

Record of Decision

on the

**SOUTHWEST LIGHT RAIL TRANSIT PROJECT
(METRO Green Line Extension)**

In Hennepin County, Minnesota

by the

Federal Transit Administration

July 2016

Table of Contents

1	Decision	1
2	Basis for Decision	2
2.1	Background and Evaluation	3
2.2	Project Purpose and Need	4
2.3	Alternatives Analysis, Locally Preferred Alternative, and Draft Environmental Impact Statement.....	5
2.4	Supplemental Draft EIS	8
2.5	Amended Draft Section 4(f) Evaluation.....	10
2.6	Final EIS	10
2.6.1	Project.....	10
2.6.2	No Build Alternative.....	11
3	Impacts and Measures to Avoid, Minimize, and Mitigate Adverse Impacts	12
3.1	Environmental Impacts of the Project	12
3.2	Measures to Avoid, Minimize, and Mitigate Adverse Impacts.....	24
4	Public and Agency Review Process	24
4.1	Scoping	24
4.2	Draft EIS.....	24
4.3	Supplemental Draft EIS	25
4.4	Amended Draft Section 4(f) Evaluation.....	25
4.5	Final EIS	25
4.6	Community Outreach	26
4.7	Agency Coordination	26
5	Determination and Findings	27
5.1	NEPA.....	27
5.2	Section 106 of the National Historic Preservation Act.....	27
5.3	Clean Water Act (Section 404) and Executive Order 11990 on Protection of Wetlands.....	28
5.4	Floodplain Management	28
5.5	Clean Water Act Sections 401 and 402	29
5.6	Endangered Species Act	29
5.7	Migratory Bird Treaty/Bald and Golden Eagle Protection Act	30
5.8	Clean Air Act.....	30
5.9	Environmental Justice.....	31
5.10	Final Section 4(f) Evaluation.....	32

Attachments

- A Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category
- B Section 106 Memorandum of Agreement
- C Comments Received on the Final EIS
- D Responses to Comments Received on the Final EIS

Record of Decision (ROD)

1 Decision

The Federal Transit Administration (FTA) has determined, pursuant to Title 23 of the Code of Federal Regulations (CFR), Part 771, and Title 40 CFR Parts 1500-1508, that the requirements of the National Environmental Policy Act of 1969 (NEPA) have been satisfied for the Southwest Light Rail Transit (LRT) Project (Project), METRO Green Line Extension. This Record of Decision (ROD) applies to the Project¹ described in the Final Environmental Impact Statement (EIS) published on May 13, 2016.

As the Project sponsor and potential recipient of FTA financial assistance for the Project, the Metropolitan Council (Council) served as the local lead agency in conducting the environmental review process with FTA. The U.S. Army Corps of Engineers (USACE) served as a federal cooperating agency, because of the agency's responsibilities for implementing the National Environmental Policy Act (NEPA) and Section 404 of the Clean Water Act (CWA), both of which are federal actions. If FTA provides financial assistance for the final design and/or construction of the Project, FTA will require the Council to design and build the Project as presented in the Final EIS and in this ROD.

The Southwest LRT Project is approximately 14.5 miles of new double-track proposed as an extension of the METRO Green Line (Central Corridor LRT), which will operate from downtown Minneapolis through the communities of St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, passing in close proximity to Edina (see Exhibit 1-1). The Project will operate primarily at-grade, with structures providing grade separation of LRT crossings, roadways, and water bodies at specified locations. For just under one-half mile, the Project will operate in a shallow light rail tunnel in the Kenilworth Corridor, between West Lake Street and just south of the Kenilworth Lagoon. Proposed system elements of the Project include 16 new light rail stations² (including the Eden Prairie Town Center Station that is deferred for construction at a later date), one operations and maintenance facility (OMF), 20 traction power substations (TPSS), 25 signal bungalow sites, and other ancillary facilities. Preliminary engineering plans for the Project and lists of transit, roadway, and pedestrian/bicycle improvements and Locally Requested Capital Investments (LRCI) can be found in Appendix E in the Final EIS.

This ROD summarizes FTA's decision regarding compliance with relevant environmental requirements. Further details supporting this ROD are in the Project's Final EIS, which is incorporated by reference which includes the Project's Final Section 4(f) Evaluation and agency correspondence. In addition, this ROD is supported by and includes four attachments:

¹ See Section 2.6.1 of this ROD for a description of the Project

² See the Project Nomenclature in the Final EIS for a listing of the station names used in the Final EIS and this ROD, compared to the official station names adopted by the Council on February 24, 2016. In particular, following are four of the station names used in the Final EIS and this ROD, compared to their official names, respectively: Royalston Station = Royalston Avenue/Farmers Market Station; Van White Station = Bassett Creek Valley Station; Penn Station = Bryn Mawr Station; and 21st Street Station = West 21st Street Station.

A – Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category

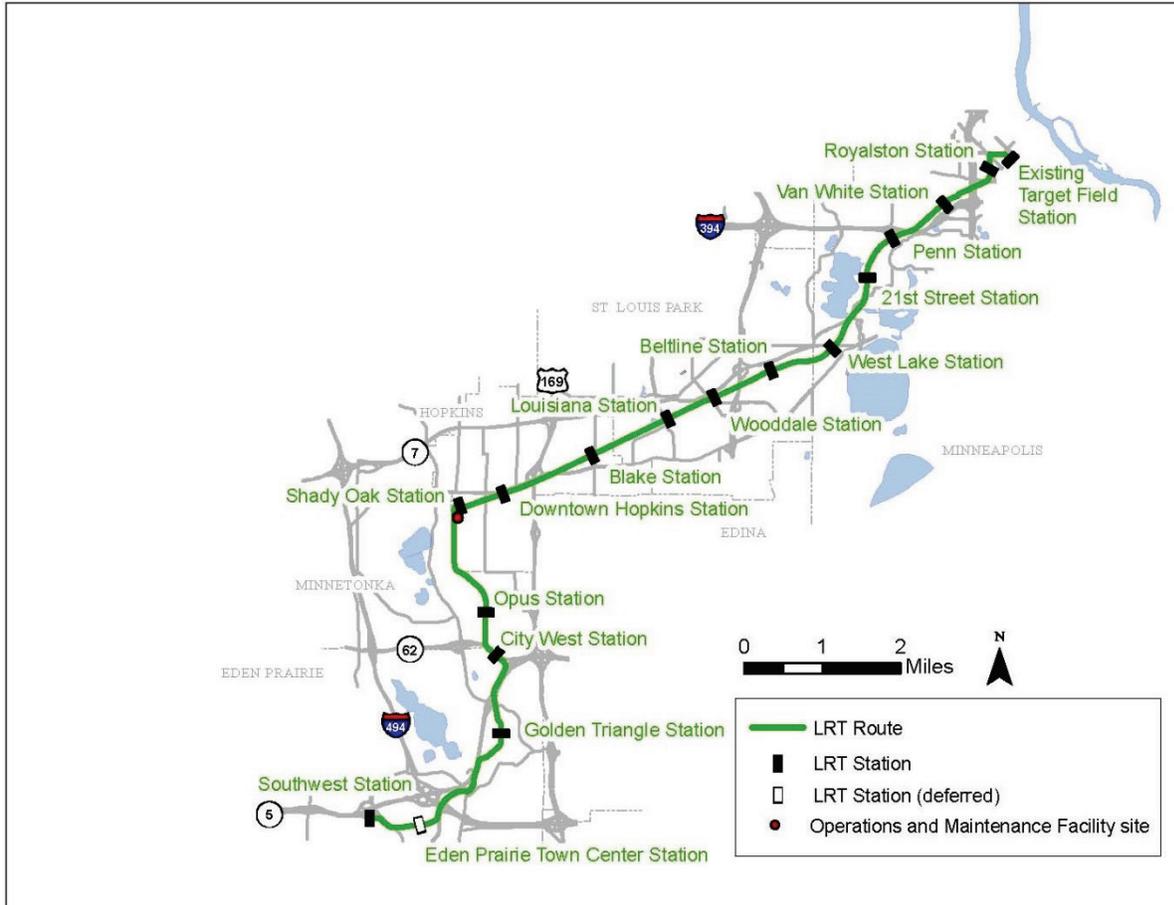
B – Section 106 Memorandum of Agreement (MOA)

