. Luce Line Trail will be realigned within Bryn Mawr Meadows Park, connecting to the proposed Van White Station and Cedar Lake Trail (which provides connections to the Kenilworth Trail). A new bicycle/pedestrian bridge will be constructed partially within park property. The current design of the new bridge has been prepared based on the Council's *Visual Quality Guidelines for Key Structures* (Council, 2015), which was developed in coordination with staff from MPRB. The realignment of the Luce Line Trail will require a permanent maintenance easement, which will be acquired by the City of Minneapolis. Decisions related to the realignment of the trails within park property will be determined through continued coordination between FTA, the Council, and MPRB.

All existing trail connections for the Luce Line Trail will be maintained in the long-term under the Project. Except for the potential for short-term trail closures to ensure trail user safety, all existing trail connections will be maintained during construction of the new trail alignment and elevated trail crossing. During short trail closures, trail users will be provided with detour routes and information. Under the current construction plan, temporary trails will be constructed to allow for the removal of existing trail segments and construction of new trail segments. Construction activities within Bryn Mawr Meadows Park will be closely coordinated with MPRB to help avoid and minimize effects on recreational activities within the park. The Project will also provide the MPRB and the public with ongoing notification of construction activities within the park, such as the timing and location of trail detours. All areas of the park that are affected by construction activities outside of the permanent easement area will be restored to existing conditions or better.

#### Section 4(f) *de minimis* Use Determination for Bryn Mawr Meadows Park – SWLRT Page 3 of 3

Further information on the long term and short term impacts to Bryn Mawr Park can be found in the SDEIS, Draft Section 4(f) Evaluation Update (see Section 3.5).

## D. Section 4(f) de minimis Use Determination

Consultation between FTA, the Council, MPRB, and City of Minneapolis on design issues related to the park has occurred throughout the design refinement process since the publication of the Draft EIS. FTA has determined that the construction and operation of the Project will not adversely affect the features, attributes or activities that qualify Bryn Mawr Meadows Park for Section 4(f) protection. Based on the analysis, design, and avoidance, minimization, and mitigation measures identified to date as summarized in the Project's SDEIS and consistent with the requirements of 23 CFR 774.5(b), FTA has concluded that a *de minimis* use determination is appropriate for Bryn Mawr Meadows Park.

This letter, as signed by the MPRB, serves as documented concurrence by the MPRB that Project actions would result in *de minimis* impacts at Bryn Mawr Meadows Park.

If you require additional assistance, please contact William Wheeler at (312) 353-2639 (William.Wheeler@dot.com) or Maya Sarna at (202) 366-5811 (<u>Maya.Sarna@dot.gov</u>). Thank you for your consideration of this request.

Sincerely,

Marisol R. Simón Regional Administrator

The MPRB, as owner and manager of Bryn Mawr Meadows Park, concurs with the FTA's determination that the Southwest LRT Project will result in a Section 4(f) *de minimis* use on Bryn Mawr Meadows Park, as defined in 23 CFR 774.17 and as demonstrated in this letter.

Date: \_\_\_\_l Signature: Name:

\_\_\_\_ Date: 1/4/2014 Title: Sperintindent

Minneapolis Park and Recreation Board, MN

17. Minnesota Park and Recreation Board *De Minimis* Concurrence Letter for Kenilworth Channel/Lagoon



U.S. Department of Transportation Federal Transit Administration

December 3, 2015

REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

Minneapolis Park and Recreation Board Superintendent Jayne Miller 2117 West River Rd. N. Minneapolis, MN 55441

# Re: Section 4(f) *de minimis* Use Determination for the Kenilworth Channel/Lagoon – Minneapolis Park and Recreation Board Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

Dear Superintendent Miller:

The Federal Transit Administration (FTA) is writing to request formal concurrence for the Southwest Light Rail Transit Project (Project) Section 4(f) *de minimis* impact determination for Kenilworth Channel/Lagoon (an element of the Minneapolis Chain of Lakes Regional Park), from the Minneapolis Park and Recreation Board (MPRB). This letter provides the background and rationale that supports the *de minimis* impact determination. FTA acknowledges the receipt of the July 21, 2015, letter from the MPRB concerning the Southwest LRT Supplemental Draft Environmental Impact Statement (SDEIS), which includes comments on the Draft Section 4(f) Evaluation Update that was included in the SDEIS. Please note that substantive comments from the MPRB concerning the Draft Section 4(f) Evaluation Update will be addressed in the project's Final Section 4(f) Evaluation, planned to be included as part of the Final Environmental Impact Statement (FEIS). Please respond in writing to this request for concurrence by January 4, 2016.

The Metropolitan Council (Council) is seeking federal funding under the Capital Investment Grant program from the FTA; therefore, the Project must comply with the federal statute for Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966.

#### A. Section 4(f) Description

Section 4(f) of the USDOT Act is a federal law that protects publicly-owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are located in 23 CFR Part 774.

*De minimis* impacts to parks are defined as those that do not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). (23 CFR 774.17). The official(s) with jurisdiction over the property and the public must be informed of the intent to make a *de minimis* use determination. If the official(s) with jurisdiction concurs in writing that the

# Section 4(f) de minimis Use Determination for the Kenilworth Channel/Lagoon – SWLRT

Page 2 of 3

project will not adversely affect the activities, features, or attributes that the property eligible for Section 4(f) protection, then the FTA may finalize the *de minimis* impact determination. Upon MPRB concurrence on the *de minimis* determination for the Kenilworth Channel/Lagoon, FTA will publish the Final Section 4(f) Evaluation in the FEIS.

## B. Section 4(f) Property Description

The Kenilworth Channel/Lagoon is an approximately 10.3-acre waterway that connects Cedar Lake and Lake of the Isles. While most of the land making up the Kenilworth Channel/Lagoon is owned fee simple by the MPRB, two areas located approximately mid-point in the channel/lagoon are owned fee simple by BNSF and Hennepin County Regional Railroad Authority, within which the MPRB owns, for park purposes, a permanent easement for a right-of-way for a canal connecting Lake of the Isles and Cedar Lake.

Recreational features within the channel/lagoon include a large curved lagoon to the east and a relatively narrow channel to the west, as well as a mix of vegetated and grassy banks. During summer months, activities through the waterway include canoeing, kayaking, and paddle boarding. During winter months, activities through the frozen waterway include cross country skiing, snowshoeing, fat-tire biking, and walking. Activities on the northern grassy banks of the lagoon, between West Lake of the Isles Parkway and South Upton Avenue, include picnicking, walking, sightseeing, wildlife viewing, and passive relaxation.

The Kenilworth Channel/Lagoon is a publicly-owned, publicly-accessible park of local significance; therefore, FTA considers the park as a Section 4(f) property. Further information about The Kenilworth Channel/Lagoon can be found in Appendix L of the Supplemental Draft EIS.

#### C. Description of Project Changes to the Kenilworth Channel/Lagoon

The Project will result in changes to the facilities currently located within the Kenilworth Channel/Lagoon, including: 1) removal of the two existing wood bridges that carry the existing freight rail tracks and multipurpose trail; 2) construction of three new separate bridges with two new supporting piers in the channel (supporting the freight rail bridge); and 3) modifications to vegetation and retaining walls. Note that the design of the new bridges has changed and advanced since publication of the SDEIS as a part of the FTA's Section 106 and 4(f) consultation processes, which will be reflected in the project's forthcoming Section 106 Memorandum of Agreement (MOA) and Final Section 4(f) Evaluation. The proposed modifications will occur within approximately 0.3 acres of the approximately 10.3-acre Kenilworth Channel/Lagoon.

The horizontal clearances between the banks and the new bridge piers will be of sufficient width to accommodate recreational activities that currently occur within the channel/lagoon. The project will also include noise mitigation, to be specified in the Project's MOA and Final EIS.

Under the Project, construction activities within the easement area will occur to allow for the removal of the two existing wood bridges and construction of the three new bridges. Those construction activities will require temporary closure/s of the lagoon for safety. Minimization and mitigation measures related to the closure/s will be developed during the Section 106 process, with MPRB consultation, and will be included in the project's Section 106 MOA.

Further information on the long term and short term impacts to the Kenilworth Channel/Lagoon can be found in the SDEIS, Draft Section 4(f) Evaluation Update (see Section 3.5).

#### Section 4(f) de minimis Use Determination for the Kenilworth Channel/Lagoon – SWLRT Page 3 of 3

#### D. Section 4(f) de minimis Use Determination

Consultation between FTA, the Council, MPRB, and City of Minneapolis on design issues related to the Kenilworth Channel/Lagoon has occurred throughout the design refinement process since the publication of the Draft EIS. FTA has determined that the construction and operation of the Project will not adversely affect the features, attributes or activities that qualify the Kenilworth Channel/Lagoon for Section 4(f) protection. Based on the analysis, design, and avoidance, minimization, and mitigation measures identified to date as summarized in the Project's SDEIS and consistent with the requirements of 23 CFR 774.5(b), FTA has concluded that a *de minimis* use determination is appropriate for the Kenilworth Channel/Lagoon.

This letter, as signed by the MPRB, serves as documented concurrence by the MPRB that Project actions would result in *de minimis* impacts at the Kenilworth Channel/Lagoon.

If you require additional assistance, please contact William Wheeler at (312) 353-2639 (<u>William.Wheeler@dot.com</u>) or Maya Sarna at (202) 366-5811 (<u>Maya.Sarna@dot.gov</u>). Thank you for your consideration of this request.

Sincerely, Mauno Rhine Sincerely,

Marisol R. Simón Regional Administrator

| TheMPRB, as owner and manager of the Kenilworth Channel<br>determination that the Southwest LRT Project will result in a<br>Kenilworth Channel/Lagoon, as defined in 23 CFR 774.17 and | Section 4(f) de minimis use on the |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
|                                                                                                                                                                                        | 1 1                                |
| Signature: Aggres helle                                                                                                                                                                | Date: $\frac{1/4}{2014}$           |
| Name: Jayne Miller                                                                                                                                                                     | Title: Soperintendent              |
|                                                                                                                                                                                        |                                    |
|                                                                                                                                                                                        |                                    |

18. City of Minnetonka De Minimis Concurrence Letter for Unnamed Open Space B



U.S. Department of Transportation Federal Transit Administration

March 7, 2016

REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

Julie Wischnack, Community Development Director City of Minnetonka 14600 Minnetonka Boulevard Minnetonka, MN 55345

#### Re: Section 4(f) *de minimis* Use Determination for Unnamed Open Space B – City of Minnetonka Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

Dear: Ms. Wischnack

The Federal Transit Administration (FTA) is writing to request formal concurrence for the Southwest Light Rail Transit Project's (Project) Section 4(f) *de minimis* impact determination for Unnamed Open Space B, from the City of Minnetonka. A preliminary Section 4(f) *de minimis* determination for the open space was included in the Amended Draft Section 4(f) Evaluation, which was published in the Federal Register by FTA and the Metropolitan Council (Council) on January 11, 2016. This letter provides the background and rationale that supports the *de minimis* impact determination. Please respond in writing to this request for concurrence by March 21, 2016.

The Council is seeking federal funding under the Capital Investment Grant program from the FTA; therefore, the Project must comply with the federal statute for Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966, 49 USC §303.

#### A. Section 4(f) Description

Section 4(f) of the USDOT Act is a federal law that protects publicly-owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are located in 23 CFR Part 774.

*De minimis* impacts to parks are defined as those that do not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). (23 CFR Part 774.17). The official(s) with jurisdiction over the property and the public must be informed of the intent to make a *de minimis* use determination. 23 CFR Pt. 771.5(b)(2)(ii). If the official(s) with jurisdiction concurs in writing that the Project will not adversely affect the activities, features, or attributes that qualify the property for Section 4(f) protection, then the FTA may finalize the *de minimis* impact determination.

## Re: Section 4(f) *de minimis* Use Determination for Unnamed Open Space B – City of Minnetonka Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

Upon the City of Minnetonka's concurrence on the *de minimis* determination for the Unnamed Open Space B, FTA will publish the Final Section 4(f) Evaluation in the final environmental impact statement (FEIS).

## **B.** Section 4(f) Property Description

Unnamed Open Space B is a 49-acre open space located generally south of Smetana Road, west of Green Circle Drive, North of Bren Road West, and east of Claremont Apartments. Unnamed Open Space B is predominantly naturally vegetated (e.g., wooded, riparian, and wetland features), with some areas of landscaping and pavement (i.e., roadway and trail segments that cross the property). The recreational activities within Unnamed Open Space B that are related to those natural features include bird watching, wildlife viewing, native plant observation and identification, nature photography, picnicking, work breaks (from adjacent offices), solitude and contemplation, off-trail walking/hiking, and cross country skiing (weather permitting). Within Unnamed Open Space B there are a few park benches located adjacent to the trail segments that traverse the open space.

Additional recreation activities that occur within Open Space B are those that occur on the segments of the Opus development area trail network that pass through the property. Those recreation activities include walking, running, bicycling, nature and wildlife observation, cross country skiing, and other similar activities. The trail network is the primary way in which recreational users of Unnamed Open Space B access the property. Further information about Unnamed Open Space B can be found in the Amended Draft Section 4(f) Evaluation.

# C. Description of Project Changes to Unnamed Open Space B

The Project will result in a variety of permanent and short-term (construction-related) changes to Unnamed Open Space B. The Council will permanently acquire from the City of Minnetonka an approximately 1.0-acre portion of Unnamed Open Space B (approximately 2 percent of the property). The acquired property will be incorporated into the Project for transportation purposes, including the Project's proposed light rail alignment, a traction power substation and doublecrossover bungalow, and an access driveway between the substation/bungalow and Bren Road West. Most of the natural areas of Unnamed Open Space B, which are predominantly located in the northern portion of the property, will not be directly affected by the Project. Those areas, such as the wetland, will not be altered by the Project, either permanently or temporarily.

Project construction activities will be confined to the southern portion of Unnamed Open Space B. Those construction activities will predominantly occur within the area of Unnamed Open Space B that will be permanently acquired for the Project. Some construction activities will also occur within the approximately 1.6 acres of Unnamed Open Space B located outside and immediately to the east of the area of the property to be permanently acquired for the Project. Construction activities within Unnamed Open Space B will be closely coordinated with the City of Minnetonka to help avoid and minimize effects on recreational activities within the park. The Project will also provide the City of Minnetonka and the public with ongoing notification of construction activities within the park, such as the timing and location of trail detours. All areas of the open space that are affected by construction activities outside of the area to be acquired for the Project will be restored to existing conditions or better.

## Re: Section 4(f) *de minimis* Use Determination for Unnamed Open Space B – City of Minnetonka Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

Further information on the long term and short term impacts to Unnamed Open Space B can be found in the Amended Draft Section 4(f) Evaluation.

#### D. Section 4(f) *de minimis* Use Determination

Consultation between FTA, the Council, and the City of Minnetonka on design issues related to the park has occurred throughout the design refinement process since the publication of the Draft EIS. FTA has determined that the construction and operation of the Project will not adversely affect the features, attributes or activities that qualify the Unnamed Open Space B for Section 4(f) protection. Based on the analysis, all possible planning to minimize harm has been identified to date, as summarized in the Project's Amended Draft Section 4(f) Evaluation and consistent with the requirements of 23 CFR 774.5(b), FTA has concluded that a *de minimis* use determination is appropriate for Unnamed Open Space B.

This letter, as signed by the City of Minnetonka, serves as documented concurrence by the City of Minnetonka that Project actions would result in *de minimis* impacts at Unnamed Open Space B.

If you require additional assistance, please contact Reggie Arkell at (312) 886-3704/ reginald.arkell@dot.gov or Maya Sarna at (202) 366-5811/maya.sarna@dot.gov. Thank you for your consideration of this request.

Sincerely,

Annoi Manor

Marisol R. Simón Regional Administrator

The City of Minnetonka, as owner and manager of Open Space B, concurs with the FTA's determination that the Southwest LRT Project will result in a Section 4(f) *de minimis* use on Unnamed Open Space B, as defined in 23 CFR 774.17 and as demonstrated in this letter.

| Signature:            | _Date: 12/11/16             |
|-----------------------|-----------------------------|
| Name: Julie Wischnack | _Title: Community Dev. Dir. |

19. City of Minnetonka De Minimis Concurrence Letter for Local Trail Network in Opus Woods Area



U.S. Department of Transportation Federal Transit Administration

March 7, 2016

REGION V Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin 200 West Adams Street Suite 320 Chicago, IL 60606-5253 312-353-2789 312-886-0351 (fax)

Julie Wischnack, Community Development Director City of Minnetonka 14600 Minnetonka Boulevard Minnetonka, MN 55345

## Re: Section 4(f) *de minimis* Use Determination for the Opus Development Area Trail Network – City of Minnetonka Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

Dear: Ms. Wischnack

The Federal Transit Administration (FTA) is writing to request formal concurrence for the Southwest Light Rail Transit Project's (Project) Section 4(f) *de minimis* impact determination for the Opus development area trail network, from the City of Minnetonka. A preliminary Section 4(f) *de minimis* determination for the open space was included in the Amended Draft Section 4(f) Evaluation, which was published in the Federal Register by FTA and the Metropolitan Council (Council) on January 11, 2016. This letter provides the background and rationale that supports the *de minimis* impact determination. Please respond in writing to this request for concurrence by March 21, 2016.

The Council is seeking federal funding under the Capital Investment Grant program from the FTA; therefore, the Project must comply with the federal statute for Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966, 49 USC §303.

### A. Section 4(f) Description

Section 4(f) of the USDOT Act is a federal law that protects publicly-owned parks, recreation areas, wildlife and/or waterfowl refuges, as well as significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by the USDOT. As a USDOT agency, FTA must comply with Section 4(f). FTA's Section 4(f) regulations are located in 23 CFR Part 774.

*De minimis* impacts to parks are defined as those that do not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). (23 CFR Part 774.17). The official(s) with jurisdiction over the property and the public must be informed of the intent to make a *de minimis* use determination. 23 CFR Pt. 771.5(b)(2)(ii). If the official(s) with jurisdiction concurs in writing that the Project will not adversely affect the activities, features, or attributes that qualify the property for Section 4(f) protection, then the FTA may finalize the *de minimis* impact determination.

### Re: Section 4(f) *de minimis* Use Determination for the Opus Development Area Trail Network – City of Minnetonka Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

Upon the City of Minnetonka's concurrence on the *de minimis* determination for the Opus development area trail network, FTA will publish the Final Section 4(f) Evaluation in the final environmental impact statement (FEIS).

#### **B.** Section 4(f) Property Description

The Opus development area trail network is an eight-mile (approximately 42,000 feet) length of trail corridor that generally serves the mixed-use Opus development area in Minnetonka, Minnesota. The Opus development trail network is owned and maintained by the City of Minnetonka. The Opus development area trail network is located between Smetana Road to the north, Highway 169 to the east, Highway 62 to the south and Shady Oak Road to the west. The Opus development trail network was originally designed and constructed as an element of the Opus mixed use development. The Opus development area trail network is a collection of trails that are paved with asphalt, with short sections of concrete pavement. Most of the trail network is at-grade, with some short sections of trails crossing under local roads. The primary recreation facilities that occur within the Opus development area trail network are the trails themselves. The primary recreation activities that occur within the Opus development area trail network area trail network occur on the trails, and include walking, running, bicycling, nature and wildlife observation, cross-country skiing (conditions allowing), and other similar activities. Transportation activities also occur within the trail network. Further information about the Opus development area trail network can be found in the Amended Draft Section 4(f) Evaluation.

#### C. Description of Project Changes to the Opus development area trail network

The Council will permanently alter relatively short sections of the Opus development area trail network to accommodate the introduction of the light rail alignment, station, and related improvements. Alterations to the trail network by the Project will include removal of relatively short sections of paved trail to be replaced with new paved trail sections in different locations, resulting in a net increase in the size of the trail network. In summary, approximately 1.5 acres of existing trail will be removed and replaced with approximately 1.8 acres of new trail, resulting in a net increase of approximately 0.3 acres of trail. All connections currently provided through the Opus development area trail network will be maintained during and post construction.

Some temporary construction activities associated with the Project will affect the Opus development area trail network within and directly adjacent to the segments of trail that will be removed and replaced with a new trail segment. Construction activities within the Opus development area trail network include grading, vegetation removal and replacement, repaving segments of the trail that will remain in place to match new trail segments, temporary trail connections and signage, and other activities associated with reconstruction of affected trails. The Project will provide the public and the City of Minnetonka with construction detour information. Further, the Project will restore all segments of the Opus development area trail network (i.e., the Project will alter trail segments but will not permanently remove trail area) to pre-construction conditions or better, based on specifications agreed to between the Council and the City of Minnetonka. Further information on the long term and short term impacts to the Opus development area trail network can be found in the Amended Draft Section 4(f) Evaluation.

## Re: Section 4(f) *de minimis* Use Determination for the Opus Development Area Trail Network – City of Minnetonka Concurrence Southwest Light Rail Transit Project, Hennepin County, Minnesota

#### D. Section 4(f) de minimis Use Determination

Consultation between FTA, the Council, and the City of Minnetonka on design issues related to the park has occurred throughout the design refinement process since the publication of the Draft EIS. FTA has determined that the construction and operation of the Project will not adversely affect the features, attributes or activities that qualify the Opus development area trail network for Section 4(f) protection. Based on the analysis, all possible planning to minimize harm has been identified to date, as summarized in the Project's Amended Draft Section 4(f) Evaluation and consistent with the requirements of 23 CFR 774.5(b), FTA has concluded that a *de minimis* use determination is appropriate for the Opus development area trail network.

This letter, as signed by the City of Minnetonka, serves as documented concurrence by the City of Minnetonka that Project actions would result in *de minimis* impacts at the Opus development area trail network.

If you require additional assistance, please contact Reggie Arkell at (312) 886-3704/ reginald.arkell@dot.gov or Maya Sarna at (202) 366-5811/maya.sarna@dot.gov. Thank you for your consideration of this request.

Sincerely, Othanta

Marisol R. Simón Regional Administrator

The City of Minnetonka, as owner and manager of the Opus development area trail network, concurs with the FTA's determination that the Southwest LRT Project will result in a Section 4(f) *de minimis* use on the Opus development area trail network, as defined in 23 CFR 774.17 and as demonstrated in this letter.

e Wischneck Title: Comm Dev. Dir. Signature:

20. Materials from City of Minnetonka Official with Jurisdiction Meeting, January 2016

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| Meeting Title:      | Section 4(f) Coordination – Newly Identified Section 4(f)<br>Properties within the City of Minnetonka                                                                                                                                                  |       |                                              |                                     |             |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------------------------------|-------------------------------------|-------------|
| Date:               | 01/05/2016                                                                                                                                                                                                                                             | Time: | 1:00 p.m.                                    | Duration:                           | 1.0 hour    |
| Location:           | SPO Conf. Rr<br>Call in #: 1 88                                                                                                                                                                                                                        |       | 5; code: 110926906                           | 2                                   |             |
| Meeting called by:  | Nani Jacobson, Assistant Director, Environmental & Agreements                                                                                                                                                                                          |       |                                              |                                     |             |
| Invitees:           | FTA: Maya Sarna; Minnetonka: Julie Wischnack, Phil Olsen, William<br>Manchester; SPO: Jim Alexander, Sarah Ghandour, Ryan Kronzer, Sam<br>O'Connell, Dan Pfeiffer, James Mockovciak, Kim Proia, Mark Bishop, Don<br>Demers, Jeanne Witzig, Leon Skiles |       |                                              |                                     |             |
| Purpose of Meeting: |                                                                                                                                                                                                                                                        | -     | l Section 4(f) prope<br>tion 4(f) process an | rties under jurisdic<br>d analysis. | tion of the |

| Ag | end | a                                                                                     |
|----|-----|---------------------------------------------------------------------------------------|
| 1. | We  | lcome and Introductions                                                               |
| 2. | Ov  | erview of Section 4(f) Requirements (handout)                                         |
| 3. | Ide | ntification of Section 4(f) Properties (handouts)                                     |
|    | a.  | Properties Evaluated:                                                                 |
|    |     | - Opus Development Area Trail Network                                                 |
|    |     | - Unnamed Open Space B                                                                |
|    |     | - Unnamed Open Space A                                                                |
|    | b.  | Process for Determining Section 4(f) Status                                           |
|    |     | - Initial Status Determinations                                                       |
|    |     | - Current Status Determinations                                                       |
|    | c.  | Preliminary Section 4(f) de minimis Impact Determinations (handout)                   |
| 4. | Nex | t Steps                                                                               |
|    | a.  | Publication of the Amended Draft Section 4(f) Evaluation                              |
|    | b.  | Receipt of Public and Agency Comments and Review by FTA, City, Council                |
|    | c.  | FTA Request to City for Written Concurrence on the Two Section 4(f) de minimis Impact |
|    |     | Determinations                                                                        |
|    | d.  | Publication of the Final Section 4(f) Evaluation                                      |



| DISCUSSION:   |                            |          |
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| ACTION ITEMS: | <b>PERSON RESPONSIBLE:</b> | DEADLINE |
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## Section 4(f) of the Department of Transportation Act Overview

#### 1. What is the intent of Section 4(f)?

• To prohibit a transportation project from using a qualifying park/recreation area, historic site or wildlife/ waterfowl refuge, unless there is no prudent and feasible avoidance alternative or the use would be *de minimis* 

#### 2. What is a 4(f) Use?

- The permanent incorporation of any portion of a 4(f) property into a project through the fee simple acquisition of the property or acquiring a property right that allows permanent access to the property (e.g., easement)
- Use has a greater than *de minimis* impact (*de minimis* = no adverse effect to the activities, features or attributes of the 4(f) property, after minimization and mitigation)
- A proximity impact (e.g., noise, visual) that substantially impairs use of the property = Constructive Use
- A short-term construction use that cannot meet five Temporary Occupancy criteria

#### 3. What is a *de minimis* impact?

 (1) For historic sites, a Section 106 finding of no adverse effect or no historic properties affected on a historic property, or (2) For parks, recreation areas, and wildlife and waterfowl refuges, the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f).

#### 4. What is a Constructive Use?

Occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features or attributes of the property are substantially diminished.

#### 5. What is a Temporary Occupancy?

- Temporary occupancies of land that are so minimal as to not constitute a use under 4(f). These must meet:
  - Duration must be temporary, i.e. less than the time needed for construction of the project and no change in ownership of the land
  - Scope of work must be minor, i.e. both the nature and magnitude of the changes to the 4(f) property are minimal
  - No anticipated permanent adverse physical impacts, nor will it interfere with protected activities, features or attributes of the property
  - The land being used must be fully restored (returned to a condition which is at least as good as that which existed prior to the project)
  - Documented agreement with the official(s) with jurisdiction

#### 6. How is the eligibility of a 4(f) park/recreation area determined?

- Primary purpose of the property is recreation
- Property is publically-owned, publically-accessible and of local significance

#### 7. What is an Official with Jurisdiction?

- Parks: Officials with the agency/ies that own or administer the 4(f) property
- Historic sites: SHPO

#### 8. How are Section 4(f) and Section 106 related?

- Section 106 process determines the eligibility of historic/archaeological resources for potential 4(f) protection
- Section 106 determines level of 4(f) use (e.g., use + no adverse effect = de minimis; use + adverse effect = non-de-minimis 4(f) use)
- 106 Agreement documents 4(f) All Possible Planning to Minimize Harm

#### 9. What is a Feasible and Prudent Avoidance Alternative?

- Completely avoids the permanent use of a 4(f) property
- Feasibility: Can be built as a matter of sound engineering
- Prudence: No severe problems that outweigh protecting the 4(f) property, considering:
  - Meeting Purpose/Need
  - Safety
  - Severe impacts (after mitigation)
  - Extraordinary costs
  - Unique problems/factors
  - Cumulative impact of multiple factors

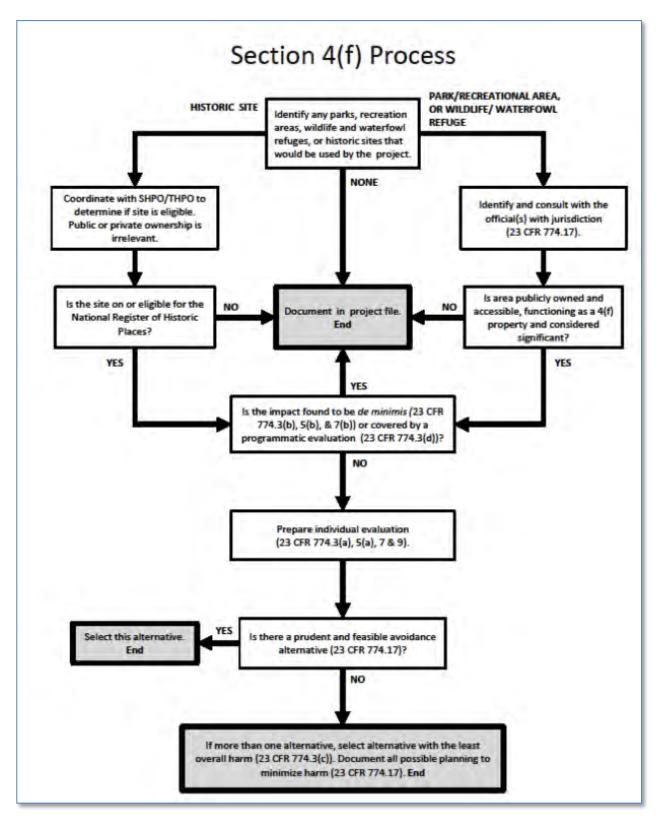
#### 10. What happens if the LPA uses a protected property?

- FTA issues a 4(f) Evaluation (draft and final), including three required determinations:
  - There is **No Prudent/Feasible Avoidance Alternative**
  - All Possible Planning to Minimize Harm has occurred (includes all reasonable mitigation measures)
  - o LPA must have Least Overall Harm compared to other alternatives that have a 4(f) use

#### 11. What is a Least Overall Harm Analysis?

- When there is no feasible and prudent avoidance alternative, the comparison of the LPA with other alternatives under consideration that would have a use of any 4(f) property
- Comparative criteria used to reach the determination:
  - Relative value of and impacts to 4(f) properties, after similar mitigation efforts criteria:
    - Ability to mitigate adverse impacts to each 4(f) property
    - Relative severity of harm to protected characteristics of the 4(f) properties (after mitigation)
    - Relative significance of the 4(f) properties
    - Views of officials with jurisdiction over the 4(f) properties
  - Consideration of substantial problem/s criteria:
    - Degree to which the alternative meets P&N
    - Magnitude of adverse impacts to non-4(f) resources (after mitigation)
    - Substantial cost differences
- Only the alternative/s with the Least Overall Harm may be approved by FTA

Sources: 23 USC 138; 49 USC 303; 23 CFR Part 774; *Section 4(f) Policy Paper* (USDOT: July 20, 2012)



Source: Section 4(f) Policy Paper (p. 62; USDOT: July 20, 2012)

## 6 Newly Identified Section 4(f) Properties in Minnetonka

This section addresses the newly identified Section 4(f) properties within the City of Minnetonka, Minnesota. Table 6-1 lists the resource name, location, and jurisdictional owner. Exhibit 6-1 shows the location of the two park properties within the context of the larger Project and within the area of the Project's alignment in Minnetonka.

#### TABLE 6-1

Section 4(f) Properties Evaluated in this Amended Draft Section 4(f) Evaluation

| Property Name                          | Property Type | Location                                                                                                                                  | Official with Jurisdiction | Section 4(f)<br>Qualifying<br>Description <sup>a</sup> |
|----------------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------|
| Unnamed Open<br>Space B                | Park          | 14600 Minnetonka Boulevard                                                                                                                | City of<br>Minnetonka      | 49.0 acre open space                                   |
| Opus Development<br>Area Trail Network | Park          | Located generally between Smetana Road<br>to the north, Hwy 169 to the east, W 62 <sup>nd</sup><br>St to the South and Hwy 61 to the west | City of<br>Minnetonka      | 9.6 acre recreational trails                           |

<sup>a</sup> All listed parks are publicly owned, publicly accessible and of local significance.

Table 6-2 summarizes FTA's Section 4(f) use determinations for each of the Section 4(f) park and recreation properties within the Project's study area. Table 6-2 also includes how many acres, if any, of the property will be incorporated under the Project (compared to the property's acreage). Park and recreation properties are generally listed from south-to-north in the Project study area.

#### TABLE 6-2

Summary of Permanent Section 4(f) Park and Recreational Property Uses

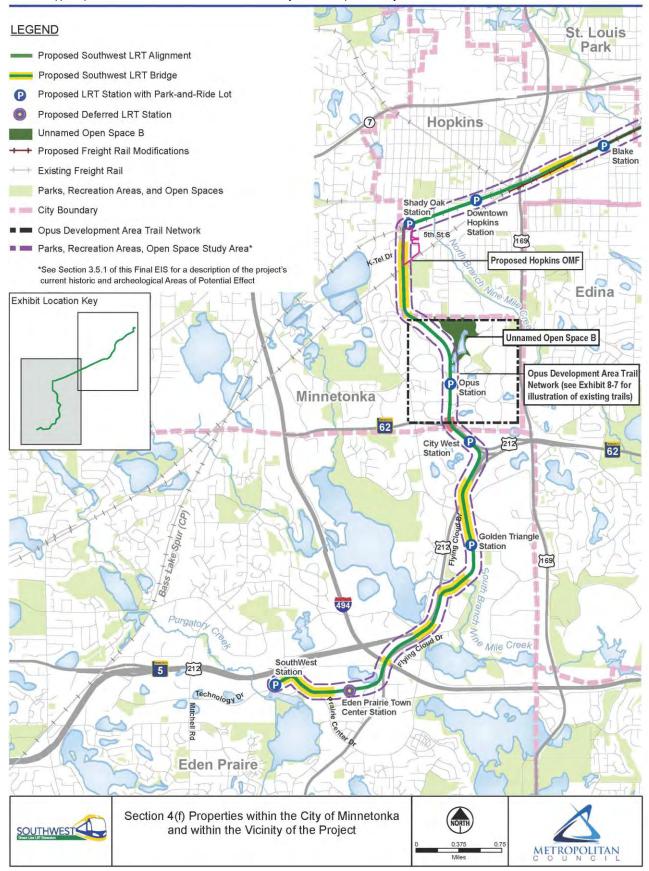
| Section 4(f) Property               | Non <i>-de</i><br><i>minimis</i> Use | <i>De minimis</i><br>Impact | No Use | Existing<br>Property<br>Acreage | Acres<br>Permanently<br>Used | % of<br>Property<br>Used |
|-------------------------------------|--------------------------------------|-----------------------------|--------|---------------------------------|------------------------------|--------------------------|
| Unnamed Open Space B                |                                      | •                           |        | 49.0                            | 1.0                          | 2.0%                     |
| Opus Development Area Trail Network |                                      | •                           |        | 9.6                             | 0.0°                         | 0.0%ª                    |

<sup>a</sup> Approximately 1.5 acres of the Opus development area trail network will be removed due to the Project and it will be replaced with approximately 1.8 acres of new trails with the same connections and functions, for a net increase of 0.3 acres of additional trail area within the Opus development area trail network.

The following property in the City of Minnetonka is not considered a Section 4(f) park/recreation property:

• **Unnamed Open Space A.** Composed of one generally naturally vegetated parcel (approximately 3.0 acres), Unnamed Open Space A is located immediately east of Bren Road E. This parcel's official plan designation in the City Minnetonka 2030 Comprehensive Plan (Figure IV-15) is "Mixed Use" (and not "Parks" or "Open Space"). A paved trail, which is part of the Opus development area trail network, (see Section 6.1.2) crosses the parcel in an east-west manner at a point approximately 830 feet north of the intersection of Bren Road East and Red Circle Drive. Unnamed Open Space A also contains an easement owned by Hennepin County for drainage purposes. Based on deed/title information on this property there are no park/recreation-related easements or other park/recreational legal agreements attached to this property. Further, there is no deed covenant restricting the future use of this parcel to "parkland" or "open space." Therefore, FTA does not consider Unnamed Open Space A to be a Section 4(f) property.

#### **EXHIBIT 6-1** Section 4(f) Properties in Minnetonka and within the vicinity of the Proposed Project



Following is a description of the two Section 4(f) park and recreation properties within the Project's park and recreation are study area within the City of Minnetonka (generally from south to north), including:

- A description of the Section 4(f) property
- A Section 4(f) *de minimis* impact determination

#### 6.1 Unnamed Open Space B – Preliminary *De Minimis impact* Determination

#### A. Section 4(f) Property Description

Unnamed Open Space B is an approximately 49-acre regional park located at 14600 Minnetonka Boulevard in Minnetonka (see Exhibit 6-2). Unnamed Open Space B is owned and operated by the City of Minnetonka. The open space is generally located between Bren Road West on the south, Smetana Road on the north, Green Circle Drive on the east, and private residential and commercial properties on the west. This parcel is designated as "Open Space" in the City Minnetonka 2030 Comprehensive Plan (Figure IV-5) versus Open Space A which is designated as "mixed use.", the City's Plan notes that the purpose of "open spaces" is to preserve as many of the natural features of the land as possible.<sup>1</sup>

Unnamed Open Space B is predominantly naturally vegetated (e.g., wooded, riparian, and wetland features), with some areas of landscaping and pavement (i.e., roadway and trail segments that cross the property). The primary recreation features and attributes of Unnamed Open Space B are: 1) the naturally vegetated areas of the property that make up the majority of the recreation area; and 2) segments of the Opus development area trail network, which is also a Section 4(f) property (see Section 6.2).