C – Comments Received on the Final EIS

D – Responses to Comments Received on the Final EIS

EXHIBIT 1-1

Southwest LRT Alignment



2 Basis for Decision

The documents³ considered in making this decision include the following:

- *Southwest Transitway Alternatives Analysis Final Report* (HCRRA, 2007)
- *Southwest Transitway Scoping Summary Report* (HCRRA, 2009; amended in 2012)
- *Southwest Transitway Draft EIS* (HCRRA, 2012)

³ Citations included within this ROD are to documents listed in Appendix C of the Final EIS.

- *Southwest Light Rail Transit (METRO Green Line Extension) Supplemental Draft EIS* (Council, 2015)
- *Southwest Light Rail Transit (METRO Green Line Extension) Final EIS* (Council, 2016)
- All attachments to this ROD (i.e., A – Project Mitigation Measures and Responsible Parties by Environmental and Transportation Category; B – Section 106 Memorandum of Agreement; C – Comments Received on the Final EIS; D – Responses to Comments Received on the Final EIS)
- Technical memoranda, correspondence, and other documents in the Project’s administrative record

2.1 Background and Evaluation

The Project evolved from several prior transportation planning activities in the study area, which informed the consideration of alternatives in the NEPA process. The main study that spurred the Project was the *Southwest Rail Transit Study* (Hennepin County Regional Railroad Authority [HCRRA], 2003), which established that rail transit should be part of the transportation strategy for the southwest metropolitan area. The report recommended further study on four LRT alternatives. Subsequently, HCRRA conducted the Southwest Transitway Alternatives Analysis (AA), publishing the *Southwest Transitway Alternatives Analysis Final Report* in 2007. The AA Report identified the alternatives most likely to meet Project goals that were recommended for further evaluation.

In September 2008, FTA and HCRRA issued a Notice of Intent (NOI) to publish an EIS in the *Federal Register* and a state Notice of EIS Preparation in the *Minnesota Environmental Quality Board (EQB) Monitor*, 2008, which initiated the environmental review process for the Southwest Transitway Project. The Scoping process resulted in publication of the *Southwest Transitway Scoping Summary Report* in January 2009 (HCRRA, 2009).⁴ The NEPA and Minnesota Environmental Policy Act (MEPA) scoping process resulted in the refinement of alternatives for consideration, concluding that five LRT alternatives would be examined in the Draft EIS, along with the Enhanced Bus and No Build alternatives.

Based on the AA findings, as well as input from the public, HCRRA, local jurisdictions, and elected officials, the Council identified the Locally Preferred Alternative (LPA) on May 26, 2010, for inclusion in the Metropolitan Council’s 2030 Transportation Policy Plan (TPP). The Council selected LRT on the Kenilworth-Opus-Golden Triangle alignment (Alternative 3A, as identified in the AA) as the LPA.

Between 2009 and 2012, FTA, HCRRA, and the Council prepared the Draft EIS. The Notice of Availability of the Draft EIS was published in the *Federal Register* on October 12, 2012, and in the *EQB Monitor* on October 15, 2012, and a public comment period, including three public hearings, extended to December 31, 2012. FTA and the Council determined that design adjustments made to the LPA following publication of the Draft EIS had the potential to result in new adverse impacts and needed to be evaluated in a Supplemental Draft EIS. The Notice of Availability of the Supplemental Draft EIS was published in the *Federal Register* on May 22, 2015 and in the *EQB Monitor* on May 25, 2016, and the public comment period, including three public hearings, extended to July 21, 2015.

³ On September 25, 2012, HCRRA amended the Southwest Transitway Southwest Scoping Summary Report (which serves as the Scoping Decision Document under the Minnesota Environmental Policy Act to include the impacts of relocating freight rail for the four build alternatives and including a collocation alternative where freight rail, light rail and the commuter bike trail collocate, i.e., share a common corridor, between Louisiana Avenue and Penn Avenue. The amendment was authorized with approval of Board Action Request 12-HCRRA-0049. Notice of the amendment to the scoping report was issued in the *EQB Monitor* on October 15, 2012.

On May 13, 2016, FTA and the Council published the Notice of Availability of the Final EIS in the *Federal Register*. On May 16, 2015, the Council also published a Notice of Availability in the *EQB Monitor*. Interested persons were provided the opportunity to submit written comments to the Council on the adequacy of the Final EIS, as required under Minnesota Rule 4410.2800, subp. 2. The Notice of Availability indicated that the comment period expired on June 13, 2016. The Final EIS evaluated the Project (including adjustment since the Draft EIS and Supplemental Draft EIS) and the No Build Alternative, and included a discussion on other alternatives previously studied but eliminated from further consideration.

2.2 Project Purpose and Need

The purpose for the Southwest LRT Project includes the following:

- The Southwest LRT Project will improve access and mobility to the jobs and activity centers in the Minneapolis central business district, as well as along the entire length of the corridor for reverse-commute trips to the expanding suburban employment centers.
- The Southwest LRT Project will provide a competitive, cost-effective travel option that will attract choice riders to the transit system. The competitive and reliable travel time for the Southwest LRT Project is attributed to the diagonal nature of the line compared to the north-south/east-west orientation of the roadway network and to the increasing levels of congestion of the roadway network.
- The Southwest LRT Project will be part of the region's system of transitways integrated to support regional transportation efficiency. Since the late 1990s, the Southwest LRT Project has been identified by the Council as warranting a high level of transit investment to respond to increasing travel demand in a highly congested area of the region. Due to congestion levels on the roadway network, speed and use limitations of the shoulder bus operations, and capacity constraints in downtown Minneapolis, a bus option is limited in its ability to adequately serve the travel demand and to provide reliable travel times.

Four primary need factors make the Southwest LRT Project important for people who live and work in the southwest metropolitan area: (1) declining mobility; (2) limited competitive, reliable transit options for choice riders and people who rely on public transportation, including reverse-commute riders; (3) need to maintain a balanced and economically competitive multimodal freight system; and (4) regional/local plans calling for investment in additional light rail transit projects in the region.