The natural areas of Unnamed Open Space B are predominantly made up of the following: an established and functioning wetland in the northern portion of the property; a meandering minor waterway connecting to the wetland; and areas of natural woods, meadow and brush. These natural areas of the property attract an array of wildlife, which are also attracted to and move about between other natural areas that are located on nearby private properties within the Opus development area. The recreational activities within Unnamed Open Space B that are related to those natural features include bird watching, wildlife viewing, native plant observation and identification, nature photography, picnicking, work breaks (from adjacent offices), solitude and contemplation, off-trail walking/hiking, and cross country skiing (weather permitting). Within Unnamed Open Space B there are a few park benches located adjacent to the trail segments that traverse the open space.

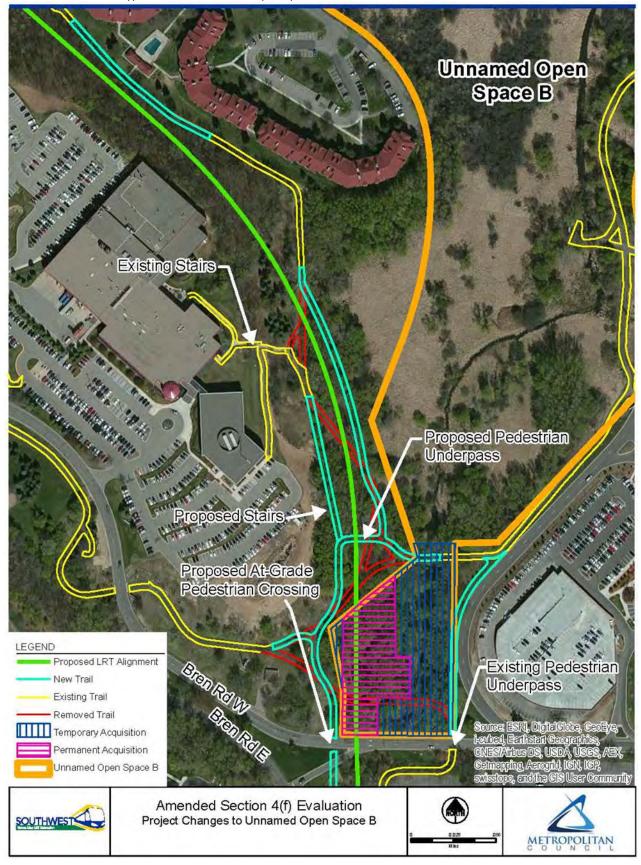
Additional recreation activities that occur within Open Space B are those that occur on the segments of the Opus development area trail network that pass through the property. Those recreation activities include walking, running, bicycling, nature and wildlife observation, cross country skiing, and other similar activities. The trail network is the primary way in which recreational users of Unnamed Open Space B access the property.

As Unnamed Open Space B is a publicly owned, publicly accessible recreation area of local significance, FTA considers Unnamed Open Space B to be a Section 4(f)-protected property. Consultation between City of Minnetonka and Project staff on design issues related to Open Space B has occurred throughout the design refinement process that occurred after publication of the Draft EIS. In addition, Project staff held a meeting with City staff on January 5, 2016,<sup>2</sup> which focused on recreation areas owned and operated by the City of Minnetonka, the Section 4(f) process and documentation, and FTA's preliminary Section 4(f) determinations for the two City recreation areas addressed in this document.

January 5, 2015

<sup>&</sup>lt;sup>1</sup> There is a covenant restricting the future use of this parcel to "parkland" or "open space" (see Deed Document No. 1260164). The covenant restriction will be addressed through the Council's and MnDOT's property acquisition process by implementing a real property condemnation process for the portion of Open Space B that will be permanently acquired for the Project. Open Space B also includes an easement for right-of-way across the northwest portion of the property, which includes an existing paved roadway by the Claremont Apartments to access Smetana Road. Other easements affecting the property include those for flowage rights of the City of Hopkins, drainage, and utilities.

<sup>&</sup>lt;sup>2</sup> See Section 7 for a more detailed description of the FTA's and the Council's Section 4(f) consultation process and activities.



#### B. Determination of Permanent Section 4(f) Use

As illustrated in Exhibit 6-2, the Project will result in a variety of permanent and short-term (construction-related) changes to Unnamed Open Space B, described as follows.

The Council will permanently acquire from the City of Minnetonka an approximately 1.0 acre portion of Unnamed Open Space B (approximately 2 percent), as illustrated on Exhibit 6-2). The acquired property will be incorporated into the Project for transportation purposes. In particular, the acquired portion of Unnamed Open Space B will be used by the Project for the following:

- A short section of the proposed light rail alignment, including a double crossover and grading required to accommodate the light rail alignment;
- A traction power substation and a double-crossover bungalow, and
- An access driveway between the substation/bungalow and Bren Road West.

Most of the natural areas of Unnamed Open Space B, which are predominantly located in the northern portion of the property, will not be directly affected by the Project. Those areas, such as the wetland, will not be altered by the Project, either permanently or temporarily. In addition, the proposed light rail alignment will generally be screened from view from those natural areas due to retained trees and existing residential buildings located between the proposed alignment and those natural areas.

The portion of the property that will be acquired by the Project includes some natural vegetation; however, that area is generally isolated from the larger natural areas located in the northern portion of the property. Further, the area that will be acquired by the Project has somewhat different attributes than the northern natural areas, in that it is directly bordered on three sides – by large commercial development immediately to the east and west and by an arterial roadway (Bren Road West) to the south. Additionally, some of the area to be acquired for the Project is currently landscaped, rather than naturally vegetated. Finally, over half the southern portion of the property will not be acquired for the Project and will be retained in City ownership; this remaining area of the southern portion of Unnamed Open Space B will provide a vegetative buffer between a new trail segment on the southwest edge of the property and commercial development located to the west.

Project construction activities will be confined to the southern portion of Unnamed Open Space B. Those construction activities will predominantly occur within the area of Unnamed Open Space B that will be permanently acquired for the Project. Those construction activities will include clearing, grubbing, and grading, construction of the light rail alignment, new trail sections, the new traction power substation and signal bungalow, and revegetation of the site.

Some construction activities will also occur within the approximately 1.6 acres of Unnamed Open Space B located outside and immediately to the east of the area of the property to be permanently acquired for the Project. In general, those construction activities will be related to regrading that will be required to match the grading within the area to be permanently acquired, as well as the removal and replacement of trail segments. Those construction activities may also include the construction and removal of potential temporary trail connections.

Construction activities within Unnamed Open Space B will be closely coordinated with the City of Minnetonka to help avoid and minimize effects on recreational activities within the open space. The Council will also provide the City of Minnetonka and the public with ongoing notification of construction activities within the open space, such as the timing and location of heavy construction activities and trail detours. All areas of the remaining Unnamed Open Space B property that will be affected by Project construction activities will be restored to existing conditions or better and restoration plans will be developed and implemented in consultation with the City of Minnetonka.

Relative to the segments of the Opus development area trail network that traverse portions of Unnamed Open Space B, portions of the existing at-grade trail will be relocated to accommodate construction of the light rail alignment and other facilities. New sections of trail will be located within the remaining adjacent portion of Unnamed Open Space B, as illustrated on Exhibit 6-2. The realignment of the trails within the open

space will ultimately be determined through continued consultation between FTA, the Council, and the City of Minnetonka, which will work to avoid, minimize, and mitigate impacts to the open space's Section 4(f)-qualifying activities, features, and attributes. As noted in Section 6.2, existing trail connections for portions of the Opus development area trail network that are within Unnamed Open Space B will be maintained in the long-term under the Project. Except for the potential for short-term trail closures to ensure trail user safety, all existing trail connections will be maintained during construction of the new trail alignment. During those short-term temporary trail closures, trail users will be provided with detour routes and information. Temporary trails may be constructed to allow for the removal of existing trail segments and construction of new trail segments.

FTA, the City of Minnetonka, and the Council have made efforts to help avoid, minimize, and mitigate impacts to Unnamed Open Space B, including participation in a Section 4(f) coordination meeting in January 2016. See Appendix B for the notes and materials from that meeting. In particular, the Project minimized the amount of area of the property needed to be acquired for transportation purposes and designed the modified trail network to ensure continued connections and minimal trail modifications. Further, the recreation activities that currently occur within the area unaffected by the Project in Unnamed Open Space B will be maintained both during and after construction of the Project.

#### C. Preliminary Section 4(f) Use Determination

Based on the design and analysis as described in this section, and consistent with the requirements of 23 CFR 774.5(b), FTA has preliminarily determined, in coordination with the City of Minnetonka, that Project actions will not adversely affect the features, attributes, or activities that qualify Unnamed Open Space B for Section 4(f) protection. As such, FTA has concluded that Project actions will result in a Section 4(f) *de minimis* impact at Unnamed Open Space B, consistent with 23 CFR 774.17.

FTA, the Council, and the City of Minnetonka will consider all comments received during the public comment period for this Amended Draft Section 4(f) Evaluation that address this preliminary Section 4(f) *de minimis* impact determination for Unnamed Open Space B. Following the close of the public comment period on this Amended Draft Section 4(f) Evaluation and after consideration of the comments, FTA will request written concurrence from the City of Minnetonka prior to making a final *de minimis* use determination for this property. FTA intends to make the final *de minimis* impact determination for Unnamed Open Space B in the Project's Final EIS/Final Section 4(f) Evaluation.

# 6.2 Opus Development Area Trail Network – Preliminary *De Minimis* Impact Determination

#### A. Section 4(f) Property Description

The Opus development trail network is an approximately eight-mile (approximately 42,000 feet) length of trail corridor that generally serves the mixed-use Opus development area in Minnetonka, Minnesota (see Exhibit 6-3). In general, the Opus development trail network is owned and maintained by the City of Minnetonka. Portions of the trail network are on land owned fee simple by the City of Minnetonka (e.g., within Unnamed Open Space B); portions of the trail network are on land owned fee simple by a private entity or individual within an easement owned by the City of Minnetonka (e.g., south of the Claremont Apartments); and portions of the trail network are located on land owned fee simple by a private entity or individual.

The Opus development area trail network is generally located between Smetana Road to the north, Highway 169 to the east, West 62nd Street to the south and Highway 61 to the west. The Opus development trail network was originally designed and constructed as an element of the Opus mixed use development, which includes office, retail, residential, institutional, recreation, and other uses. Overall, trails within the City of Minnetonka, including the Opus development area trail network, are designated as both a recreation and a transportation facility in the City Minnetonka 2030 Comprehensive Plan (Chapter VII – Parks, Open Space and Trail Plan; Figure VII-2 – Existing Trail System within the Comprehensive Plan; Chapter 8 – Transportation Plan).

#### EXHIBIT 6-3

January 5, 2015

Amended Draft Section 4(f) Evaluation – Opus Development Area Trail Network



The Opus development area trail network is a collection of trails that are generally paved with asphalt, with short sections of concrete pavement. Most of the trail network is at-grade, with some short sections of trails crossing under local roads. Maintaining and improving the road/trail grade separations are a priority of the City of Minnetonka. The primary recreation facilities within the Opus development area trail network are the trails themselves. There are scattered benches, picnic tables, directional signs, and the like that are located adjacent to the trail network and are utilized by trail users. Segments of the Opus development area trail network cross through and are included within Unnamed Open Space B, which is a Section 4(f) property (see Section 6.1 for additional information on Unnamed Open Space B). The primary recreation activities that occur within the Opus development area trail network occur on the trails. Those recreation activities include walking, running, bicycling, nature and wildlife observation, cross-country skiing (conditions allowing), and other similar activities. There are also ancillary passive and active recreation activities occurring on other public and private recreation areas or open spaces that connect to the trail network, for example, where trail users stop to observe or use a recreation area or open space. Transportation activities also occur within the trail network, providing pedestrians and bicyclists with connections between residential, commercial retail, and other uses within and outside of the Opus development area. Much of the trail network is plowed of snow during the winter.

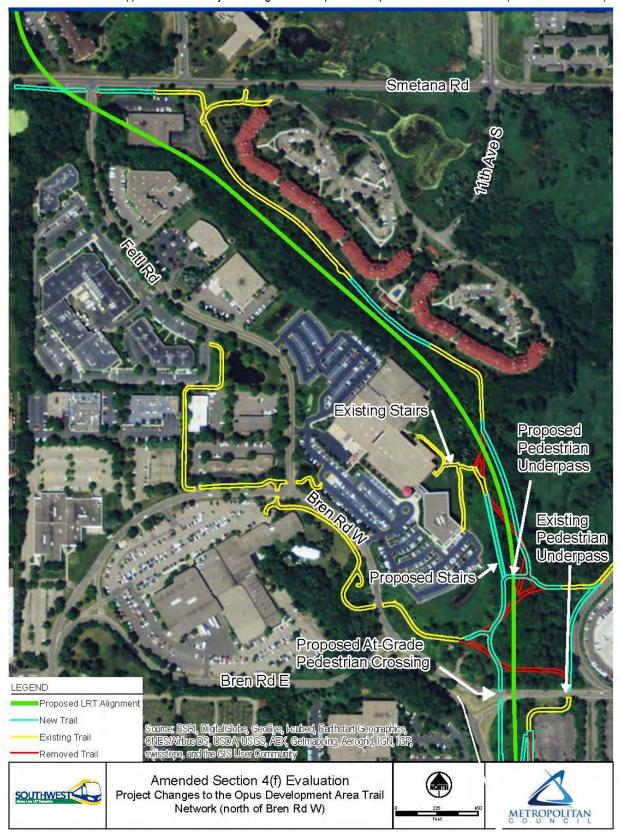
As the Opus development area trail network is a publicly owned, publicly accessible recreation area of local significance, FTA considers the Opus development area trail network to be a Section 4(f)-protected property. Consultation between the City of Minnetonka and Project staff on design issues related to the Opus development area trail network has occurred throughout the design refinement process that occurred after publication of the Draft EIS. In addition, Project staff held a meeting with City staff on January 5, 2016,<sup>3</sup> which focused on recreation areas owned and operated by the City of Minnetonka, the Section 4(f) process and documentation, and FTA's preliminary Section 4(f) determinations for the recreation areas.

#### B. Determination of Permanent Section 4(f) Use

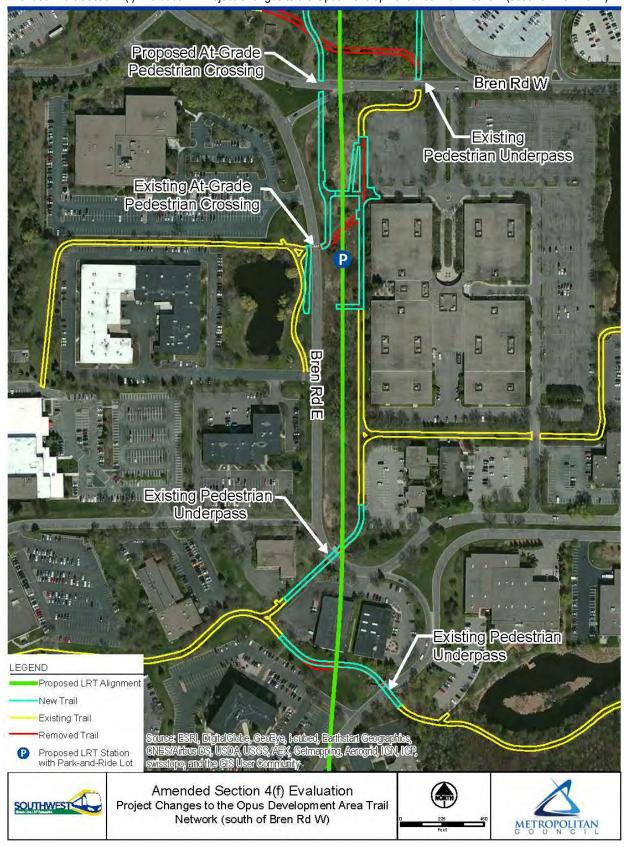
As illustrated on Exhibits 6-4 and 6-5, the Project will result in a variety of permanent and short-term (construction-related) changes to the Opus development area trail network, described as follows.

The Council will permanently alter relatively short sections of the Opus development area trail network to accommodate the introduction of the light rail alignment, station, and related improvements (as illustrated on Exhibits 6-4 and 6-5). In general, alterations to the trail network by the Project will include removal of relatively short sections of paved trail to be replaced with new paved trail sections in different locations, resulting in a net increase in the size of the trail network. In summary, approximately 1.5 acres of existing trail will be removed and replaced with approximately 1.8 acres of new trail, resulting in a net increase of approximately 0.3 acres of trail. The Project will also maintain the number of trail undercrossings beneath roadways and will include a new trail undercrossing beneath the proposed light rail alignment. All alterations to the trail network will result in maintaining all connections currently provided through the Opus development area trail network. Each new trail segment will be designed and constructed to have the same or better physical and functional characteristics of the trail segment that it will replace. For example, new trail segment that is currently 10 feet wide will be replaced with a trail segment that is at least 10 feet wide. Specifications for the new replacement trail segments have and will be developed in consultation with the City of Minnetonka.

<sup>&</sup>lt;sup>3</sup> See Section 7 for a more detailed description of the FTA's and the Council's Section 4(f) consultation process and activities.



**EXHIBIT 6-5** Amended Draft Section 4(f) Evaluation – Project Changes to the Opus Development Area Trail Network (south of Bren Rd W)



Some temporary construction activities associated with the Project will affect the Opus development area trail network within and directly adjacent to the segments of trail that will be removed and replaced with a new trail segment. Construction activities within the Opus development area trail network include grading, vegetation removal and replacement, repaving segments of the trail that will remain in place to match new trail segments, temporary trail connections and signage, and other activities associated with reconstruction of affected trails. The Project will provide the public and the City of Minnetonka with construction detour information. Further, the Project will restore all segments of the Opus development area trail network altered but not permanently moved by the Project (e.g., regrading a trail segment to match a new trail segment) to pre-construction conditions or better, based on specifications agreed to between the Council and the City of Minnetonka.

All existing trail connections provided by the Opus development area trail network will be maintained in the long-term under the Project. Except for the potential for short-term trail closures to ensure trail user safety during construction, all existing trail connections will be maintained during construction of the new trail. During those temporary trail closures, trail users will be provided with detour routes, signage, and other information as appropriate. Temporary trails may be constructed to allow for the removal of existing trail segments and construction of new trail segments. Construction activities within the Opus development area trail network will be closely coordinated with the City of Minnetonka to help avoid and minimize effects on recreational activities within the trail network. The Council will also provide the City of Minnetonka and the public with ongoing notification of construction activities within the trail network, such as the timing and location of trail detours.

FTA, the City of Minnetonka, and the Council have made efforts to help avoid, minimize, and mitigate impacts to the Opus development area trail network, including participation in a Section 4(f) coordination meeting on January 5, 2016 (see Appendix B for copies of the notes and materials for that meeting). For the areas of the Opus development area trail network that will be permanently and temporarily affected by the Project, FTA, the City of Minnetonka, and the Council have coordinated to define ways to help avoid, minimize, and mitigate impacts to the open space. In particular, the Project minimized the amount of area of the trail network to be modified. Further, Project designs have and will ensure that all existing trail connections will be maintained during and after construction of the Project. In addition, the modifications to the trail network have avoided the removal of any existing trail undercrossings of roadways of trails within the network. Further, a new trail undercrossing of the proposed light rail alignment will be provided just north of Bren Road West. Finally, the design of the Project has and will continue to ensure that recreation activities that currently occur within the Opus development area trail network will be maintained both during and after construction of the Project has and will continue to ensure that recreation activities that currently occur within the Opus development area trail network will be maintained both during and after construction of the Project.

#### C. Preliminary Section 4(f) Use Determination

Based on the design and analysis as described in this section, and consistent with the requirements of 23 CFR 774.5(b), FTA has preliminarily determined, in coordination with the City of Minnetonka, that Project actions will not adversely affect the features, attributes, or activities that qualify the Opus development area trail network for Section 4(f) protection. As such, FTA has concluded that Project actions will result in a Section 4(f) *de minimis* impact of the Opus development area trail network, consistent with 23 CFR 774.17.

FTA, the Council, and the City of Minnetonka will consider all comments received during the public comment period for this Amended Draft Section 4(f) Evaluation that address this preliminary Section 4(f) *de minimis* impact determination for the Opus development area trail network. Following the close of the public comment period on this Amended Draft Section 4(f) Evaluation and after consideration of the comments, FTA will request written concurrence from the City of Minnetonka prior to making a final *de minimis* impact determination for this property. FTA intends to make the final *de minimis* impact determination for the Opus development area trail network in the Project's Final EIS/Final Section 4(f) Evaluation.

#### Minnetonka 2030 Comprehensive Plan – Chapter VII – Parks, Open Space and Trail Plan

#### **Open Space Related Exerpts**

#### Chapter VII. Parks, Open Space and Trail Plan

The Minnetonka park, open space and trail system has become one of the more important community assets and serves city residents and businesses, alike. The park and open space system contributes a substantial amount of property for public activities in the community and reflects the city's commitment towards natural resource stewardship. Further, the trail system provides connections between public spaces and community-oriented activity areas within and outside the city.

The Minnetonka parks and recreation system has expanded and grown as the city has developed. Through thoughtful planning by community leaders in response to understanding the values and interests of the community, residents and workers enjoy diverse opportunities for leisure. As demographic changes continue to impact the city, it will be important to understand which recreational amenities can maintain the city's vitality and attractiveness.

The following chapter of the comprehensive guide plan provides a framework for the overall park, open space and trail planning activities through 2030. Much of the information within this chapter is based on the Minnetonka *Park, Open Space and Trail System Plan* (POST Plan) prepared and adopted by the city in 2000 and is referenced for specific park planning information. The POST Plan establishes a balanced approach to managing community and neighborhood parks, open space, athletic field and trail resources in the city.

The chapter includes:

- a review of the park planning history in the city,
- a summary of park, open space, trails, recreation resources in the city,
- current strategic planning efforts,
- future park, open space and trail improvements, and
- concludes with implementation strategies and tools.

The basis for this chapter is represented in the Minnetonka 2030 Vision, and the community policies included in Chapter III – Overall City Policies.

#### 4. Open Space Preservation

Minnetonka has long been committed to open space preservation, most recently reflected by the passage of the 2001 bond referendum, a shift to conservation development, and updates of land use ordinances related to preservation of steep slopes, shore land and trees. Following the 2001 referendum, the park board and city council prioritized approximately 50 areas throughout the community for possible preservation. The rankings were based on factors developed by the citizen open space preservation task force and adopted by the city council. These factors include sensitive environmental features, buffers for neighborhoods, high visibility, size and linkage to other open areas.

Preservation strategies were developed for each of these areas, ranging from the negotiation of easements to outright purchase. Following the passage of the referendum, the city successfully negotiated acquisitions of five parcels along Minnehaha Creek. Additionally, the city acquired an option to purchase a 30 acre property across from Meadow Park. The city still holds that option, and the resident has donated a conservation easement over the entire property to the Minnesota Land Trust.

Additionally, conservation development agreements have been negotiated for a number of properties to preserve as many of the natural features of the land as possible. Often a property owner has dedicated a conservation easement that prohibits future development activity. Between 2000 and 2006, 159 acres of private land have been placed in conservation easements.

In addition to the donation of easements, other conservation techniques continue to promote the quality of the environment. These include smaller road widths, which allow more open space and less impervious surface, and rain gardens or infiltration systems to treat the storm water run off and promote better water quality.

Additionally, the Park Board has adopted goals and specific strategic objectives (the order does not reflect priority) for the future, that are updated on an annual basis. The 2008 goals and objectives follow the policies included in Chapter III – Overall Policies pertaining to parks, open space and recreation:

- 1. To protect natural resources and open space
  - a. Conduct an ongoing evaluation of the open space process

b. Continue to review and comment on the implementation of the natural resources stewardship plan

c. Assist staff in managing the open space process through successful completion

d. Review options to enhance natural resources & open space

e. Review all proposed changes to the city's code of ordinances that pertain to natural resources and open space

f. Actively participate in development of the city's Minnehaha Creek Visioning Plan

g. Consider a program to recognize historical aspects of the park system

#### 3. Open Space and Natural Area Connections

The 2030 Minnetonka Vision shown as Figure III-1 in Chapter III – Overall Policies depicts the park and open space areas in the city under public control, water resources and areas of important vegetation in the city. The creek corridors, associated floodplain and wetlands, and trails create natural "greenways" within the city, often connecting the city's parks that feature preservation and natural resource stewardship.

The 2000 POST Plan established the need to develop an overall program (with funding) for the preservation of open space under city control based upon the ecological qualities of the area. In the coming years, further study is needed by the city to determine the potential for other private and public stewardship activities to foster connections between the natural "greenways", public open space and areas of important vegetation. Additionally, investigation is needed to review incorporating new stormwater sustainability techniques and address concerns with the growing number and type of plant and animal invasive species.

An update to the POST Plan is needed to further examine the potential for connections between the greenways, open space, and other conservation and sustainability efforts. Information pertaining to MLCCS data and other water quality management inventories reviewed in Chapter VI – Resource Management should be consulted and refined during the POST plan update process to determine the appropriate strategies for the city to manage public open space and encourage private conservation efforts on an ecological neighborhood basis.

#### 3. Open Space

- a) Utilize the city open space preservation program and the management of natural resources policy to obtain, manage and improve open space for the public.
- b) Convert properties acquired for open space preservation to a park or natural setting environment.
- c) Continue to eradicate invasive plant and animal species from open space and other city property and maintain open space in accordance with the Park Maintenance Standards, as may be amended.
- d) Seek grants, funding partners and other outside funding opportunities to increase the amount of publically held open space in the city.

## Section IV Bicycle and Trail System Plan

Minnetonka has a well-developed system of trails (Figure VIII-12). These trails may help reduce traffic by encouraging the use of alternatives to the automobile, including non-motorized transportation modes such as bicycle and pedestrian.

The City will strive to achieve the following trail system goals as related to transportation:

- ✓ To enhance the transportation system through provisions for multiple modes of travel and intermodal connections;
- ✓ To encourage pedestrian travel for local trips and the use of transit facilities;
- ✓ To provide direct and continuous access for destination-oriented pedestrian and bicycle trips;
- ✓ To provide pedestrian and bicycle-oriented improvements that overcome natural and man-made barriers and promote neighborhood connectivity;
- ✓ To provide safe, attractive and convenient pedestrian-oriented improvements which recognize the differing needs of bicyclists and pedestrian, especially the needs of the elderly, disabled and children;
- ✓ To provide for the integration of street and park systems, so as to support the transportation, park and land-use elements of the City's Comprehensive Plan.

### Chapter VII - Parks, Open Space and Trails Plan – Trail-Related Excerpts

#### 2. Existing Trail System

The city's existing trail system, shown on Figure VII-2 consists of off-road trails, walkways (asphalt trails that parallel roadways) and on-road pedestrian-bicycle lanes. The original Loop Trail System was designed to connect the city's major parks and activity centers, and to function as both a transportation and recreation system. Its 33 miles of trails is the centerpiece of the entire trail system that includes neighborhood connectors, sidewalks, pedestrian-bicycle lanes and regional connectors. The main city trail system connects with the Three Rivers Park District's combined 27 mile south segment of Lake Minnetonka and Minnesota River Bluffs LRT regional trails (formerly Southwest Regional LRT). Both corridors begin in Hopkins; the north corridor extends to Victoria, while the south corridor extends to Chanhassen. The city's trail and walkway system also connects with a DNR state trail, the 62 mile Luce Line Trail, in Plymouth just north of Minnetonka.

Trail facilities, including restrooms and drinking fountains, are located at each of the city's five community parks. Much of the main trail system is plowed during the winter months, making it usable throughout the year.

Each year, the city continues to add to the trail system. New trails are generally added with major road reconstruction projects (e.g., CR 101 and the planned 2008-09 improvements to Shady Oak Road). Internal trails have been included with the park renewal projects.

#### b. Local trail connections and pathways

Although there are numerous trails within the city, the trail system is many years from completion. As noted in Chapter VIII – Transportation, several trail connections are planned in conjunction with roadway improvements scheduled in the coming years. These trails will be physically separated from vehicular traffic.

However, there are numerous other trails and pathways that are needed to establish connections to the village centers, parks, schools, existing trails and other activity centers. Figure VII-3 shows the future overall trail plan and identifies numerous trails that currently remain unfunded. It is anticipated that the necessary right of way control and construction of the unfunded trails and pathways will eventually be accomplished as part of the following activities:

- future roadway reconstruction,
- new development and private development activities,
- outside funding from other government agencies or private entities, and
- future capital improvement programming.

#### 2. Trail/Pathway Development and Maintenance

- a. Continue yearly investments into the Future Trail Plan according to the schedule identified in the capital improvements program.
- Provide safe neighborhood trail connections to the overall trail system and community amenities in response to neighborhood requests or Park Board recommendations. Chapter VII.
   Parks, Open Space and Trails Plan VII-16 2030 Comprehensive Guide Plan
- c. Review and prioritization of the unfunded portions of the trail system by the Park Board to connect the village areas, community parks and adjacent communities.
- d. Incorporate identified trails, sidewalks and pathways connections in roadway reconstruction projects.
- e. Continue investments to rehabilitate older trail segments and improve signage (identification and wayfinding).
- f. Maintain trails in accordance with the Park Maintenance Standards, as may be amended, to improve "wheel-ability" for all age groups, sustainability and year round use, as appropriate.

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#### DECLARATION OF RESTRICTIVE COVENANT HENNEPIN COUNTY MINN.

\_ DEPUTY

/ THIS DECLARATION OF RESTRICTIVE COVENANT is made as of this day of February, 1985, by and between THE CITY OF MINNETONKA, a municipal corporation (hereinafter referred to as the "City"), and OPUS CORPORATION, a Minnesota corporation (hereinafter referred to as "Opus"), with reference to the following facts and circumstances:

A. By that certain Quit Claim Deed dated September 19, 1977, filed February 15, 1978, as Document No. 4356924 in the Office of the County Recorder for Hennepin County, Minnesota, Opus (then known as Rauenhorst Corporation) conveyed to the City the fee title to that certain tract of land legally described as:

> Outlot A, Opus 2 Fourth Addition, according to the recorded plat thereof

(hereinafter referred to as the "Subject Property").

The Subject Property was conveyed upon the express condi-Β. tion that it be used only as "parkland and open space purposes", and with the provision that the Subject Property would revert to Opus if it were ever used for any purpose other than parkland or open space.

In connection with its issuance of a permit for the proposed development of certain adjoining property legally described as Tract A, Registered Land Survey No. 1530, Files of Registrar of Titles, County of Hennepin, Nine Mile Creek Watershed District has required that no further development of the Subject Property be per-mitted which would require fill or encroachment within the 100-year frequency floodplain of Nine Mile Creek (hereinafter referred to as the "Floodplain"), and the City has agreed that such restriction is acceptable for the Subject Property.

D. Opus has agreed that a development restriction as set forth in Paragraph C above would be appropriate for the Subject Property and Opus has further agreed that should Opus, or its successors or assigns, acquire the Subject Property by operation of the reverter contained in said Quit Claim Deed, Opus and its suc-cessors and assigns would be bound by such development restriction.

Ε. The City and Opu's desire to set forth in writing this development restriction.

NOW, THEREFORE, in consideration of the foregoing facts and circumstances, and for other good and valuable consideration, the City and Opus hereby agree as follows:

1. The Subject Property shall hereafter be held and conveyed subject to the restriction that there be no further filling or en-croachment within the Floodplain, as such area from time to time may be situated within the Subject Property.

2. This development restriction shall apply to and bind each and every owner of any part of the Subject Property, and its re-spective successors and assigns, to the extent such part of the Subject Property lies within the Floodplain, and shall operate as a covenant passing with the title to the Subject Property.

IN WITNESS WHEREOF, the City and Opus have caused this Declara-tion to be executed as of the day and year first above written.

THE CITY OF MINNETONKA NU U Mayor Ånd ames + Its City Manager

OPUS CORPORATION By\_\_\_\_\_ Its VICE PRESIDENT - REAL ESTATE DIVISION

36-117-22-21-000

STATE OF MINNESOTA) ) ss. COUNTY OF HENNEPIN)

The foregoing was acknowledged before me this <u>7</u>(4) day of February, 1985, by Larry A. Donlin, Mayor, and James F. Miller, City Manager, of The City of Minnetonka, a municipal corporation, on behalf of the municipality.

Notary Pūbļ BE ! . Y L. NORTON NOTARY PUB IC - MINNESOTA Ś HENNEPIN COUNTY My Commission Excires Nov. 6, 1986

STATE OF MINNESOTA) ) ss. COUNTY OF HENNEPIN)

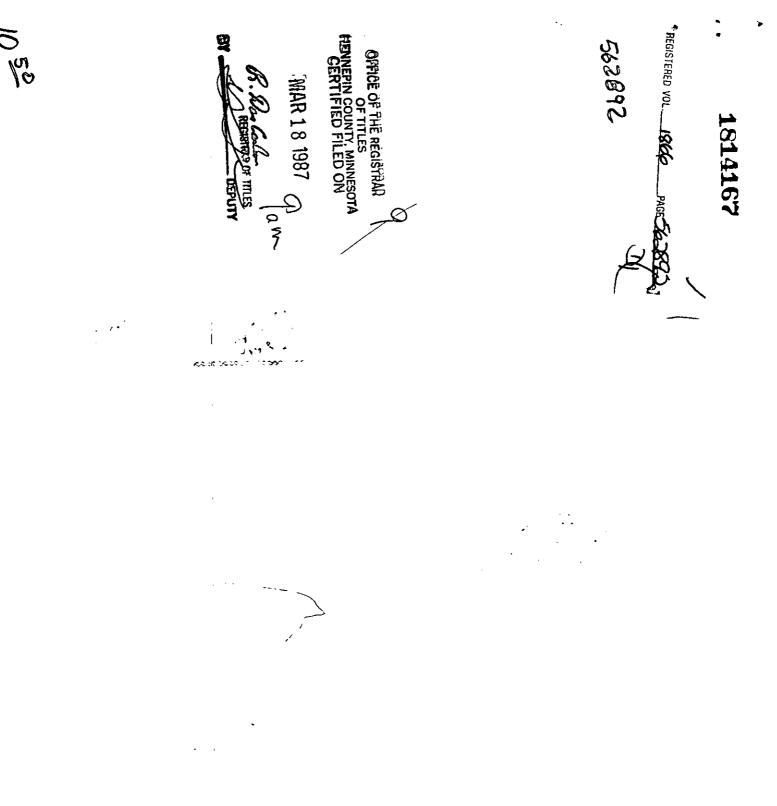
> MARC L. KRUGER NOTARY CUBLIC -- MINNESOTA HENNEPIN COUNTY mission expires Oct. 31, 1990

The foregoing was acknowledged before me this  $21^{st}$  day of February, 1985, by Ralph O. Robinson Vice President-Real Estate Division, of Opus Corporation, a corporation tion under the laws of Minnesota, on behalf of the Corporation.

Marc L. Krugen Notary Public

INSTRUMENT DRAFTED BY:

Marc L. Kruger 800 Opus Center 9900 Bren Road East Minnetonka, MN 55343



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## TRANSFER ENTERED

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HENNELPIN COUNTY MINN

#### EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT is made this  $\frac{22}{\text{Minnesota}}$  day of July, 1991, by and between OPUS CORPORATION, a Minnesota corporation (hereinafter referred to as "Owner"), and the CITY OF MINNETONKA, a Minnesota municipal corporation (hereinafter referred to as "City"), with reference to the following facts and circumstances:

A. Owner is the fee owner of certain real property legally described as follows:

Lots 3 and 4, Block 4, Opus 2 Ninth Addition, according to the recorded plat thereof, Hennepin County, Minnesota

(hereinafter referred to as the "Property").

B. Owner has constructed across certain portions of the Property a bituminous surfaced path, and related improvements, all as part of a trail system in the Opus 2 development (such paths and related improvements collectively hereinafter referred to as the "Secondary Road Improvements"), and Owner has agreed to grant to City an easement for the Secondary Road Improvements upon certain terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing facts and circumstances, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties hereto, Owner and City hereby agree as follows:

1. Owner hereby grants to City a perpetual, non exclusive easement for the construction, installation, use and maintenance of the Secondary Road Improvements over those portions of the Property lying within the fifteen (15) foot wide drainage and utility easement dedicated in the plat of Opus 2 Ninth Addition which lies along the Northeast boundary of the Property. The use of the Secondary Road Improvements permitted pursuant to this easement grant shall be limited to pedestrian and nonmotorized vehicular travel by the general public and by City, its employees and agents; provided, however, that City may use the Secondary Road Improvements as a means of access for emergency vehicles in instances where public health or safety necessitates such access, and for City maintenance vehicles.

2. Owner hereby grants, bargains, quit claims and conveys to City, its successors and assigns, forever, the Secondary Road Improvements. City accepts the Secondary Road Improvements, and agrees that from and after the date hereof City shall be solely responsible for maintaining, repairing and replacing all of the Secondary Road Improvements and the area within the easement described in Paragraph 1 hereof. Without limiting the generality of the foregoing, City agrees that it shall be responsible for mowing all grass immediately adjoining such bituminous surfaced paths.

3. Nothing in this Easement Agreement to the contrary shall prohibit Owner from using the easement area described in Paragraph 1 hereof for such purposes as Owner may decr appropriate, provided that such use by Owner does not materially interfere with the enjoyment by City of the rights and easement herein granted.