The transportation issues facing the Southwest LRT Project Corridor (see Exhibit 1.3-1 of the Final EIS) illustrate the need for improved mobility, accessibility, and system linkages to key activity centers (Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and downtown Minneapolis) through high-capacity transit service. The Southwest LRT Project is one of several transit corridors identified in the Council's 2040 TPP as being in need of enhanced transit service. The Southwest LRT Project Corridor continues to experience increases in population and employment with limited additional traffic capacity on existing streets and highways, resulting in increased travel time, delays, and air pollution. Portions of the Southwest LRT Project Corridor are already densely developed. New development and redevelopment in areas of the corridor are expected to generate increases in travel demand. Chapter 8 of the Final EIS discusses how the Project addresses the corridor needs and achieves its intended purpose.

2.3 Alternatives Analysis, Locally Preferred Alternative, and Draft Environmental Impact Statement

HCRRA initiated the AA of the Southwest Corridor in 2005 and the *AA Final Report* was published in 2007. In the AA, multiple transportation modes and alignments were evaluated against detailed performance criteria, including ridership, community impacts, environmental impacts, and cost. In summary, the Southwest Transitway AA included the evaluation of ten build alternatives and a conventional bus alternative referred to as the Enhanced Bus Alternative. The analysis included eight LRT alternatives and two bus rapid transit alternatives. The New Starts⁵ baseline alternative used for comparison with the Southwest LRT build alternative is a transportation system management alternative⁶. The Enhanced Bus Alternative included two new limited-stop bus routes that would provide bi-directional service between Eden Prairie, Minnetonka, Hopkins, St. Louis Park and downtown Minneapolis. It also would include minor modifications to the existing express bus service, increased service frequencies, and restructured local bus service to provide better access along the limited-stop routes to key areas, including Golden Triangle and downtown Minneapolis.

After evaluation as part of the AA process, three LRT alternatives were recommended to be carried forward for consideration as the LPA. The LRT alternatives satisfied the goals and were deemed at that time to best fit the purpose and need of the Project. All three LRT alternatives would provide a dual LRT guideway with exclusive and semi-exclusive right-of-way.

After completion of the AA process, the Project proceeded under HCRRA in September 2008 with publication of the federal Notice of Intent to Prepare an EIS (FTA, 2008b) and the state Notice of EIS Preparation (Minnesota EQB, 2008). HCRRA began development of NEPA and MEPA documentation with a scoping process, including publication of the *Southwest Transitway Scoping Summary Report* in January 2009. The NEPA and MEPA scoping process resulted in the refinement of alternatives for consideration, concluding that five LRT alternatives would be examined in the Draft EIS, along with the Enhanced Bus and No Build alternatives.

The selection of an LPA is part of the transportation planning and project development process and is included in the region's long-range transportation plan. HCRRA initiated the NEPA and MEPA process prior to selection of the LPA in order to ensure consideration of potential impacts to critical environmental resources and allow the public and resource agencies the opportunity to officially comment on the purpose and need for the Project.

HCRRA conducted an LPA screening evaluation based on information from the AA process, conceptual engineering plans, and environmental considerations. The results of the screening evaluation indicated that the ability of an LRT alignment to serve and enhance the planned commercial and mixed use development in the Golden Triangle/Opus area (within the City of Minnetonka and City of Hopkins) is a significant differentiator. Therefore, the LRT option that served this area was recommended for selection as the LPA. On October 20, 2009, HCRRA held a public hearing on the recommended LPA. On November 3, 2009, the HCRRA Board recommended that the Council select LRT on the Kenilworth-Opus-Golden Triangle alignment (Alternative 3A, as

⁵ New Starts is one of four categories of eligible projects under FTA's discretionary Capital Investment Grant program, which provides funding for fixed guideway investments. New Starts projects are new fixed guideway projects or extensions to existing fixed guideway systems.

⁶ Based on the *Final Interim Policy Guidance: Federal Transit Administration Capital Investment Grant Program* (FTA; June 2016), FTA's New Starts requirements no longer include the development and analysis of a baseline alternative. The baseline alternative has been replaced by FTA with the No Build Alternative for comparative purposes within the New Starts rating process. For additional information on FTA New Starts program, see <http://www.fta.dot.gov/12304.html>.

defined in the AA Report) as the LPA for the Southwest Transitway for inclusion in the Metropolitan Council's 2030 TPP. This action came as a result of the AA led by HCRRA, including recommendations from the Project's Policy Advisory Committee, which included representatives from cities along the alignment. From March 8 to April 22, 2010, a 45-day public comment period was held for the proposed amendment to the Council's 2030 TPP selecting LRT on the Kenilworth-Opus-Golden Triangle alignment (Alternative 3A) as the LPA for the Southwest Transitway, with a public hearing held by the Council's Transportation Committee on April 12, 2010. On May 26, 2010, the Council accepted the summary of public comment and adopted the amendment to the 2030 TPP, which included selecting LRT on the Kenilworth-Opus-Golden Triangle alignment (Alternative 3A) as the LPA for the Southwest Transitway.

After completion of scoping and identification of the LPA, FTA determined that the Project's Draft EIS should address whether to: (1) relocate Twin Cities & Western (TC&W) freight trains currently operating along the Canadian Pacific (CP)-owned Bass Lake Spur and the HCRRA-owned Cedar Lake Junction to the CP-owned Minneapolis, Northfield, and Southern Railway (MN&S) Spur in the City of St. Louis Park and BNSF-owned Wayzata Subdivision (included in LRT 1A, LRT 3A, LRT 3C-1, and LRT 3C-2, and referred to as "relocation"); or (2) continue to operate the TC&W freight trains along the Bass Lake Spur and Kenilworth Corridor alongside the proposed light rail alignment and stations (included in the No Build Alternative, Enhanced Bus Alternative, and LRT 3A-1, and referred to as "co-location").

The Draft EIS was published in October 2012, and evaluated five light rail alternatives, as well as the Enhanced Bus Alternative and the No Build Alternative. The seven alternatives are described below (see Chapter 2 of the Draft EIS for additional detail and illustrations of the alternatives):

- The No Build Alternative, required under the NEPA and MEPA processes, would provide planned and programmed transit facilities and operations identified in the region's fiscally constrained transportation plan. The No Build Alternative would provide additional express and local bus service on existing facilities, including operation on the regional network of bus shoulder lanes.
- The Enhanced Bus Alternative would provide additional express routes, new limited-stop service, and enhanced bus facilities in Hopkins. Under the Enhanced Bus Alternative, combined bus stops and park-and-ride lots would be located in the vicinity of the intersection of Mitchell Road and Highway 212 and at the existing SouthWest Transit Center. These facilities would be connected to downtown Minneapolis via two new, limited-stop bus lines and two existing SouthWest Transit express bus lines.
- LRT 1A would include a double-tracked light rail line between Minneapolis and Eden Prairie, generally within HCRRA-owned right-of-way. This alternative would require relocation of existing freight rail operations from a portion of the Bass Lake Spur and the entire Kenilworth Corridor to the MN&S Spur and Wayzata Subdivision. New right-of-way would be required near Penn Avenue to serve the Van White and Royalston stations in Minneapolis before connecting into the METRO Blue Line corridor in downtown Minneapolis and interlining with other LRT service. This alternative would include 14 new light rail stations.
- LRT 3A, which included the LPA, would result in a double-tracked light rail line between Minneapolis and Eden Prairie. This alternative would require relocation of existing freight rail operations from a portion of the Bass Lake Spur and the entire Kenilworth Corridor to the MN&S Spur and Wayzata Subdivision. Seventeen light rail stations were included as part of this alternative. Under this alternative, the proposed light rail alignment would run through the Golden Triangle and Opus employment areas in Eden Prairie. In St. Louis Park and Hopkins, the alignment would use HCRRA's Southwest LRT Trail. In Minneapolis, the alignment would use space within the Kenilworth Corridor. Near Penn Avenue, the alternative would require new

light rail right-of-way to serve the Van White and Royalston stations in Minneapolis before connecting with the METRO Blue Line in downtown Minneapolis.