4. The easement hereby granted and the agreement herein contained shall by an easement and agreement running with the Property, and shall inure to the benefit of and be binding upon Owner and City and their respective successors and assigns

IN WITNESS WHEREOF, Owner and City have caused this Easement Agreement to be executed as of the day and year first above written.

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OPUS CORPORATION

Ву Jeffrey W/ Essen/ Vice President-

General Manager Real Estate

CITY OF MINNETONKA μ. mi By

Timothy M. Bergstedt Mayor

Q And mo Janes F. Miller, City Manager

STATE OF MINNESOTA) ) 55. COUNTY OF HENNEPIN)

The foregoing was acknowledged before me this 18th day of July, 1991, by Jeffrey W. Essen, the Vice President-General Manager Real Estate of Opus Corporation, a corporation under the laws of Minnesota, on behals of the corporation.

anderson Notary Public

····· IRENE V. ANDERSON NOTARY PUBLIC-MANNESD'A MENNEPIN COUNTY Immission Expires Doc. 7, 1995 My Co \*\*\*\*\*

STATE OF MINNESOTA) ) 88. COUNTY OF HENNEPIN)

The foregoing was acknowledged before me this 22<sup>AA</sup> day of July, 1991, by Timothy M. Bergstedt and James F. Miller, the Mayor and City Manager of the City of Minnetonka, a municipal corporation under the laws of Minnesota, on behalf of the municipal corporation.

Public Notary

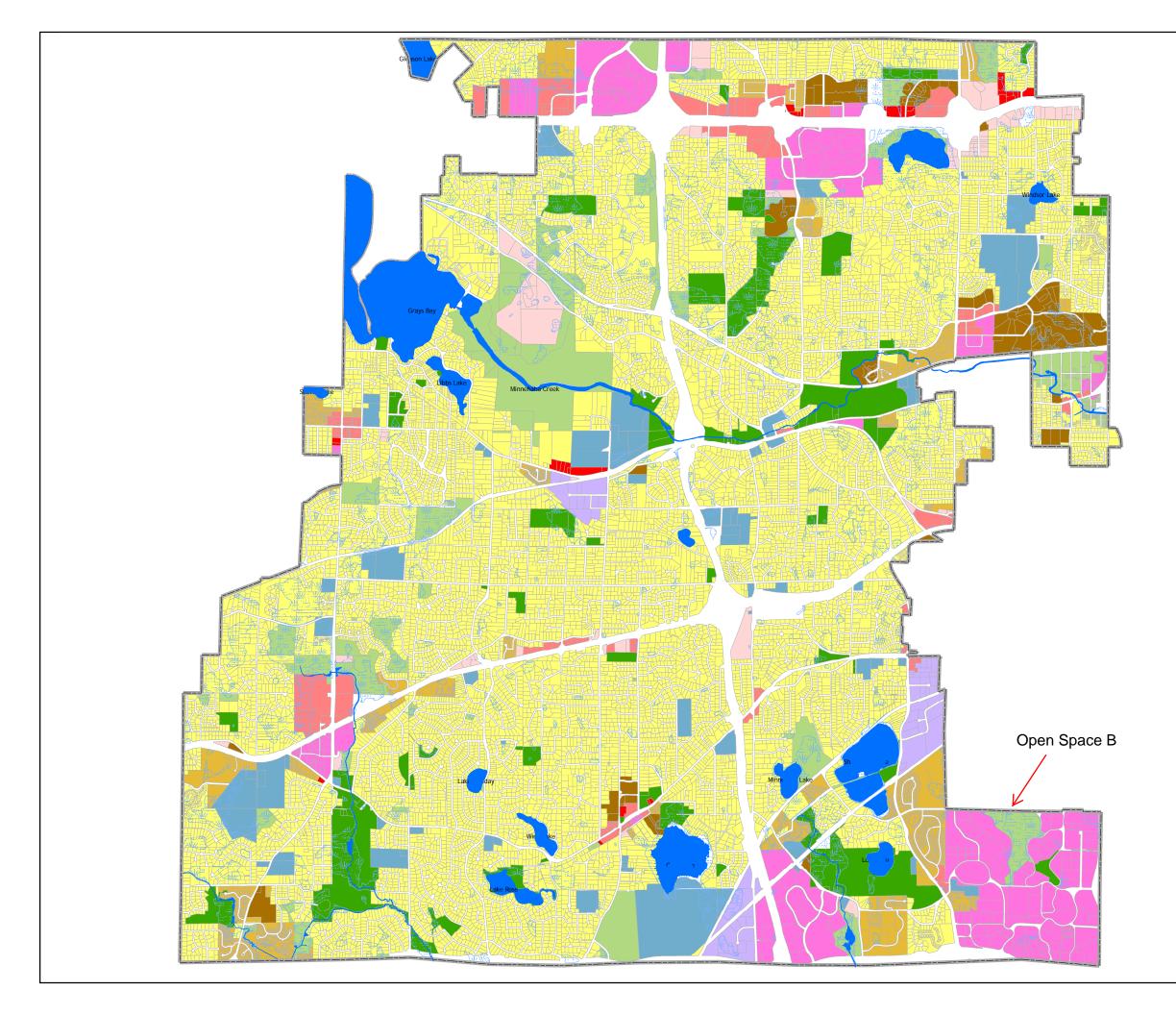
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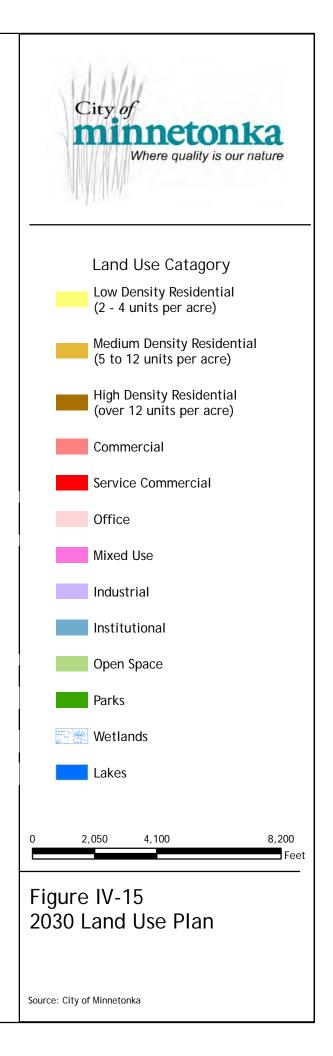
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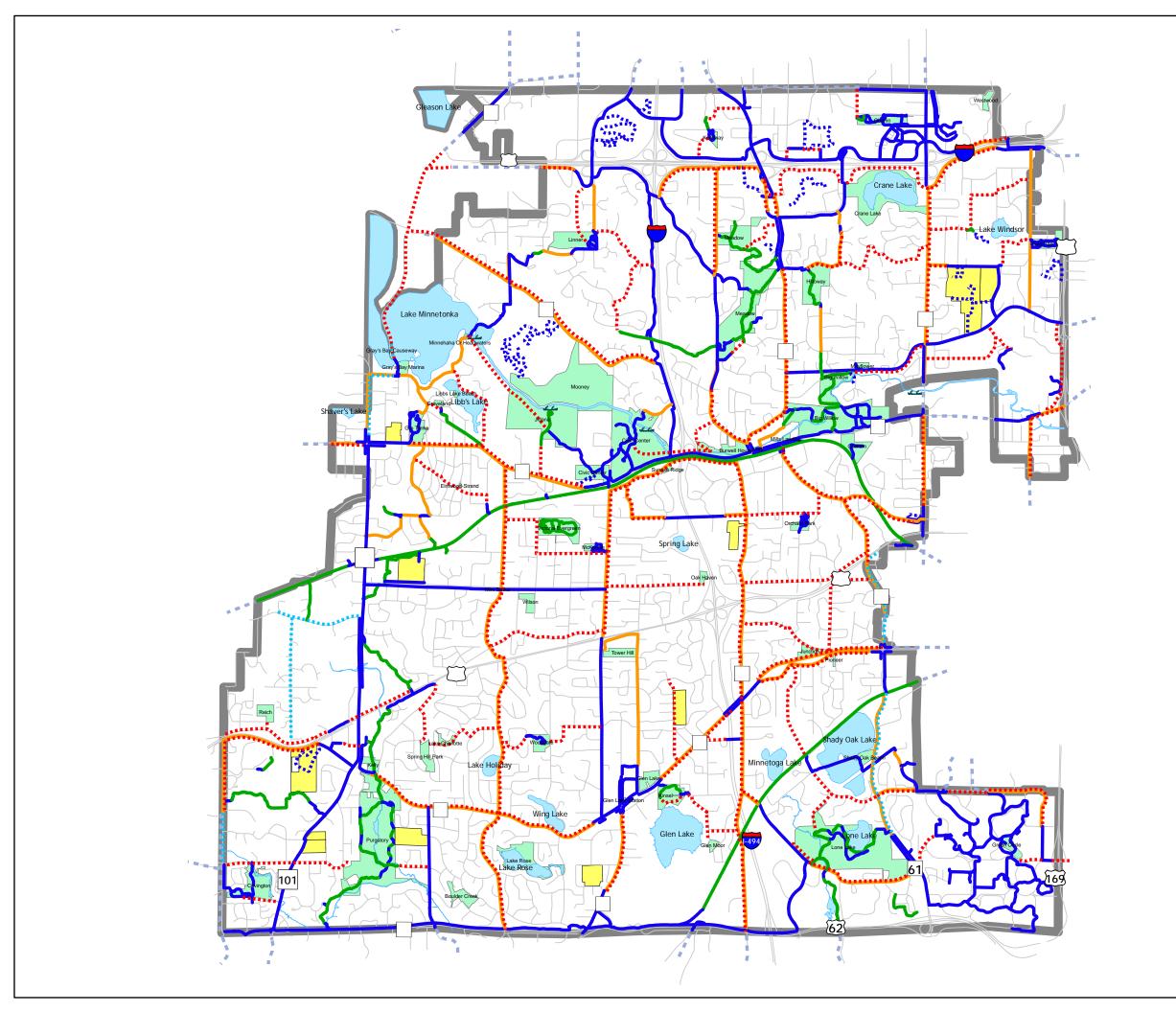
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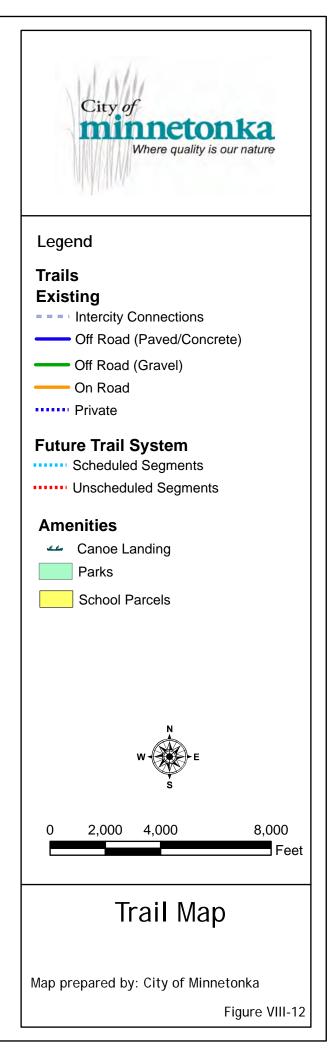
This instrument was drafted by:

Marc L. Kruger 800 Opus Center 9900 Bren Road East Minnetonka, Minnesota 55343











| Meeting Title:      | Section 4(f) Coordination – Newly Identified Section 4(f)<br>Properties within the City of Minnetonka                                                                                                   |                                             |           |                           |  |  |  |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-----------|---------------------------|--|--|--|
| Date:               | 01/05/2016                                                                                                                                                                                              | Time:                                       | 1:00 p.m. | <b>Duration:</b> 1.0 hour |  |  |  |
| Location:           | SPO Conf. Rm. 6A                                                                                                                                                                                        |                                             |           |                           |  |  |  |
|                     | Call in #: 1 88                                                                                                                                                                                         | Call in #: 1 888.742.5095; code: 1109269062 |           |                           |  |  |  |
| Meeting called by:  | Nani Jacobson, Assistant Director, Environmental & Agreements                                                                                                                                           |                                             |           |                           |  |  |  |
| Attendees:          | FTA: Maya Sarna (phone); Minnetonka: Julie Wischnack, Phil Olsen,<br>William Manchester; SPO: Jim Alexander, Sarah Ghandour, Dan Pfeiffer,<br>James Mockovciak, Jeanne Witzig, Leon Skiles, Leila Bunge |                                             |           |                           |  |  |  |
| Purpose of Meeting: | Discuss Newly Identified Section 4(f) properties under jurisdiction of the City of Minnetonka, Section 4(f) process and analysis.                                                                       |                                             |           |                           |  |  |  |
| Agenda              |                                                                                                                                                                                                         |                                             |           |                           |  |  |  |

| Ag | lenda                                                                                      |
|----|--------------------------------------------------------------------------------------------|
| 1. | Welcome and Introductions                                                                  |
| 2. | Overview of Section 4(f) Requirements (handout)                                            |
| 3. | Identification of Section 4(f) Properties (handouts)                                       |
|    | a. Properties Evaluated:                                                                   |
|    | - Opus Development Area Trail Network                                                      |
|    | - Unnamed Open Space B                                                                     |
|    | - Unnamed Open Space A                                                                     |
|    | b. Process for Determining Section 4(f) Status                                             |
|    | - Initial Status Determinations                                                            |
|    | - Current Status Determinations                                                            |
|    | c. Preliminary Section 4(f) <i>de minimis</i> Impact Determinations (handout)              |
| 4. | Next Steps                                                                                 |
|    | i) Publication of the Amended Draft Section 4(f) Evaluation                                |
|    | ii) Receipt of Public and Agency Comments and Review by FTA, City, Council                 |
|    | iii) FTA Request to City for Written Concurrence on the Two Section 4(f) de minimis Impact |
|    | Determinations                                                                             |
|    | iv) Publication of the Final Section 4(f) Evaluation                                       |



#### **DISCUSSION:**

- 2) Overview of Section 4(f) Requirements SPO staff provided an overview of Section 4(f) requirements and the process for a *de minimis* use of the newly identified Section 4(f) properties under jurisdiction of the City of Minnetonka (Refer to handout "Section 4(f) of the Department of Transportation Act").
  - a) The intent of Section 4(f) is to prohibit a transportation project from using a qualifying park/recreation area, historic site or wildlife/waterfowl refuge, unless there is no prudent and feasible avoidance alternative or the use would be *de minimis*.
  - b) The use of a Section 4(f) property includes the incorporation of the park property into a transportation use through a physical use or through a permanent change in property ownership.
  - c) A *de minimis* impact is a physical use of the 4(f) property; however, the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f).
  - d) For *de minimis* impacts, reasonable mitigation measures are identified for the 4(f) property, and FTA issues a preliminary determination in a draft Section 4(f) Evaluation for public comment. Following the comment period, the local jurisdiction has the opportunity to concur in writing that the affected property has a *de minimis* use. Final Section 4(f) determinations will be made by FTA, reflecting consideration of comments on the preliminary determinations and on continued consultation with the Officials with Jurisdiction.



#### 3) Identification of Section 4(f) Properties SPO staff described the Section 4(f) Properties within the City of Minnetonka and the project area that are proposed to have a preliminary *de minimis* use determination.

- a) Properties described (Refer to handout "Newly Identified Section 4(f) Properties in Minnetonka", Section 6.1 for full descriptions of the properties) include:
- Opus Development Area Trail Network (Refer to handout "Newly Identified Section 4(f) Properties in Minnetonka", Exhibit 6-4 for location)

- A 2-foot buffer on either side of the trail is provided where it would need to be maintained (a total of about 9 acres)

- The multi-use trails are the features and the activities on the trail including walking, biking, crosscountry skiing, etc.

- Trail provides access to secluded areas and to workplaces, for both commercial and residential destinations

- Certain sections of the trail will be moved for the construction of the LRT and will be repaved later (Refer to Exhibit 6-4 for those changes)

- No part of the trail will be permanently removed without its current connectivity function being replaced

- The project preserves the pedestrian grade separated crossings in the Opus development area trail networkAfter construction the amount of trail acreage will slightly increase

• Unnamed Open Space B (Refer to handout "Newly Identified Section 4(f) Properties in Minnetonka", Exhibit 6-1 for location)

- Primarily open space use (undeveloped, meadows, forested area, landscaped area)

- Trail going through Open Space B is paved and goes through the natural areas within open space (part of the Opus development area trail network)

- No traditional recreational features (i.e. ball park, playground, etc.)

- Uses are typical things that would occur in natural areas, like bird watching, plant identification, areas for solitude, appreciation of nature, etc.

- City staff mentioned that the area in the north of Open Space B (West of Green Circle Drive) is a wetland restoration area and that the Opus area is officially named Opus 2 Business Park

- Changes to Open Space B – approximately 1.5 acres of the property will be permanently incorporated into the project through the acquisition process (Refer to Exhibit 6-2 for permanent acquisition location) as well as temporary trail impacts; however, the detour routes will be provided for the trail during construction. A TPSS and signal bungalow will be located on this property and will require some permanent realignment of trails in Open Space B; however there be no long or short-term adverse effects on the trails

- There will be no noise impact on the noise sensitive uses of the property and those areas will generally be shielded from view of the LRT alignment by existing trees and other vegetation

- Natural areas will be maintained with no adverse effects

• Unnamed Open Space A (Refer to handout "Newly Identified Section 4(f) Properties in Minnetonka", page 1)

- Not considered a Section 4(f) park/recreation property

- Based on deed/title information on this property there are no park/recreation-related easements or other park/recreational legal agreements attached to this property

- There is no deed covenant restricting the future use of this parcel to "parkland" or "open space"

- FTA does not consider Unnamed Open Space A to be a Section 4(f) property
- b) Preliminary Section 4(f) *de minimis* Impact Determinations (Refer to handout "Newly Identified Section 4(f) Properties in Minnetonka")



- Open Space B – the Project actions will not adversely affect the features, attributes, or activities that qualify Open Space B for Section 4(f) Projection. FTA has preliminarily concluded that Project actions will result in a Section 4(f) *de minimis* impact.

- Opus Development Area Trail Network - the Project actions will not adversely affect the features, attributes, or activities that qualify Opus Development Area Trail Network for Section 4(f) Projection. FTA has preliminarily concluded that Project actions will result in a Section 4(f) *de minimis* impact.

#### 4) Next Steps

i) Publication of the Amended Draft Section 4(f) Evaluation

- The Amended Draft Section 4(f) Evaluation will be published separately from the NEPA documentation because these two properties are newly identified and not initially included in previous Section 4(f) preliminary evaluations included with NEPA documentation (e.g., DEIS and SDEIS).