- LRT 3A-1, which included the same light rail service improvements as LRT 3A, was developed to examine the implications of co-locating the existing freight rail service and multiple-use path with the proposed light rail alignment and stations. LRT 3A-1 includes the same light rail alignment and stations that comprise LRT 3A; however, freight rail service currently operating in the Bass Lake Spur and Kenilworth Corridor would not be relocated.
- LRT 3C-1 would include a double-tracked LRT line between Minneapolis and Eden Prairie, connecting 20 proposed light rail stations. This alternative would run through the Golden Triangle and Opus employment areas in Eden Prairie. In St. Louis Park and Hopkins, the alignment would use HCRRA's right-of-way. In Minneapolis, the light rail alignment would use space within the Midtown Corridor. The proposed light rail alignment would provide connections to the METRO Blue Line at 5th Street in downtown Minneapolis but would not interline with another LRT line. This alternative would require relocation of existing freight rail operations from a portion of the Bass Lake Spur and the entire Kenilworth Corridor to the MN&S Spur and Wayzata Subdivision.
- LRT 3C-2 would duplicate the alignment and station locations of LRT 3C-1, differing only in the westernmost entry to downtown Minneapolis. Multiple north-south links were considered to connect the Midtown Segment of LRT 3C-2 with downtown Minneapolis, including Park and Portland avenues. Under LRT 3C-2, the light rail alignment would interline with the METRO Blue Line in downtown Minneapolis. This alternative would require relocation of existing freight rail operations from a portion of the Bass Lake Spur and the entire Kenilworth Corridor to the MN&S Spur and Wayzata Subdivision.

The Draft EIS noted that the light rail alternatives would need an OMF for light vehicle maintenance, running repairs for the light rail vehicles, and storage of vehicles not in service. The Draft EIS listed the physical requirements and preferred characteristics for an OMF site. Four potential OMF sites were described and evaluated in the Draft EIS.

The Draft EIS documents the anticipated environmental impacts, costs, and benefits of the alternatives considered. It also included a draft Section 4(f) Evaluation (addressing the potential use of and impacts to publicly owned parklands, recreation areas, open spaces, and historic and archaeological resources). FTA, HCRRA, and the Council published the Draft EIS in October 2012.

The evaluation in the Draft EIS found that LRT in the Kenilworth-Opus-Golden Triangle alignment, with freight rail relocated from the Kenilworth Corridor (LRT 3A), would best meet the Project's Purpose and Need Statement. In addition, the Draft EIS found that LRT 3A would minimize construction-related impacts, relative to other alternatives studied. Further, the evaluation in the Draft EIS found that LRT 3A would result in benefits that could not be achieved under the No Build or Enhanced Bus Alternatives (e.g., the introduction of an exclusive transit right-of-way throughout the corridor to reduce transit travel times and increase transit reliability). However, the evaluation in the Draft EIS also found that the benefits associated with LRT 3A could not be achieved without some adverse environmental impacts but that the overall benefits derived from LRT 3A—including increased transit ridership and enhanced mobility—outweigh the potential adverse environmental impacts (see Section 11.2 of the Draft EIS for the evaluation of the other six alternatives).

The public comment period on the Draft EIS extended to December 31, 2012, and three public hearings were held to receive testimony on the Draft EIS.⁷ Approximately 1,000 comments on the Draft EIS were submitted, in the form of letters, emails, public testimony, and comment cards received at the public hearings. In general, comments in support of the Project noted enhanced transit service, accessibility, and lower transit travel times. Comments opposed noted the cost of the Project; that funds could be spent on other public transportation, opposition to the proposed light rail and freight rail alignments, and concerns about adverse impacts from the Project. For more information on the AA and Draft EIS, including descriptions of the alternatives considered and the evaluation measures used, see Chapter 2 of the Final EIS.⁸

2.4 Supplemental Draft EIS

Upon the close of the Draft EIS comment period on December 31, 2012, the Council assumed responsibility from HCRRA as the local lead agency for continuation of the environmental process and the Council and FTA reviewed the comments received on the Draft EIS. Of note was the USACE determination that LRT 3A-1 (co-location) was the *least environmentally damaging practicable alternative*. Due to this, the FTA and Council were required to consider LRT 3A-1 in greater detail to satisfy the CWA. The USACE is a cooperating agency under NEPA for the Project and must determine whether the Project complies with the CWA Section 404(b)(1) (Guidelines). The USACE stated “as proposed [in the Draft EIS] the chosen LPA, alternative LRT 3A, would not qualify as the least environmentally damaging practicable alternative, which as proposed would be alternative LRT 3A-1 (co-location).”

In addition, TC&W, the major freight carrier operating on the existing freight rail line within the co-location segment of the Kenilworth Corridor, expressed serious engineering and operational concerns with LRT 3A; therefore, TC&W and its shippers were opposed to LRT 3A as presented in the Draft EIS.

Based on the comments received on the Draft EIS and through meetings with the public, businesses, municipalities, and other groups, the Council initiated a process to develop adjustments to the Project’s design. The adjustments were screened by FTA and the Council to determine whether they individually or collectively warranted further evaluation in terms of social, environmental, economic, and transportation impacts under NEPA. The Council, in coordination with FTA, reviewed each of the design adjustments to identify any substantive changes to LRT 3A and LRT 3A-1 not addressed in the Draft EIS. The review was based on NEPA and MEPA environmental review procedures to determine whether the design adjustments were substantial enough to warrant detailed study in the form of a supplement to the Draft EIS (40 CFR Part 1502.9[c] and Minnesota Rule 4410.3000, subps. 3 and 5, respectively).

While there were no new reasonable alternatives identified through the design adjustment process that would meet the Project’s Purpose and Need, FTA and the Council determined that the proposed design adjustments in portions of Eden Prairie, St. Louis Park and Minneapolis, and the proposed OMF in Hopkins should be evaluated in a supplement to the Draft EIS because of the potential for new significant adverse impacts that were not disclosed in the Draft EIS. Following is a description of the design adjustments addressed, described, and illustrated in the Supplemental Draft EIS:

⁷ Public hearings for the Draft EIS were held on November 13, November 14, and November 29, 2012, in the cities of Minneapolis, St. Louis Park, and Eden Prairie, respectively.

⁸ Chapter 2 of the Draft EIS provides more detailed descriptions of the alternatives evaluated within the Draft EIS, and Chapter 11 of the Draft EIS summarizes the evaluation of those alternatives, based on the Project’s Goals and Objectives.

- **Eden Prairie Segment.** The proposed light rail alignment and stations in the Eden Prairie Segment were adjusted south to provide better connections to local activity centers, while avoiding or minimizing adverse impacts. The Eden Prairie Segment generally extends between just west of the intersection of Technology Drive and Mitchell Road, and just east of the intersection of Flying Cloud Drive and Valley View Road. The Supplemental Draft EIS included a western light rail terminus at Mitchell Station, as well as an option of terminating the light rail line at SouthWest Station.
- **Proposed OMF in Hopkins.** The Project includes a proposed OMF in the City of Hopkins, which was not one of the four potential OMF sites identified in the Draft EIS. The proposed Hopkins OMF would be within an existing office warehouse and light manufacturing development. It would occupy an approximately 15-acre site southwest of the intersection of 5th Street South and 15th Avenue South. Light maintenance activities and the storage of vehicles not in service would occur within enclosed structures, although some maintenance activities (such as moving vehicles) would occur outside of buildings. The OMF site would be in operation 24 hours a day, throughout the year.
- **St. Louis Park/Minneapolis Segment.** In the St. Louis Park/Minneapolis Segment, the LPA was adjusted to include the following:
 - A proposed light rail tunnel in the Kenilworth Corridor (generally between West Lake Street and the Kenilworth Lagoon)
 - Retention of existing freight rail service in the Kenilworth Corridor, with some modification to freight rail tracks to accommodate light rail
 - Adjustments to the location and capacity of proposed park-and-ride lots

As noted in Section 2.5 of the Supplemental Draft EIS, the findings reached in the design adjustment process that occurred after publication of the Draft EIS led to adjustments to the Project that would retain freight rail in the Kenilworth Corridor (LRT 3A-1). The Supplemental Draft EIS noted that design adjustments to LRT 3A-1, compared to the relocation of freight rail (LRT 3A), would result in:

- Less harm to Section 4(f)-protected properties (compared to the displacement of the Park Spanish Immersion School playground with freight rail relocation)
- Permanent displacement of approximately six fewer acres of wetland
- Avoidance of the displacement of residents and businesses in St. Louis Park and Minneapolis (compared to the full acquisition of approximately 32 residential, commercial, and institutional parcels under freight rail relocation)
- Minimized reconstruction of freight rail tracks and related adverse impacts
- Inclusion of the Southerly Connector, which replaces the Skunk Hollow switching wye and will facilitate freight rail movements
- Design refinements that will help avoid diminishing the potential for transit-oriented development around light rail stations in close proximity of freight rail tracks
- Safe and convenient pedestrian crossings of freight rail tracks at the proposed Wooddale, Beltline, and 21st Street stations
- Bicycle and pedestrian improvements and the study of potential traffic-related improvements that will improve access to light rail stations and across the light rail and freight rail alignment in the Kenilworth Corridor (compared to the construction of a berm for the freight rail alignment in St. Louis Park that would divide a residential and commercial neighborhood)

After publication of the Supplemental Draft EIS, the Council identified cost saving measures that were developed and analyzed in consultation with the Project's local participating agencies. Those cost saving measures included deferring the proposed Eden Prairie Town Center Station and a Project-wide reduction in the total number of park-and-ride spaces. The Council and FTA reviewed the cost-saving measures and determined that they would likely not result in any new significant adverse environmental impacts from what is already documented in the Project's Draft EIS and Supplemental Draft EIS. Therefore, the cost-savings measures implemented did not warrant the preparation of an additional environmental review.

2.5 Amended Draft Section 4(f) Evaluation

On January 11, 2016, FTA and the Council published the *Southwest LRT Project Amended Draft Section 4(f) Evaluation* (Council; 2016), which included preliminary Section 4(f) *de minimis* impact determinations for Unnamed Open Space B and the Opus development area trail network, both in the City of Minnetonka. The comment period on the *Amended Draft Section 4(f) Evaluation* extended through February 25, 2016. See Chapter 6 of the Final EIS for additional information on the *Amended Draft Section 4(f) Evaluation*.

2.6 Final EIS

The Final EIS evaluates the Project and the No Build Alternative. The Project is defined in Section 2.1.1 and Appendix E of the Final EIS and the No Build Alternative is defined in Section 2.1.4 of the Final EIS. Other alternatives considered prior to the Final EIS are described in Sections 2.1 through 2.4 of this ROD and in Section 2.2 of the Final EIS.

2.6.1 Project

The Southwest LRT Project is approximately 14.5 miles of new double track light rail alignment proposed as an extension of the METRO Green Line (Central Corridor LRT), which will operate from downtown Minneapolis through the communities of St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, passing in close proximity to Edina. The Southwest LRT will operate primarily at-grade, with structures providing grade separation of LRT crossings, roadways, and water bodies at specified locations. For just under one-half mile, it will operate in a shallow LRT tunnel in the Kenilworth Corridor between West Lake Street and just south of the Kenilworth Lagoon, with an at-grade light rail bridge over the lagoon.

Under the Project, the proposed light rail alignment from Eden Prairie to Target Field will have 16 light rail stations: SouthWest, Eden Prairie Town Center (deferred), Golden Triangle, and City West Stations in Eden Prairie; Opus Station in Minnetonka; Shady Oak, Downtown Hopkins, and Blake Stations in Hopkins; Louisiana, Wooddale, and Beltline Stations in St. Louis Park; and West Lake, Penn, 21st Street, Van White, and Royalston Stations in Minneapolis. Major elements that will be incorporated onto the station platforms include shelters, lighting, furniture, and fencing and railing. All stations will include accessible connections to local street networks and sidewalks. The proposed alignment also includes approximately 2,500 additional park-and-ride spaces, accommodations for passenger drop-off, and bicycle and pedestrian access, as well as new or restructured local bus route connection stations to nearby residential, commercial and education destinations. Freight rail operations will remain in the existing location in the Kenilworth Corridor. The light rail and freight rail alignments will be co-located for approximately 5.9 miles through the Bass Lake Spur and Kenilworth Corridor, as well as approximately 0.4 miles in the Wayzata Subdivision.

An additional 27 light rail vehicles (LRVs) will be added to the Green Line fleet for the operation of the Project. The additional LRVs will be stored and maintained in the new OMF to be located in Hopkins. In general, light maintenance activities and the storage of vehicles not in service will occur

within enclosed structures, although some maintenance activities, including moving vehicles between functional areas within the OMF, will occur outside of buildings. Activities on the 15-acre site will include washing, routine cleaning, routine maintenance, and inspections of the trains; parts storage; and maintenance-related office functions. The proposed Hopkins OMF site will include a network of light rail switching track, an approximately 110-space surface parking lot for employees and visitors, storage and maintenance of nonrevenue vehicles, and office space for employees. An LRV storage barn will include five storage bays (with six vehicles per bay) to accommodate a total of 30 vehicles. The storage barn will be designed to accommodate future expansion on Council property, including a sixth storage bay on the west side of the facility to accommodate total of 36 vehicles. Heavy maintenance of the Project's LRVs, including wheel truing, major body repair, and painting, will occur at the existing Franklin Street OMF, which is outside of the Project vicinity and will not need to be expanded to accommodate the LRV's added for the Project.