- City Staff asked where the document would be published. SPO Staff stated that it will be published in the *Federal Register*, the EQB Monitor, and on the Project website. Hard copies will be available at the SPO, State Legislative Library, MnDOT Library, Met Council Library, Minnetonka public library and Minnetonka City Hall.

- It is anticipated to be published on January 11, 2016. The document will include two appendices: Plan sheets and meeting materials/notes

ii) Receipt of Public and Agency Comments and Review by FTA, City, Council

- SPO will respond, in coordination with City of Minnetonka, to the comments received after the 45-day public comment period

- No public hearing will be held, or required under Section 4(f)
- With publication on January 11, February 25, 2016 ends the 45-day comment period
- iii) FTA Request to City for Written Concurrence on the Two Section 4(f) *de minimis* Impact Determinations

- City Staff asked what their role is in this process. SPO staff responded that it is an active action that both parties (i.e., FTA and the City) agree on after the comment period closes and both need to agree that this is a *de minimis* finding

- City Staff provided the contact for the written concurrence letter to be Julie Wischnack

- iv) Publication of the Final Section 4(f) Evaluation
  - Will be included in the FEIS

| ACTION ITEMS:                                                                            | <b>PERSON RESPONSIBLE:</b> | <b>DEADLINE:</b> |
|------------------------------------------------------------------------------------------|----------------------------|------------------|
| Notify adjacent property owners (AMS and Claremont) that this document will be published | SPO Outreach Staff         | 1/11/2016        |
| Review Amended Draft Section 4(f) Evaluation for comments and changes                    | City Staff                 | 1/6/2016         |
| Publish Amended Draft Section 4(f) Evaluation for comments                               | SPO Staff                  | 1/11/2016        |
| Respond to comments with input from City Staff                                           | FTA, SPO Staff             | After 2/25/2016  |

21. Open Space A and B: Property Legal Documents

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Open Space A Property Legal Documents

| C A23<br>06-002 | MINNESOTA D | EPARTMENT OF TRAI | NSPORTATION | DUPLICATE |
|-----------------|-------------|-------------------|-------------|-----------|
| C.S.            |             | PARCEL NO         | )           |           |
| COUNTY OF       | HENNEPIN    | JOB NO.           | T9N635      |           |

# TITLE OPINION

I hereby certify to the State of Minnesota that I have examined the title to the real estate herein described as shown by the records in the office of the County Recorder, Registrar of Titles, County Auditor and County Treasurer, and as shown by said records the title to the following described tract:

Outlot E, The Townhouses of Shady Oak

NE SW of section <u>36</u>, Township <u>116</u> North, Range <u>22</u> Hennepin County,

is at the date of this certificate in the following named persons: (if the title is registered, note the certificate number.)

# REGISTERED LAND TORRENS CERTIFICATE NO. 548328

| Name               | Nature<br>of Interest | Date of Document<br>& Recording Date | Book and Page<br>and/or<br>Document No. | Name of Spouse or<br>if Single, so state |
|--------------------|-----------------------|--------------------------------------|-----------------------------------------|------------------------------------------|
| City of Minnetonka | Fee                   | D: May 17, 1976<br>R: June 17, 1977  | T-1224135                               |                                          |

#### During the past five years the title to said tract was in the following persons, if different from above:

|      |             |                  | Book and Page |                     |
|------|-------------|------------------|---------------|---------------------|
|      | Nature      | Date of Document | and/or        | Name of Spouse or   |
| Name | of Interest | & Recording Date | Document No.  | if Single, so state |

creditor and attorney for the creditor.) property should be shown here. Show docket number, date of entry and amount of judgment, names of judgment debtor and other defects, if any, in the title; any judgments docketed in the office of the Court Administrator that would be a lien against this addresses of parties, date of instrument, date of recording, document number, and other pertinent information; also enumerate SUBJECT ONLY TO THE FOLLOWING: (Here enumerate encumbrances and liens of every nature, giving names and

EASEMENT for drainage in favor of Hennepin County, filed of record as Document A-3781501.

EASEMENT in favor of The City of Minnetonka, dated May 27, 1976, and filed of record on August 30, 1976, as Document T-

<u>∽'8198811</u>

36-117-22-31-0002 P.I.D. I further certify that all taxes and assessments against said tracts are paid, except:

| 8                              |                        |                                          |
|--------------------------------|------------------------|------------------------------------------|
|                                |                        |                                          |
|                                |                        |                                          |
|                                |                        |                                          |
|                                |                        |                                          |
| November 5, 2013               | by: Danielle D. Holder | 1316364                                  |
| (Per County Recorder's Office) | Attorney or Abstracter | Book - of - Page                         |
| EFFECTIVE DATE                 | SIGNATURE              | Last Tract Entry or Certificate Memorial |
|                                |                        |                                          |

# **Certificate of Title**

# Certificate Number: 548328

S.S.

1224135

Transfer From Certificate Number: 545668

Originally registered June 25, 1973 Volume:1634, Certificate No: 493155, District Court No: 17255

State of Minnesota **County of Hennepin** 

This is to certify that

City of Minnetonka a Minnesota municipal corporation, whose address is 14600 Minnetonka Boulevard, Minnetonka, Minnesota

Registration

is now the owner of an estate in fee simple

In the following described land situated in the County of Hennepin and State of Minnesota:

Outlot E, The Townhouses Of Shady Oak.

Subject to an easement for drainage purposes in favor of the County of Hennepin as contained in Book 69 of Hennepin County Records page 3781501;

Subject to and together with the easements, covenants, liens and restrictions contained in Document No. 1086026, as amended by Document No. 1165854, the easement over common areas being limited to the following common area Lots: Lot 28, Block 1 and Lot 18, Block 2, The Townhouses of Shady Oak and Lots 4, 5 and 6, Block 1, The Townhouses of Shady Oak 2nd Addition as determined in Torrens Case No. A-18335;

Subject to the interests shown by the following memorials and to the following rights or encumbrances set forth in Minnesota statutes chapter 508, namely:

Liens, claims, or rights arising under the laws or the Constitution of the United States, which the statutes of this state cannot require to appear of record;

Any real property tax or special assessment for which a sale of the land has not been had at the date of the certificate of title; Any lease for a period not exceeding three years, when there is actual occupation of the premises under the lease; 2.

3. 4.

All rights in public highways upon the land;
 Such right of appeal or right to appear and contest the application as is allowed by law;
 The rights of any person in possession under deed or contract for deed from the owner of the certificate of title;
 Any outstanding mechanics lien rights which may exist under sections 514.01 to 514.17.

| Memorials          |                  |                                        |             |                                                                                                                                                                   |  |
|--------------------|------------------|----------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Document<br>Number | Document<br>Type | Date of Filing<br>Month Day, Year Time | Amount (\$) | Running in Favor Of                                                                                                                                               |  |
| 1188618            | Quit Claim Deed  | Aug 30, 1976 4:15 PM                   |             | City of Minnetonka. Granting a perpetual easement for public right-of -way purposes over pt of above land                                                         |  |
| GR 1376364         | Quit Claim Deed  | Apr 1, 1980 12:00 PM                   |             | Rauenhorst Corporation. Granting a temporary eaesment for<br>construction & installation of a walkway to expire Mar 1, 1981, over<br>pt of above land. (See Inst) |  |

11/5/2013 Indexes Verified through



IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of my office this 17th day of June, 1977.

> Wayne A. Johnson Registrar of Titles,

In and for the County of Hennepin and State of Minnesota.

Certificate Number: 548328

This is a non-certified copy

Page 1 of 1



| a da an an an                                                                                                                                                                                                                                             | 1224135                                                                                                                                                                                                                                   | ۰.<br>                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                |
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| Contraction of the second second second second second second second second second second second second second s                                                                                                                                           | E No. 22 M                                                                                                                                                                                                                                | Miller-Davis Co., Minneapolis 26-10                                                                                                                                                                                                                                                                                                                                   |                                                                                                                |
| Limited Warranty Deed.<br>Corporation to Corporation.                                                                                                                                                                                                     | contention of the second second second second second second second second second second second second second se                                                                                                                           | rm Conveyancing Blanks (Revised 1974)36-18                                                                                                                                                                                                                                                                                                                            |                                                                                                                |
| This Indenture, "<br>EIRST WISCONSIN                                                                                                                                                                                                                      | 1224135<br>Made this 17th day of NATIONAL BANK OF MILWAUKEE, a nat                                                                                                                                                                        | of May , 19.77 ,<br>ional_banking_association                                                                                                                                                                                                                                                                                                                         |                                                                                                                |
| organized and existing                                                                                                                                                                                                                                    | the good mfUnitedStates                                                                                                                                                                                                                   | ., party of the first part, and                                                                                                                                                                                                                                                                                                                                       |                                                                                                                |
| the City of Minnetonka, a<br>%Xcorporation under the laws of t<br>the second part,                                                                                                                                                                        | municipal<br>the State of                                                                                                                                                                                                                 | , party of                                                                                                                                                                                                                                                                                                                                                            | <b>医马马力</b> 2                                                                                                  |
| to it in hand paid by the said pa                                                                                                                                                                                                                         | e said party of the first part, in com<br>and valuable consideration<br>with of the second part, the receipt whereof<br>d Convey unto the said party of the second p<br>cel of land lying and being in the Cour<br>ed as follows, to-wit: | is hereby acknowledged, does<br>part, its successors and assigns,                                                                                                                                                                                                                                                                                                     |                                                                                                                |
| Outlot E, The Townhouses (<br>record in the office of t<br>and together with the eas<br>tained within document nu                                                                                                                                         | of Shady Oak, according to the pla<br>the Registrar of Titles in and for<br>sements, covenants, conditions, lie<br>mber 1086026, files of the Registr<br>4 files of the Registrar of Titles                                               | said county, subject to<br>ns and restrictions con-<br>ar of Titles as amended                                                                                                                                                                                                                                                                                        | にたるでも、他のなどので、日本部の                                                                                              |
|                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                       | 日本た下し                                                                                                          |
|                                                                                                                                                                                                                                                           | None                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                |
| State Deed Tax Paid Herec                                                                                                                                                                                                                                 | on <del>\$2.20</del>                                                                                                                                                                                                                      | -                                                                                                                                                                                                                                                                                                                                                                     | 市民族の                                                                                                           |
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| unto belonging or in anywise<br>Forever. And the said party<br>party of the second part, its s<br>act or thing whatsoever where<br>after, shall or may be imper<br>installments of unpaid r<br>to the City of Minnetoni<br>and the title to the above fra | RANSFER ENTERED<br>UN 1 ( 127)<br>FINANCE DIVISION<br>HEIMEPHI CONVERSE<br>ST <u>fen 26 hoc</u> DEENT<br>anted premises against all persons lawfully<br>any, hereinbefore mentioned, the said par<br>In Testimony Wheteof, The            | d part, its successors and assigns,<br>ssors, does covenant with the said<br>e, done; executed or suffered any<br>thereof, now or at any time here-<br>er whatsoever, subject to all<br>ents and previous easements<br>claiming the same from, through<br>ty of the first part will. Warrant.<br>c said first party has caused these<br>roorate name by its. Montgage | The second second second second second second second second second second second second second second second s |
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| ORPORATE<br>SEAL<br>OF MILWKONSCREE OF                                                                                                                                                                                                                    | xinxidenxxxxxxxxm.Banking_Of<br>be hereunto affixed the day an                                                                                                                                                                            | ATIONA BANK OF MIL WYKEF<br>By ////////////////////////////////////                                                                                                                                                                                                                                                                                                   | V. V. <u>V. V. V. V. V. V. V. V. V. V. V. V. V. V</u>                                                          |



1224135 State of Minnesota, 83. The foregoing instrument was acknowledged before me 17thay of. 19 77 May this .... Alexander W. Walter, Mortgage Banking Officer by. Richard C. Palmiter, Mortgage Banking Officer (NAME OF OFFICER OR AGENT, TITLE OF OFFICER OR First Wisconsin National Bank of Milwaukee and by.. national banking association ATION ACKNO association wregedigy, on behalf of the oororation. CHRISTINE & BRANDLE HENNEPIN COUNTY NOTARY PUBLIC-MINNESOTA Notary Public (TITLE OR KANN) My commission expires 8-5-82 INSTRUMENT Brandle THIS WAS DRAFTED С. S. Suite 425 8200 Normandale Blvd. Bloomington, Mn 55437Address) CTF, NO 5-4 8 3 28 1224135 ununt of memory that the within instrument I hereby certify that the within instrument was filed in this office on the Page 545668 V 17 day of JUN A.D. 1977. at OFFIGE OF REGISTINAR OF TITLES STATE OF MINNESOTA Reg. Vol. 1809. By .... Thereby certify that the within Deed  $M_{i}$ and was duly recorded as instrument. Transfer described in this instrument should be was filed in this office for record on the .Deputy. This statements for the real properly IMITED WARRANTY DEED .... Deputy. "Register of Deeds. · County Auditor. . Name D Microfined Office of Register of Deeds, Minnesota Form No. 23. Corporation to Corporation and was duly recorded in Book State of Minicsola No Delinquent, Taxes and 01. day of 1142-0-MINONETOTICA ELVIO ١. ture day of several CITY OF LIPINETQNIKA P Colouty of Doc. No ... of Deeds, page .... Daxoral [] entered this 2 sent to: . ŀ 10 Bu-Bu 10 • ţ -.... ••



1188618 Quit Cisim Deed (Statutory Short Form) Miller-Davis Co., Minnaapolls, Minn. Uniform Conveyancing Blanks (1931). Form No. 34-M. 36 15 1188618 epin County, State of Minnesota , the Real Estate, situate in the County of Hennepin , Sta Hennepin of , State of Minnesota, as Grantee described as follows, to-wit: A perpetual easement for public right-of-way purposes over, under and across that part of the following described property: ţv; Outlot E, The Townhouses of Shady Oak, according to the plat thereof on file or of record in the office of the Registrar of Titles in and for said Hennepin County. OHES Ë Which lies westerly, northwesterly and northerly of a line des-cribed as follows: Ы Commencing at the northwest corner of said Outlot E; thence on an assumed bearing of South 20 degrees 04 minutes 27 seconds East, along the westerly line of said Outlot E, a distance of 127.73 feet, to the begin-ning of the line to be described; thence northeasterly a distance of 173.12 feet, along a nontangential curve concave to the southeast having a radius of 104.41 feet and a central angle of 95 degrees 00 minutes 10 sec-onds, the chord of said curve has a length of 153.96 feet and bears North 44 degrees 18 minutes 37 seconds East; thence South 88 degrees 11 minutes 18 seconds East; parallel with the north line of said Outlot E, to the easterly line of said Outlot E and said line there terminating. Ĵ. ö t there terminating. 20 TRANSFER ENTERED ..... STATE DEED TAX DUE AUG 2 5 1975 FINAMON DIVISION HENNEPIN COUNTY, MINNL MILWAUKE , WISCONSID 12 Dated Tat П MAY 1976 this áu In Presence of FIRST WISCONSIN NATIONAL BANK OF MILWAUKEE, a Natl. By EACL D. LILLYDAHL Banking Assoc. MORTGAGE BANKING OFFICER Its ISCONSIN 11. 14 State of Minnesota, BROGELMAN WOLTEASE DEWEINE OFFICIER WAYNE H. Its MILWAUKEE County of ..... MAY 74 On this 27 M NOTARY PUBLIC day of EARL D LILLYDAILL and 51005111 30 corporation. R. KUHD  $\frac{r_{W}}{M}$ THIS INSTRUMENT WAS DRAFTED BY Carl F. Dever 2 County, Me Notary Public. 14600 Minnetonka Blvd. 261461 Minnetonka, Minne Sota 55343 My commission expires Minn N 534672 + · (PTTA Lize  $f \leq q$ 



1188618 3.6.1 1188618 Registered Vol 1772 Page 534673 Doc. No. 9 QUIT CLAIM DEED (Statutory Short Form) By Corporation Ø 534673 то OFFICE OF REGISTRAR OF TITLES STATE OF MINNESOTA COUNTY OF HEINKEPIN I. hereby certify that the within Instrument was filed in this office on the Office of Register of Deeds, State of Minnesota, 30 day of AUG A.D. 1976 at 415 o'clock P M. ł Register of Decds. R the ......Deputy. By. Вy 25 DEPUTY REGISTRAR OF TITLES Taxes paid and Transfer entered this . day of 19.... County Auditor. By Deputy. Tax statements for the real property described in this instrument should be sent to: Name Address 325 COUNTY CHARGE Recording Fee \$2.00 . 2.0 



Miller-Davis Co., Minneapolis, Minn. Minnesota Undorm Conveyancing Blanks (1931). Form No. 3-M. po consel Warranty Deed. Individual to Corporation. 3781501 207 This Indenture, Mude this 27th day of etween Frank Holy and Hildagard M. Holy, husband and wife 27th Minnesota and State of .. of the County of Hennepin parties of the first part, and The County of Hennepin, a hody politic and corporate them in hand paid by the said party of the second part, the receipt whereof is hereby u alged, do hereby Grant, Bargain, Sell, and Convey unto the said party of the second part, cossors and assigns, Forever, all the tract or parcel of land lying and being in the County to acknow 'sdged, do and State of Minnesotr described as follows, to-wit: Nennepin. of THE AT: A 277 1048 D 15 a gass n 9 All that part of the following described tracts; The West 198 feet of the North 188.5 feet of the Gorthwest 1/4 of Southwest The West 198 feet of the North 188.5 feet of the Korthwest 1/4 of Southwest 1/4 of Section 36, Township 117, Range 22, and that part of the Northwest 1/4 of the Northwest 1/4 of Southwest 1/4 of Section 36, Township 117, Range 22, lying South of the North 188.5 feet thereof, and Commencing at the Northwest corner of the Southwest 1/4 of Northwest 1/4 of Southwest 1." of Section 36, Township 117, Range 22, thence South 165 feet; thence East 216 feet to the center line of County Road; thence Northerly along south center line to the North line of said Southwest 1/4 Northerly along said center line to the North line of said Southwest 1/4 of Northwest 1/4 of Southwest 1/4; thence West 120 feet to point of beginning, except roads, which lies within a distance of 40 feet on each side of the following described line: Beginning at a point on the North line of the South 1/2 of Section 35, Fownship 117, Range 22, distant 242.42 feet Westerly of the East Quarter corner of said section; thence deflect Southeasterly at an angle of 126° 30° with said North line, a distance of 401.37 feet; thence deflect to the right along a tangential curve having a radius of 1432.39 feet (delta angle 29° 19' 10") a distance of 732.98 feet and there terminating. Also a permanent easement for drainage purposes over that part of the first above described tracts not acquired herein, which lie within 15 fact on each side of a line 75 feet in length being a radial line of the curve of the above described line and drawn from a point thereon distant 445.04 feet Southeasterly of the North line of the South half of said section as measured along said line. manner and form aforesaid, and that the same are free from all incumbrances, σ Q 38 ~ 2 ~ 98 ທ G STATE TAX DUE HEREON 79.90 ź, 2 And the above bargained and granted lands and promises, in the quies and praceable possession of the said party of the second part, its successors and assigns, and the diversions latofully claiming or to claim the whole or any part thereof, subject to incumbrances, if any, hereinbefore montioned, the said part like of the first part will Warrand and Defind. In Cesilinous Misters, the call parties of the periods that is nervounte at their, hand 5 the day and year first above written. in Presence of

Open Space B Property Legal Documents

| AA 🔊<br>07-003 | MINNESOTA DEPARTME | NT OF TRAN | SPORTATION DUPLICATE |
|----------------|--------------------|------------|----------------------|
| C.S.           |                    | PARCEL NO. |                      |
| COUNTY OF      | HENNEPIN           | JOB NO.    | T9N635               |

# **TITLE OPINION**

I hereby certify to the State of Minnesota that I have examined the title to the real estate herein described as shown by the records in the office of the County Recorder, Registrar of Titles, County Auditor and County Treasurer, and as shown by said records the title to the following described tract:

Outlot A Opus 2 Fourth Addition EXCEPT

That part of Outlot A embraced within the North 10 acres of the West half of the Northwest Quarter of the Northeast Quarter of Section 36, Township 117, Range 22, Opus 2 Fourth Addition.