The Project will require facilities to provide signaling and power to the light rail alignment and LRVs. Active devices, such as traffic signals, railroad-type flashers, and bells, are proposed to control traffic at locations where the light rail alignment will cross public streets. The Project includes 20 proposed TPSS facilities that will provide power for the LRVs through an overhead wire system and which will be completely enclosed and will include perimeter fencing. The Project also includes 25 proposed signal bungalow sites, which will house the equipment to operate and monitor the signals that regulate light rail train movement on the alignment. Appendix E of the Final EIS lists and illustrates the proposed TPSS and signal bungalow sites along the proposed light rail alignment.

Relative to roadways, the Project includes intersection modifications, new traffic signals, changes to existing traffic signals, and other traffic management techniques. Those roadway modifications will be at intersections and at-grade light rail crossings of roadways within the roadways and traffic study area. The Project also includes bicycle and pedestrian improvements that will provide safe bicycle and pedestrian crossings of the proposed light rail alignment. The proposed bicycle and pedestrian improvement will help accommodate the proposed light rail and roadway improvements or will provide bicycle and pedestrian connections to the proposed light rail stations.

The Final EIS also evaluated a range of proposed LRCIs. LRCIs are improvements proposed by Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and Hennepin County to be undertaken separate from, but contingent upon, implementation of the LPA. These proposed improvements are not needed to support the base function of the LPA, nor do they represent mitigation for any impact of the LPA. These proposed activities may be implemented independently by the stakeholders at a future date, and are not conditions of the Project. However, in some cases, implementing a LRCI separately would not be as efficient as constructing the LRCI in conjunction with the Project. The Final EIS included LRCIs to show the full range of potential Project components, evaluate the impacts and ensure mitigation measures are provided for LRCIs, where applicable.

FTA, in consultation with the Council, has determined that the Project as described in the Final EIS, and which is incorporated herein, meets the Purpose and Need for the Project as described in Section 8.1 of the Final EIS. The environmental review documents have addressed all required NEPA considerations, as well as other environmental considerations and findings, including those associated with the Endangered Species Act, Section 4(f), Section 106, Environmental Justice, CWA, Floodplains, and the Clean Air Act (as described in Section 5 of this ROD).

2.6.2 No Build Alternative

The development and analysis of a *no build* or a *no action* alternative is required under NEPA and MEPA. The No Build Alternative represents both a possible outcome of this Final EIS process, as

well as a reference point to gauge the benefits, costs, and impacts of the Project. The No Build Alternative represents future conditions in 2040 within the corridor if the Project is not implemented. The definition of the No Build Alternative includes all the proposed and funded projects in the TPP⁹ except the Project. That is, the No Build Alternative only differs from the Project in that the No Build Alternative does not include the construction and operation of the Project. Section 2.1.4 of the Final EIS provides a more detailed description of the No Build Alternative, and Chapters 5 and 6 of the TPP list and illustrate respectively the funded highway and transit projects in the 2040 TPP that are included in the No Build Alternative (identified as Current Revenue Scenario Investments).

3 Impacts and Measures to Avoid, Minimize, and Mitigate Adverse Impacts

This section describes the impacts identified in the Final EIS for the Southwest LRT Project (including the LPA and LRCIs as described in Section 2.6.1).

3.1 Environmental Impacts of the Project

The Final EIS discusses 16 environmental-related categories and analyzes effects (Chapter 3 in the Final EIS) and six transportation-related analysis and effects (Chapter 4 in the Final EIS) associated with the No Build Alternative and the Project, including a summary of methodologies and regulations and a description of the affected environment. The analysis addresses long-term and short-term (construction) direct and indirect impacts, as well as cumulative impacts related to the Project. Long-term impacts are those that will continue to occur after construction of the Project is complete; short-term impacts are those that will be associated with Project construction activities and will be temporary. Table 3-1 summarizes the long-term and short-term impacts to environmental and transportation-related resources that will result from the Project. Specific mitigation measures for impacts from the Project are in Attachment A of this ROD.

Section 5 of this ROD describes the determination and findings regarding Project compliance with other federal laws and agency requirements: NEPA; Section 106 of the National Historic Preservation Act; the CWA and Executive Order on Protection of Wetlands; floodplain management; CWA Sections 401 and 402; Endangered Species Act; Migratory Bird Treaty/Bald and Golden Eagle Protection Act; Clean Air Act; Environmental Justice; and Final Section 4(f) Evaluation. Responses to all comments received on the Final EIS are provided in Attachment D of this ROD.

⁹ If those projects are implemented, the sponsors of those projects would be responsible for complying with applicable federal and state environmental requirements, such as NEPA and MEPA, including disclosure of the projects' environmental impacts.

TABLE 3-1
Project Impacts by Environmental and Transportation Category

Category		Summary of Impacts ^a
Environmental Categories		
3.1 Land Use	Long-term Direct Impacts	<ul style="list-style-type: none"> • Direct conversion of approximately 144 acres of privately owned industrial, commercial, and residential land, publicly and privately owned parks and open space, publicly owned rights-of-way (i.e., HCRRA), and privately owned railroad rights-of-way (i.e., Canadian Pacific Railway and BNSF Railway) to public transportation-related use (refer to Table 3.1-5 for more information) • No adverse impacts due to no changes in overall land use characteristics within the vicinity of the Project
	Long-term Indirect Impacts	<ul style="list-style-type: none"> • Potential increased intensity and/or advanced timing of development surrounding proposed light rail station areas • No adverse impacts
	Short-term Impacts	<ul style="list-style-type: none"> • Temporary changes to property access during construction or temporary conversion of land to a transportation use for construction staging and other construction activities • Temporary easements on 134 acres effecting 178 parcels of land that include industrial, commercial, railroad, residential, and public land uses
3.2 Economic Activity	Long-term Direct Impacts	<p>Employment:</p> <ul style="list-style-type: none"> • Beneficial effects: <ul style="list-style-type: none"> - \$34.5 million (2015 dollars) in local annual wages and salaries, resulting in 172 long-term jobs in the local economy • No adverse impacts to regional employment due to the projected increase in transit workers <p>Property Tax Revenue:</p> <ul style="list-style-type: none"> • Permanent removal of acquired private parcels from the property tax base of affected cities and corresponding reduction in property tax revenue from those parcels <p>Existing Business and Development/Redevelopment:</p> <ul style="list-style-type: none"> • Changes in local traffic patterns and the number of available off-street and on-street parking spots, resulting in a loss of overall parking for some businesses and a related loss in revenue • Removal of land acquired by the Project from the inventory of available land for potential development/redevelopment <p>Freight Rail Owners and Operators:</p> <ul style="list-style-type: none"> • No adverse impacts to freight rail owners and operators based on modifications by the Project
	Long-term Indirect Impacts	<p>Employment:</p> <ul style="list-style-type: none"> • Beneficial effects: <ul style="list-style-type: none"> - Potential creation of new jobs as employees gain easier access to businesses, residential housing units, and other facilities, providing a net benefit to the local economy • No adverse impacts due to new jobs created in the region as employees gain easier access to businesses

Category		Summary of Impacts ^a
		<p>Property Tax Revenue:</p> <ul style="list-style-type: none"> • Beneficial effects: <ul style="list-style-type: none"> - Potential increase in property tax revenue for local jurisdictions related to increases in development/redevelopment • No adverse impacts to property tax revenue due to the transit oriented development potential surrounding the stations <p>Existing Business and Development/Redevelopment:</p> <ul style="list-style-type: none"> • Beneficial effects: <ul style="list-style-type: none"> - Likely increased property values in areas surrounding proposed light rail stations - Likely increase in development/redevelopment in the areas surrounding light rail stations • Potential impacts that could reduce value of an area (“nuisance effects”) • No adverse effects to existing business and development/redevelopment due to improved accessibility which expand workforce and retail access
	Short-term Impacts	<p>Employment:</p> <ul style="list-style-type: none"> • Beneficial effects: <ul style="list-style-type: none"> - Construction spending associated with the Project will result in an estimated \$1.3 billion in overall economic activity (year-of-expenditure dollars) over the construction period • Potential lost revenues for businesses due to temporary reduction of parking stalls, traffic congestion, reduced access, and increased noise, dust, and perceived changes in visual quality <p>Property Tax Revenue:</p> <ul style="list-style-type: none"> • No adverse impacts because the temporary occupancies and easements are not expected to result in displacement of businesses or residents <p>Existing Businesses:</p> <ul style="list-style-type: none"> • Potential increases in noise levels, dust, traffic congestion, visual changes, and increased difficulty accessing property for existing businesses <p>Freight Rail Owners and Operators:</p> <ul style="list-style-type: none"> • Slower freight rail operations during construction may occur and short periods of freight stoppage required to make some modifications to the freight rail track
3.3 Neighborhood and Community	Long-term Direct Impacts	<p>Access to Community Facilities:</p> <ul style="list-style-type: none"> • Some roadway modifications within the general vicinity of community facilities, but access to these facilities will be maintained and the Project will provide improve transit access to these facilities • No adverse impacts <p>Community Character:</p> <ul style="list-style-type: none"> • Some changes in noise/vibration and visual character adjacent to the Project and some property acquisition, but these changes will be confined to limited areas • No adverse impacts <p>Community Cohesion:</p> <ul style="list-style-type: none"> • Some changes in the local roadway, pedestrian, and bicycle networks will occur, but existing roadway and sidewalk/trail connectivity and access will be maintained or improved • No adverse impacts

Category		Summary of Impacts ^a
	Long-Term Indirect Impacts	<ul style="list-style-type: none"> Potential property conversion surrounding proposed station areas, including private and public development and/or redevelopment that could affect supply of and demand for off-street and on-street parking around station areas No adverse impacts on community facilities, community character, or community cohesion
	Short-Term Impacts	<p>Access to Community Facilities:</p> <ul style="list-style-type: none"> Temporary changes to roadways, including intersections modifications, and trail and sidewalk detours for routes which provide access to community facilities <p>Community Character:</p> <ul style="list-style-type: none"> Construction impacts, such as increased levels of noise, vibration, and dust, may temporarily affect neighborhood character at times of heavy construction Presence of large construction equipment may be perceived as visually disruptive <p>Community Cohesion</p> <ul style="list-style-type: none"> Potential increases in noise levels, dust, and traffic congestion, including increased automobile and truck traffic through residential neighborhoods
3.4 Acquisitions and Displacements	Long-term Direct Impacts	<ul style="list-style-type: none"> Partial acquisition of 159 parcels (totaling 133.5 acres) and full acquisition of 36 parcels (totaling 64 acres) Relocation of up to 72 businesses that currently operate on or use 20 of the parcels to be acquired
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Potential for increased development and redevelopment in areas surrounding station areas that could indirectly lead to acquisitions and displacements
	Short-term Impacts	<ul style="list-style-type: none"> Temporary easements on 134 acres effecting 178 parcels of land that include industrial, commercial, railroad, residential, and public land uses
3.5 Cultural Resources	Adverse Effects	<ul style="list-style-type: none"> Adverse effect on the Kenilworth Lagoon and the Grand Rounds Historic District, of which the Kenilworth Lagoon is a contributing element Adverse effect on the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot (Avoided with measures incorporated into the Project's design and Section 106 MOA) Adverse effect at two archaeological sites, 21HE0436 and 21HE0437, both of which will be destroyed during the construction of the Project (the term "destroyed" is used in applying 36 CFR 800.5 and the Secretary of the Interior's Standards [36 CFR 68])
3.6 Parks and Recreation	Long-term Direct Impacts	<p>The following parks, recreation areas, and open space properties will incur long-term direct impacts as a result of the Project:</p> <ul style="list-style-type: none"> Unnamed Open Space A: Acquisition of entire 2.95-acre open space parcel to accommodate installation of LRT tracks and station platform; trail realignment Unnamed Open Space B: Acquisition of 2.5 acres to accommodate installation of LRT tracks; trail realignment Kenilworth Channel/Lagoon: LRT improvements and modifications to the freight rail and trail alignments will occur on approximately 0.3 acre Cedar Lake Park: New segment of sidewalk to be constructed within the park near East Cedar Beach; realignment of a portion of North Cedar Lake Regional Trail in park Bryn Mawr Meadows Park: Acquisition of 0.4-acre permanent maintenance easement to accommodate replacement trail bridge; modification of trail alignments in the park
	Long-term Indirect Impacts	<p>The following parks, recreation areas, and open spaces will incur long-term indirect impacts as a result of the Project:</p> <ul style="list-style-type: none"> Purgatory Creek Park: Changes to visual setting due to installation of elevated LRT line adjacent to park Nine Mile Creek Conservation Area: Changes to visual setting due to installation of LRT line adjacent to the property Overpass Skate Park: Changes to visual setting and noise conditions due to installation of LRT line adjacent to park