NENW of section 36 , Township 117 North, Range 22 Hennepin County,

is at the date of this certificate in the following named persons: (if the title is registered, note the certificate number.)

#### **REGISTERED LAND TORRENS CERTIFICATE NO.**

| Name               | Nature<br>of Interest | Date of Document<br>& Recording Date          | Book and Page<br>and/or<br>Document No. | Name of Spouse or<br>if Single, so state |
|--------------------|-----------------------|-----------------------------------------------|-----------------------------------------|------------------------------------------|
| City of Minnetonka | Fee                   | D: September 19, 1977<br>R: February 15, 1978 | A-4356924                               | ×                                        |

#### During the past five years the title to said tract was in the following persons, if different from above:

|      |             |                  | Book and Page |                     |
|------|-------------|------------------|---------------|---------------------|
|      | Nature      | Date of Document | and/or        | Name of Spouse or   |
| Name | of Interest | & Recording Date | Document No.  | if Single, so state |

SUBJECT ONLY TO THE FOLLOWING: (Here enumerate encumbrances and liens of every nature, giving names and addresses of parties, date of instrument, date of recording, document number, and other pertinent information; also enumerate other defects, if any, in the title; any judgments docketed in the office of the Court Administrator that would be a lien against this property should be shown here. Show docket number, date of entry and amount of judgment, names of judgment debtor and creditor and attorney for the creditor.)

VACATION filed of record on October 12, 1977 as Document A-4323765.  $\checkmark$ 

RESTRICTION for use as Parkland shown in Deed Doc No. 1260164.  $\checkmark$ 

EASEMENT for Right of Way described in Book 1074 of Deeds, page 300.

EASEMENT in favor of the City of Hopkins for flowage described in Book 1951 Deeds page 173.

I further certify that all taxes and assessments against said tracts are paid, except: P.I.D. Part of 36-117-22-21-0002

| Last Tract Entry or Certificate Memorial | SIGNATURE              | EFFECTIVE DATE                 |
|------------------------------------------|------------------------|--------------------------------|
| Book - of - Page                         | Attorney or Abstracter | (Per County Recorder's Office) |
| T-4437117                                | by: Danielle D. Holder | July 31, 2013                  |
|                                          |                        |                                |
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| AA        | MINNESOTA DEPARTM | ENT OF TRAN | SPORTATION | DUPLICATE |
|-----------|-------------------|-------------|------------|-----------|
| C.S.      |                   | PARCEL NO.  |            |           |
| COUNTY OF | HENNEPIN          | JOB NO.     | T9N635     |           |

### **TITLE OPINION**

I hereby certify to the State of Minnesota that I have examined the title to the real estate herein described as shown by the records in the office of the County Recorder, Registrar of Titles, County Auditor and County Treasurer, and as shown by said records the title to the following described tract:

That part of Outlot A embraced within the North 10 acres of the West half of the Northwest Quarter of the Northeast Quarter of Section 36, Township 117, Range 22, Opus 2 Fourth Addition

NENW of section <u>36</u>, Township <u>117</u> North, Range <u>22</u> Hennepin County,

is at the date of this certificate in the following named persons: (if the title is registered, note the certificate number.)

#### REGISTERED LAND TORRENS CERTIFICATE NO. 562892

| Name               | Nature<br>of Interest | Date of Document<br>& Recording Date          | Book and Page<br>and/or<br>Document No. | Name of Spouse or<br>if Single, so state |
|--------------------|-----------------------|-----------------------------------------------|-----------------------------------------|------------------------------------------|
| City of Minnetonka | Fee                   | D: September 19, 1977<br>R: February 15, 1978 | T-1260164                               |                                          |

#### During the past five years the title to said tract was in the following persons, if different from above:

|      |             |                  | Book and Page |                     |
|------|-------------|------------------|---------------|---------------------|
|      | Nature      | Date of Document | and/or        | Name of Spouse or   |
| Name | of Interest | & Recording Date | Document No.  | if Single, so state |

SUBJECT ONLY TO THE FOLLOWING: (Here enumerate encumbrances and liens of every nature, giving names and addresses of parties, date of instrument, date of recording, document number, and other pertinent information; also enumerate other defects, if any, in the title; any judgments docketed in the office of the Court Administrator that would be a lien against this property should be shown here. Show docket number, date of entry and amount of judgment, names of judgment debtor and creditor and attorney for the creditor.)

VACATION filed of record on October 12, 1977 as Document T-1241181

RESTRICTION for use as Parkland shown in Deed Doc No. 1260164.

RESTRICTIONS COVENANTS and EASEMENTS shown on Certificate of Title No. 562892.

EASEMENT for Right of Way described in Book 1074 of Deeds, page 300.

EASEMENT in favor of the City of Hopkins for flowage described in Book 1951 Deeds page 173.

I further certify that all taxes and assessments against said tracts are paid, except: P.I.D. Part of 36-117-22-21-0002

| Last Tract Entry or Certificate Memorial | SIGNATURE              | EFFECTIVE DATE                 |  |
|------------------------------------------|------------------------|--------------------------------|--|
| Book - of - Page                         | Attorney or Abstracter | (Per County Recorder's Office) |  |
| T-4437117                                | by: Danielle D. Holder | July 31, 2013                  |  |
|                                          |                        |                                |  |
|                                          |                        |                                |  |
|                                          |                        |                                |  |
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# **Certificate of Title**

# Certificate Number: 562892

S.S.

Transfer From Certificate Number:

Originally registered July 15, 1955 Volume:781, Certificate No: 237190, District Court No: 12339

492736

State of Minnesota **County of Hennepin** 

Registration

This is to certify that

City of Minnetonka a Minnesota municipal corporation, whose address is 14600 Minnetonka Boulevard, Minnetonka, Minnesota

1260164

is now the owner of an estate in fee simple

In the following described land situated in the County of Hennepin and State of Minnesota:

That part of Outlot A embraced within the North 10 acres of the West half of the Northwest Quarter of the Northeast Quarter of Section 36, Township 117, Range 22, Opus 2 Fourth Addition.

Subject to drainage and utility easements as shown on plat;

Subject to the right-of-way mentioned in deed of record in Book 1074 of Deeds, page 300, the flowage rights of the City of Hopkins created by an instrument of record in Book 1951 of Deeds, page 173;

Subject to drainage and utility easements as shown on plat of Opus II 1st Addition;

Subject to the condition that above land shall be used solely for parkland and open space purposes, as shown in Deed Doc No 1260164, with reversionary clause;

Subject to the interests shown by the following memorials and to the following rights or encumbrances set forth in Minnesota statutes chapter 508, namely:

Liens, claims, or rights arising under the laws or the Constitution of the United States, which the statutes of this state cannot require to appear of record;

Any real property tax or special assessment for which a sale of the land has not been had at the date of the certificate of title; Any lease for a period not exceeding three years, when there is actual occupation of the premises under the lease;

2. 3.

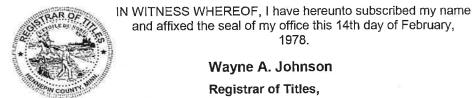
4. 5.

All rights in public highways upon the land; Such right of appeal or right to appear and contest the application as is allowed by law;

The rights of any person in possession under deed or contract for deed from the owner of the certificate of title;
 Any outstanding mechanics lien rights which may exist under sections 514.01 to 514.17.

| Memorials          |                  |                                        |             |                                                                                                                                                                                                                                                                                                                                   |
|--------------------|------------------|----------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Document<br>Number | Document<br>Type | Date of Filing<br>Month Day, Year Time | Amount (\$) | Running in Favor Of                                                                                                                                                                                                                                                                                                               |
| 1241181            | Resolution       | Oct 12, 1977 8:00 AM                   |             | By the City Council of the City of Minnetonka; Vacating public right-<br>of-way and drainage and utility easements in Opus II 1st Addition.                                                                                                                                                                                       |
| 1814167            | Declaration      | Mar 18, 1987 9:00 AM                   |             | Creating restrictive covenant.                                                                                                                                                                                                                                                                                                    |
| 4437117            | Ordinance        | Oct 16, 2007 4:00 PM                   |             | Ordinance No. 2007-26<br>By the City Council of the City of Minnetonka.<br>Modifying a wetland overlay district boundary, conditional use permit<br>for wetland buffer impacts and flood plain alteration for the opus<br>corporation redevelopment at 5700, 5720, 5740green circle drive<br>and 10350 bren road west. (See Inst) |

9/25/2013 Indexes Verified through



1978 Wayne A. Johnson

and affixed the seal of my office this 14th day of February,

**Registrar of Titles,** 

In and for the County of Hennepin and State of Minnesota.

Certificate Number: 562892

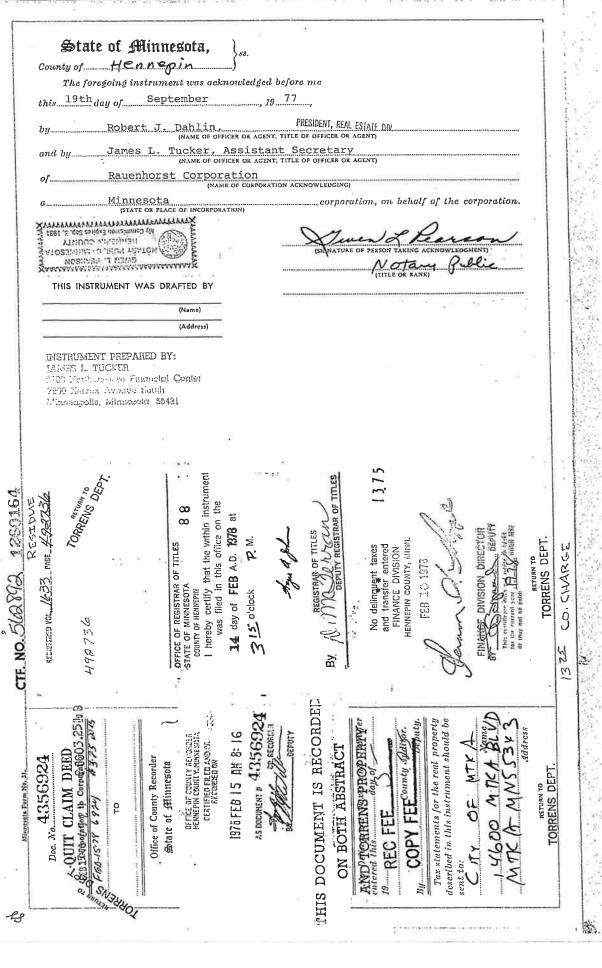
This is a non-certified copy

Page 1 of 1

164

| 164                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| Qalt Claim Deed.<br>Corporation to Corporation. 1260164                                                                                                                | Not 36-20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 435692                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                                                                                                        | of 19_77,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| RAUENHORST CORPORATION                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| a corporation under the laws of the State of Minnesota                                                                                                                 | nave of the first part and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CITY OF MINNETONKA                                                                                                                                                     | A State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State State Sta |
| a corporation under the laws of the State of Minnes<br>party of the second part,                                                                                       | soca                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 9                                                                                                                                                                      | in consideration of the num of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Millinesseth, That the said party of the first part, i<br>One Dollar (\$1.00) and other good and valuable                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| $\mathcal{N}$ Go to it in hand paid by the said party of the second part, the red<br>$\mathcal{J}$ H does hereby Grant, Bargain, Quitelaim, and Convey unto the said p | party of the second part, its successors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| A vand assigns, Forever, all the tractor parcel of land lying a b Hennepin and State of Minnesota, described as p                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| د<br>معنی Outlot A, Opus 2 Fourth Addition, accord                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 13" recorded plat thereof, upon the express                                                                                                                            | condition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| that said property shall be used solely<br>and open space purposes and if such pro<br>be used for any purposes other than par                                          | perty shall                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <pre>&gt; be used for any purposes other than par<br/>space purposes; said property shall rev</pre>                                                                    | kland or open<br>ert to party of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| first part, its successors and assigns.                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| 이상 이 이 방법을 얻는 가장 수 없는                                                                                                                                                  | · · / · · · · · · · · · · · · · · · · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| This instrument is a conveyance of fee ti                                                                                                                              | tle.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 이 너 많이 나는 것 같아. 신지가 집에서 생각하는 것이다.                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| C. V. FILED D NOT REQ.                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| FEB 5 1978                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| RV QURS                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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|                                                                                                                                                                        | STATE DEED TAX DUE HEREON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Lain marks                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| To Have and to Hold the Same, Together with all the h                                                                                                                  | vereditaments and appurtenances there-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| unto belonging or in anywise appertaining, to the said party of the Forever.                                                                                           | e second part, its successors and assigns,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| - 07 DOM -                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| presents to be executed in i                                                                                                                                           | The said first party has caused these<br>its corporate name by its<br>Div. ASSC. and its corporate seal to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| President A President State                                                                                                                                            | y and year first above written.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| O A V O G                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| RAUENHORS                                                                                                                                                              | ST CORPORATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 10/1/110 Br                                                                                                                                                            | Califf Kalin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <sup>20</sup> 00000000000000000000000000000000000                                                                                                                      | PRESIDENT, REALESTATE DIV.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                                        | The Stand                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| RETURN TO<br>TORRENS DEPT.                                                                                                                                             | Its Closed Southy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| + 492736                                                                                                                                                               | No see a second de la companya de la companya de la companya de la companya de la companya de la companya de la                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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# MAGE EASEMENT

Book-1951-Page 173

THIS INDENTURE, made this  $\underline{MQ}$  day of November, 1952, between Charles Vasko and Anna Vasko, husband and wife, of the County of Hennepin and State of Linnesota, parties of the first part and City of Hopkins, a municipal corporation located and being in the County of Hennepin and State of Minnesota, party of the second part,

WITNESSETH, That

WHEREAS, the City of Hopkins has this year deepened and widened that part of wine sile Creek lying within the limits of the City of Hopkins, and WHEREAS, the City of Hopkins has agreed to maintain the said Creek, at not less than substantially its present average depth and width, and

NOW THEREFORM; if consideration of the party of the second part hereafter maintaining which hild Greek at not less than substantially its present depth and width and cutting any weeds growing on the bottom of said Greek at reasonable time and using reasonable efforts to keep the water flowing freely through that northon of said Greek located within the City of Gopkins, the parties of the first part up hereby grant, bargain, quit claim and convey unto the said party of the second part, its successors and assigns, forever, the perpetual right, privilege and easement to overflow with waters from the clie Greek, all the tract or parcel of land lying and being in the county of Henne in and State of Linnesota, described as follows: to-wit: The south (5) Three bundred (300) feet of the worth (K) Ten (10) acres of the dest (4) one-half of the korthwest quarter (NM2) of the hortheast Guarter (1.5.) of Section Thirty-six (36), Township One Hundred Seventeen (117), many

TO MARK ALD TO FOLD THE SALE, together with all the hereditanents and a muntemances thereanto belonging or in anywise appertaining to said party of the second part, its successors and assigns, subject however, to the provisions above set forth to be performed by party of the second part.

IN TEST FORY FLEEDS the said parties of the first part have hereanto set their manus the way and year first above written.

Book-1951-Page 174 In Presence of 2 R.L. Taylor, 1ton ager STATE OF DIMESORA) SS COSIMY OF HELLEPIL.) On this <u>19</u> day of hovember, 1952, before me, a notary Public fifthin and for said county, personally appeared Charles Vasko and Anna Vasko Aus-band and will, to me known to be the persons described in, and who excluded the fore of instrument, and acknowledged that they executed the same as their free act and deed. 7. Minn. N STATE OF MALLEOUTA 35 COL PY OF MELLEPIN) N, Con fr or Manneyski on this <u>17</u> day of <u>terminer</u> 1953, before me, a Notary Public within and for said county, personally after ared W. Marlan Perbix and Malton N. L. Latlor, to be personally more, when being each by me duly shorn, they did say hast they are respectively the layor and the City lanager of the City of low find, lemin in County, linne oth, and that the scal of the do said half or point is the composite seal of said City, and that said instrument was chosed and couled in chalf of said City b. afthority of its City Council, and said A. Marlar Perbix and walton .. L. Taylor acknowledged said instru-ant to be the free set ard deed of said City. Ì rank.H. FRANK F. WIT VIEW Publication County Minu Iommiagon Expans Jacob, 200 14 LANO, Filed the medori on the 20 day of Jan A.D. 1953 at 10:00 o'clock A.M. 1953 通貨 120

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300 Doc. No 14 1/2 711, Filed april 2 1926, at 3 32 o'clock PM. N THIS INDENTURE, Made this 2. Met in the year of our Lord one thousand nine hundred and the ily of it is the between bet at the Met Us and y tidde and I that the same , have day of Aprile fustand . 11120. WITNESSETII, That the said part *is an one of the first part, for and in consideration of the sum of Utto critical sectors House drug and life figt and The 14ao* to *Leas* in hand paid by the said part, of the second part, the receipt whereof is hereby acknowledged, do *Markey Grant*, Bargain, Sell and Convey unto the said part, of the second part, the receipt whereof is hereby acknowledged, do *Markey Grant*, Bargain, Sell and Convey unto the said part. Bargain, Sell and Convey into the said part, or the second part, tract or parcel of land lying and being in the County of Hennepin and State of Minnesota, described as follows, to-wit: The Worth New (10) Weile of the West half (M. "2) of the Morthurset partie (n. 2014) of the Month East quarter (n. E. M. ) of Section Thirty Six (36) in Noundhip One Hundred Seventeen (117) Morth of range Twenty-100 122 West of the Sifth (2) Buncipal Meridian containing Jen 110) we we be it more orcless according to the Covernment Survey. the cof, the parties of the first part reserver the right to at all times to have the privilege of using a strip of ground a nod wide doing the west line of this Jen (10) ourse for a roadway to connect with Minth avenue as is now laid out in the town of Wepkine also Known as West Minneapolis Hennekin 60., Minn. TO HAVE AND TO HOLD THE SAME, Together with all the hereditaments and appurtenances thereunto belonging or in anywise appertaining to the said part of the second part heirs and assigns, FOREVER. And the said ora a Matteson her husband, convey the same in manner and form aforesaid, and that the same are free from all Ancumbrances ... heirs and assigns, against all persons lawfully claiming or to claim the whole or any part thereof, the said part dec. of the first part will WARRANT and DEFEND .... IN TESTIMONY WHEREOF, The said part \_\_\_\_\_ of the first part ha Me\_\_\_\_\_ hereinto set their hand a and seal a the day Signed, Scaled and Delivered in Presence of lora a. Matterm (Seal) Judson D. Matteron Philura L. Clemens. (Seal) (Seal) (Scal) STATE OF balifornia County of Los angeles On this & Mede On this 2 nd day of april A. D. 1926, before me, a Matany Public within and for said County, personally appeared bora a Matter and Juc con D. Matter and april her husbande, to me known to be the person. described in and who executed the foregoing J.H. Jonke instrument, and acknowledged that they executed the same as their. N. Touke Matary Public and for the County of Low Angeles, the of California mussion & spirce December 8, 1926 ...... free act and deed. (notarial Seal ) ate



#### 4323765

#### 1241181 RESOLUTION NO. 77 ~ 5177

Felti Rd. Vacation

ORRENS

RESOLUTION ORDERING THE VACATION OF PUBLIC RIGHT OF WAY AND DRAINAGE AND UTILITY EASEMENTS FOR RAUSHORST CORPORATION OPUS II 1ST ADDITION.

the Rauenhorst Corporation has petitioned the City Council WHEREAS . of the City of Minnetonka to vacate the following portion of City easement to wit:

#### Legal Description for Vacation of Feltl Road

All that part of Feltl Road lying within the Southwest Quarter of the Northwest Quarter of Section 36, Township 117, Range 22, Hennepin County, Minnesota, which lies West of the East 205.70 feet thereof.

#### Legal Description for Vacation of Streets and Drainage and Utility Easements in Opus II 1st Addition

All that part of Bren Road West, Bren Road East, Bren Road Connection, Bren Road, Red Circle Drive, Yellow Circle Drive, Green Circle Drive, Dominick Drive, 11th Street, Westward Way and County Road No. 62, all as dedicated within the plat of OPUS II lst Addition, according to the recorded plat thereof, on file or of record in the office of County Recorder in and for said Hennepin County, and

and All that part of Blue Circle Drive as dedicated within the plat of OPUS II 1st Addition, according to the recorded plat thereof, on file or of record in the office of County Recorder, in and for said Hennepin County; Except that part of said Blue Circle Drive lying Westerly of "Line A" to be hereinafter described and lying Easterly of "Line B" to be hereinafter described:

Commencing at the Northeast corner of Lot 4, Block 10, OPUS II 1st Addition, according to the recorded plat thereof on file or of record in the office of County Recorder, in and for said Hennepin County; thence South 4 degrees 31 minutes 17 seconds East (assumed bearing) along the Easterly line of said Lot 4, a distance of along the Easterly line of said Lot 4, a distance of 239.79 feet; thence Southwesterly along the Southeasterly line of said Lot 4, on a tangential curve, concave to the Northwest, having a radius of 275.38 feet, a central angle of 52 degrees 00 minutes 55 seconds, and a chord bearing of South 21 degrees 29 minutes 11 seconds West, for a distance of 250.00 feet, to the point of beginning of the line to be described; thence South 15 degrees 26 minutes 03 seconds West a distance of 53.30 feet to the Northwesterly line of Outlot E, said OPUS II lst Addition and there terminating. and there terminating.

Line B is described as follows:

Beginning at the most northerly corner of Lot 1, Block 11, said OPUS II 1st Addition; thence Northerly to the point of reverse curve on the Westerly line of Lot 5, Block 10, said OPUS II 1st Addition and there terminating, and

All of the drainage and utility easements as dedicated on the plat OPUS II 1st Addition, according to the recorded plat thereof; Except those drainage and utility easements lying within Blocks 10 and 11 of said OPUS II 1st Addition.

a Notice of Hearing on said petition was published in the official newspaper of the City of Minnetonka on the 25th day of May, 1977, and the 1st day of June, 1977, and was duly posted as required by law; and, WHEREAS.

> RETURN TO TORRENS DEPT.

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RETURN TO DEPT.

# 1241181

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RESOLUTION NO. 77 - 5177 page two

Э,

WHEREAS,

WHEREAS,

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a hearing on such petition was held on the 6th day of June, 1977, at which time all persons for and against the granting of said petition were heard, and

the City Council of the City of Minnetonka, Minnesota, finds that the petitioner is the majority land owner of the land abutting said portions of the City easements sought to be vacated and therefore, the proper petitioner, and that the public interest will be served by vacating said portions of City easements.

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MINNETONKA, MINNESOTA.

 That the above described portions of City easements, be and hereby are vacated.

2. That the vacating of Feltl Road shall take place simultaneously with the filing of the plat of OPUS 2 Fourth Addition, which creates "Feltl Lane" on the H West 33 feet thereof and "Feltl Road" as shown on said plat with the Registrar of Titles; otherwise said remaining portion of Feltl Road is not to be vacated by these proceedings.

Adopted by the City Council of the City of Minnetonka, Minnesota, this 6th day of June, 1977.

I. SAM HIC

Margaret E. Mullen, City Clerk

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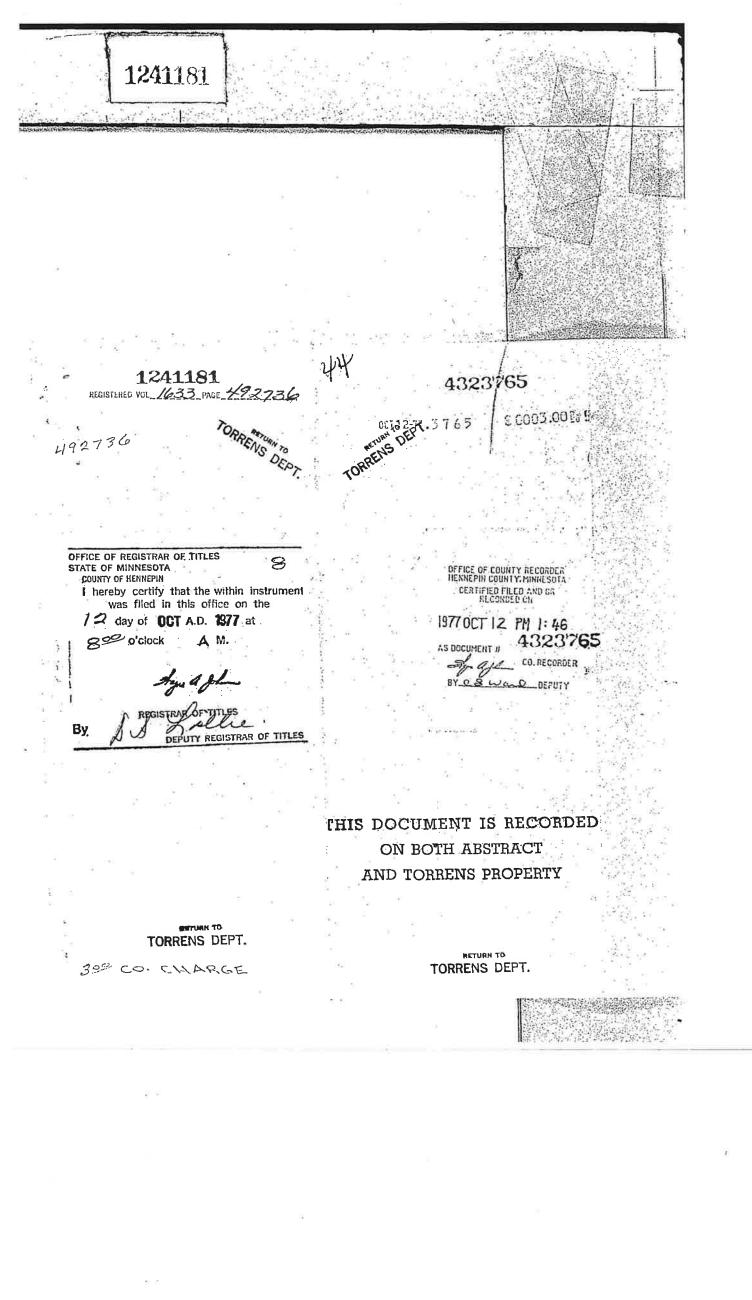
Action on the above resolution:

Motion for adoption: <u>Gray</u> Seconded by: <u>Larsen</u> Voted in favor of: <u>Gray, Hanus, Larsen, Bastable, Higuchi</u> Voted against or abstained: <u>Shaw excused; DeChetto was absent</u> Resolution adopted.

I hereby certify that the foregoing is a true and correct copy of a resolution adopted by the City Council of the City of Minnetonka, Minnesota, at a duly authorized meeting held on the 6th day of June, 1977.

Margaret E. Mullen, City Clerk

TORRENS DEPT.



22. Notices of Publication of the Amended Draft Section 4(f) Evaluation

#### DEPARTMENT OF TRANSPORTATION

#### Federal Transit Administration

#### Notice of Availability of Southwest Light Rail Transit Project Amended Draft Section 4(f) Evaluation

**AGENCY:** Federal Transit Administration (FTA), DOT.

**ACTION:** Notice of availability and request for comments on the Southwest Light Rail Transit Project Amended Draft Section 4(f) Evaluation.

**SUMMARY:** This notice announces the availability of the Southwest Light Rail Transit (LRT) Project Amended Draft Section 4(f) Evaluation, which includes preliminary Section 4(f) *de minimis* impact determinations for two newly identified Section 4(f) properties. **DATES:** By this notice, FTA requests that comments to the Amended Draft Section 4(f) Evaluation must be received by February 25, 2016.

FOR FURTHER INFORMATION CONTACT: Kathryn Loster, FTA Regional Counsel at (312) 353–3869, *kathryn.loster@ dot.gov;* Maya Sarna, FTA Office of Environmental Programs at (202) 366– 5811, *maya.sarna@dot.gov*. Comments may be submitted to Nani Jacobson, Assistant Director, Environmental and Agreements, Metro Transit-Southwest LRT Project Office, 6465 Wayzata Boulevard, Suite 500, St. Louis Park, MN 55426 or via email at *swlrt@ metrotransit.org*.

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that the FTA is releasing an Amended Draft Section 4(f) Evaluation (Amended Evaluation) for the Southwest LRT Project (Project), evaluating two additional Section 4(f) properties in the City of Minnetonka, Minnesota.

Federal Lead Agency: FTA. Project Sponsor: Metropolitan Council.

Project Description: The proposed project is a 14.5-mile light rail transit service that would connect downtown Minneapolis to the southwestern region of the metropolitan area through the cities of St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, Minnesota. The Amended Evaluation includes FTA's preliminary determination of *de minimis* impact on two park properties located within the City of Minnetonka, Minnesota. Pursuant to 23 CFR 774.5, FTA requests public and agency comments only on the two properties discussed in Amended Evaluation. Comments received on the Amended Evaluation and the preliminary Section 4(f) de minimis impact determinations will be

included, and responded to, in the Project's Final EIS, which will include the Southwest LRT Final Section 4(f) Evaluation.

To obtain a copy of the Amended Evaluation, please visit the Project's Web site at *www.swlrt.org* or by request by contacting Nani Jacobson at *swlrt@ metrotransit.org* or Maya Sarna at *maya.sarna@dot.gov.* 

Authority: 49 U.S.C. 303.

Issued on: January 11, 2016.

Marisol Simon,

Regional Administrator, FTA, Chicago, Illinois.

[FR Doc. 2016–267 Filed 1–8–16; 8:45 am] BILLING CODE P

#### DEPARTMENT OF TRANSPORTATION

#### National Highway Traffic Safety Administration

[Docket No. NHTSA-2015-0121]

#### Developing Evidence Based Fatigue Risk Management Guidelines for Emergency Medical Services

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation (DOT). **ACTION:** Notice.

**SUMMARY:** The National Highway Traffic Safety Administration (NHTSA) is announcing a meeting that will be held in Washington, DC on February 2nd, 2016 to announce a new initiative and accept comments from the public about the development of voluntary evidencebased guidelines (EBGs) for fatigue risk management tailored to the Emergency Medical Services (EMS) occupation. The meeting will include presentations by NHTSA and the project team. These presentations will address the following: (1) A brief overview of the potential dangers of drowsy and fatigued driving and the work of EMS practitioners, including the risk of traffic crashes and providing patient care; (2) a summary of the project goals and methods for coming to consensus on EBG fatigue risk management guidelines, (3) the plan for dissemination of EBGs, and (4) additional project related activities and information. Due to space limitations, attendance at the meeting is limited to invited participants and those who register in advance. Time for comment and questions from attendees will be included. Written comments can also be made on http://www.regulations.gov. **DATES:** The meeting will be held on February 2nd, 2016 from 8:00 a.m. to 12:00 p.m.

**ADDRESSES:** The meeting will be held in the Conference Center of the U.S. Department of Transportation, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Dr. J. Stephen Higgins, Telephone: 202–366–3976; email address: *james.higgins@dot.gov.* 

SUPPLEMENTARY INFORMATION: The National Highway Traffic Safety Administration (NHTSA) is announcing a meeting that will be held in Washington, DC on February 2nd, 2016 to announce a new initiative and accept comments from the public about the development of voluntary evidencebased guidelines (EBGs) for fatigue risk management tailored to the EMS occupation. This initiative (*http://www*. ems.gov/pdf/nemsac/2013/NEMSAC-AdvisoryFatigueJan2013.pdf) was started at the behest of the National **Emergency Medical Services Advisory** Committee (NEMSAC), a congressionally authorized Federal Advisory Committee; sponsored by NHTSA; and the work performed by the National Association of State EMS Officials (NASEMSO). The fatigue risk management guidelines for the EMS community will be developed by an interdisciplinary team of sleep and fatigue scientists, Evidence Based Guideline (EBG) development specialists, and experts in emergency medicine and EMS. Final results and dissemination are expected within the next two years. The evidence based fatigue risk management guidelines will be widely disseminated across the EMS community through publications, presentations, and at national stakeholder meetings.

The meeting will be attended by members of the project team, the EBG panel, members of the public, and members of the EMS community. The meeting will begin with short presentations by NHTSA staff and the project team discussing the dangers of drowsy and fatigued driving and work, a summary of the project goals and methods for coming to consensus on the guidelines, the eventual dissemination of the guidelines, and additional project related activities. A majority of the time in the meeting will be set aside to accept questions and comments from the registered attendees after the brief initial presentations. This is to ensure that the voluntary fatigue risk management guidelines will address the needs of the entire and diverse EMS community. Due to space limitations, attendance at the meeting is limited to invited participants and those who register in advance. All attendees must bring

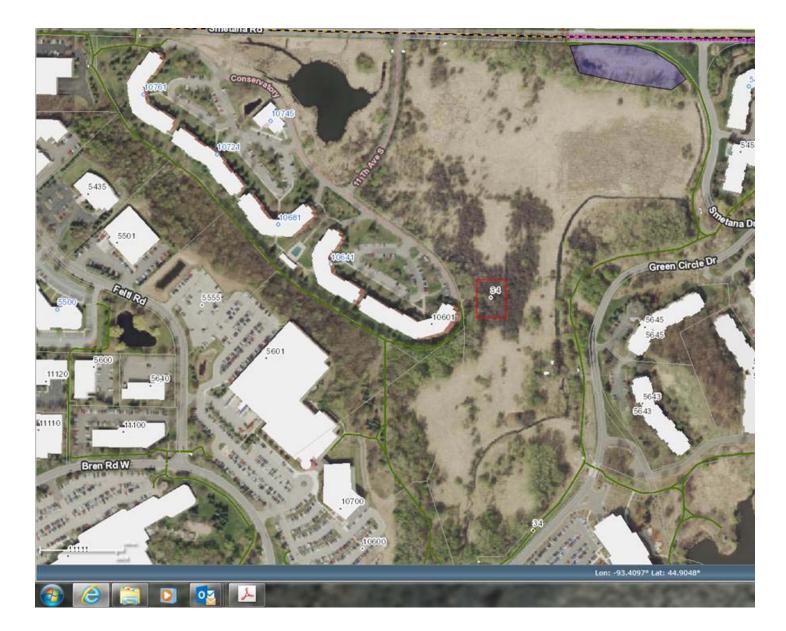
23. Open Space B: Correspondence and Documentation Regarding Wetlands

# Lucy Kozub

| From:        | Jo Colleran <jcolleran@eminnetonka.com></jcolleran@eminnetonka.com> |
|--------------|---------------------------------------------------------------------|
| Sent:        | Wednesday, February 03, 2016 12:31 PM                               |
| То:          | Lucy Kozub                                                          |
| Cc:          | Aaron Schwartz; Ben Hodapp                                          |
| Subject:     | RE: SWLRT Inquiry: Opus Area Wetland                                |
| Attachments: | WCA Declaration of Restrictions and Covenants EXHIBIT B 9.10.13.pdf |

I don't believe that any portion of this wetland has ever been restored. There is a mitigation area on the northeastern area of the parcel highlighted in purple. The WCA documents (declaration of restrictive covenants etc.) have taken a long time to get processed and they were submitted to the county for filing this past December. I have not yet received a recorded copy.

I also attached the final exhibit which illustrates the mitigation areas.



I hope this helps.

Jo Colleran | Natural Resources Manager | City of Minnetonka 11522 Minnetonka Boulevard | Minnetonka, MN 55305 952.988.8415 | jcolleran@eminnetonka.com

From: Lucy Kozub [mailto:LKozub@ae-mn.com]
Sent: Wednesday, February 03, 2016 10:01 AM
To: Jo Colleran
Cc: Aaron Schwartz; Ben Hodapp
Subject: SWLRT Inquiry: Opus Area Wetland

Hello Jo,

I am wondering if you can provide us with any history/information on the City of Minnetonka owned parcel highlighted in the below photo (PID 3611722210002). We have looked at the city's wetland inventory for this area, but we are wondering if any of the wetland on this parcel is restored wetland. If so, would it be possible to obtain the boundaries for the restored portion(s)? This inquiry is related to the Southwest LRT Project's Final EIS Section 4(f) analysis.

Thank you, Lucy



Lucy Kozub Environmental Associate Direct: 763-412-4059 Email:<u>LKozub @ae-mn.com</u>



Anderson Engineering of Minnesota, LLC 13605 1st Avenue North Suite 100 Plymouth, MN 55441 763-412-4000 (t) 763-412-4090 (f) www.ae-mn.com

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