Category		Summary of Impacts ^a
		<ul style="list-style-type: none"> Minnehaha Creek Open Space: Changes to visual setting and noise conditions due to installation of LRT line adjacent to park
		<ul style="list-style-type: none"> Edgebrook Park: Changes to visual setting and noise conditions due to installation of LRT line adjacent to park Jorvig Park: Changes to visual setting and noise conditions due to installation of LRT line adjacent to park Lilac Park: Changes to visual setting and noise conditions due to installation of LRT line adjacent to park Park Siding Park: Changes to visual setting and noise conditions due to installation of LRT line adjacent to park Kenilworth Channel/Lagoon: Changes to visual setting and noise conditions due to installation of LRT line across the channel <p>Bryn Mawr Meadows Park: Modification to the park’s visual setting due to the replacement trail bridge; improved transit and trail access</p>
	Short-term Impacts	<p>The following parks, recreation areas, and open spaces will incur short-term impacts as a result of the Project:</p> <ul style="list-style-type: none"> Purgatory Creek Park: Acquisition of temporary construction easement; temporary changes to access, noise, and visual setting conditions during construction Nine Mile Creek Conservation Area: Temporary changes to visual setting and noise conditions during construction; potential for construction activities within the parcel Overpass Skate Park: Temporary changes to visual setting and noise conditions during construction Minnehaha Creek Open Space: Temporary changes to visual setting and noise conditions during construction Edgebrook Park: Temporary changes to visual setting and noise conditions during construction Jorvig Park: Temporary changes to visual setting and noise conditions during construction Lilac Park: Temporary changes to visual setting and noise conditions during construction Park Siding Park: Temporary changes to visual setting and noise conditions during construction Kenilworth Channel/Lagoon: Temporary closure of channel/user detour during construction; temporary changes to access, visual setting and noise conditions during construction Cedar Lake Park: Acquisition of temporary construction easement to accommodate trail reconstruction within the park Bryn Mawr Meadows Park: Acquisition of temporary construction easement and temporary Project activities within the park related to construction of replacement bridge and realignment of trails
3.7 Visual Quality and Aesthetics	Long-term Direct Impacts	<ul style="list-style-type: none"> Six views with a substantial level of visual quality impact, six views with a moderate level of visual quality impact^p
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Potential for the built environment to appear more intensively developed and more urbanized in character due to the potential opportunities for new development, including higher residential densities and, in some cases, new or expanded commercial activities
	Short-term Impacts	<ul style="list-style-type: none"> Temporary impacts in portions of all visual analysis units^b associated with: construction staging areas; concrete and form installation; lights and glare from construction areas; and dust and debris
3.8 Geology and Groundwater	Long-term Direct Impacts	<p>Geology:</p> <ul style="list-style-type: none"> Potential for uneven ground settlement and bearing failure of the building foundations for the light rail alignment, stations, structures, and surface parking lots/parking structures Cuts and fills to accommodate appropriate light rail track grade, including two light rail tunnels No adverse impacts

Category		Summary of Impacts ^a
		<p>Groundwater:</p> <ul style="list-style-type: none"> Water collected at the tunnel portals will be routed through a pretreatment system that captures debris and sediments and through an underground infiltration chamber <p>Water from internal tunnel will be treated, if required, and pumped to the adjacent sanitary sewer systems owned by either the City of Minneapolis or Metropolitan Council Environmental Services</p>
	Long-term Indirect Impacts	<p>Geology:</p> <ul style="list-style-type: none"> No adverse impacts due to the existing disturbed soils underlying these areas <p>Groundwater:</p> <ul style="list-style-type: none"> Impacts may occur as development activities in the Project’s vicinity increase, but those development activities will be held to applicable regulatory standards and requirements
	Short-term Impacts	<p>Geology:</p> <ul style="list-style-type: none"> At- or above-grade construction activities will expose sub-soil when topsoil is removed, which will be susceptible to surface-water and wind erosion <p>Groundwater:</p> <ul style="list-style-type: none"> Temporary groundwater pumping during construction Potential for groundwater contamination Potential that buildings, roadways, and utilities may settle Potential that pumped groundwater will be discharged to sewer and not recharge shallow aquifer
3.9 Surface Water Resources	Long-term Direct Impacts	<p>Wetlands^c:</p> <ul style="list-style-type: none"> Impacts^d on 20 wetlands regulated under the Minnesota Wetlands Conservation Act (4.70 acres) and/or Clean Water Act (1.83 acres) Impact to 20 linear feet of Kenilworth Channel <p>Public Waters and Surface Water Quality:</p> <ul style="list-style-type: none"> Impacts will result from conversion of undeveloped land and operations and maintenance of the Project 39.9 acres of new impervious surface Five new crossings over water bodies Fill into ditch at Hopkins Operations and Maintenance Facility <p>Floodplains:</p> <ul style="list-style-type: none"> Long-term fill within 15 locally regulated floodplains (7,296 cubic yards)
	Long-term Indirect Impacts	<p>Wetlands^c:</p> <ul style="list-style-type: none"> Impacts to wetlands may occur if new development occurs within the proposed station areas
		<p>Public Waters and Surface Water Quality:</p> <ul style="list-style-type: none"> Impacts will occur as commercial, transportation, and industrial activities in the Project’s vicinity increase new point and non-point sources of water pollutants
		<p>Floodplains:</p> <ul style="list-style-type: none"> Impacts to floodplains may occur if new development occurs within the proposed station areas

Category		Summary of Impacts ^a
	Short-Term Impacts	<p>Wetlands^c:</p> <ul style="list-style-type: none"> • Impacts^e to 18 wetlands regulated under the Minnesota Wetland Conservation Act (3.83 acres) and/or the Clean Water Act (7.53 acres) • Impact to 60 linear feet of North Fork of Nine Mile Creek • Impact to 100 linear feet of Kenilworth Channel <p>Public Waters and Surface Water Quality:</p> <ul style="list-style-type: none"> • Increased rates and volumes of sediment-laden runoff during excavation, accidental spills and leaks from construction vehicles and equipment, and removal of riparian vegetation • Sediment and erosion impacts to public waters and surface water quality will occur near stream crossings, where slopes are greater and construction activities occur closer to the public water, and where controls are more difficult to implement and maintain <p>Floodplains:</p> <ul style="list-style-type: none"> • Temporary fill within floodplains • Loss or disturbance of soils and vegetation at some locations, which will increase the likelihood of temporary erosion and sedimentation in floodplains
3.10 Ecosystems	Long-Term Direct Impacts	<p>Threatened and Endangered Species:</p> <ul style="list-style-type: none"> • “No effect” on the Higgins eye (pearly mussel) and Snuffbox mussel, or their associated critical habitats • The Project may affect but is not likely to adversely affect the northern long-eared bat • No element occurrences of the Blanding’s turtle within 0.9 mile of the Project’s alignment; however, MnDNR determined this species may be adversely affected by the Project <p>Habitat:</p> <ul style="list-style-type: none"> • Removal, conversion, degradation, or splitting of existing habitat • Loss and/or degradation of vegetated areas associated with five land cover types, which could result in a decrease in potential wildlife foraging areas, breeding habitats, and nesting areas • Loss of approximately 60 acres of habitat <p>Migratory Birds:</p> <ul style="list-style-type: none"> • No adverse impacts as it is likely that regulated migratory bird species have adapted to survive in urban areas and tolerate high levels of human activity given the limited forest or woodland areas present
	Long-Term Indirect Impacts	<p>Threatened and Endangered Species:</p> <ul style="list-style-type: none"> • Impacts to threatened and endangered species may occur if new development occurs within the proposed station areas <p>Habitat:</p> <ul style="list-style-type: none"> • Increased disturbance of habitat because of activities associated with the daily operation of the light rail (e.g., noise, lighting, dust), as well as an increase in human activity in or adjacent to habitat areas • Impacts to habitat may occur if new development occurs within the proposed station areas <p>Migratory Birds:</p> <ul style="list-style-type: none"> • No adverse impacts as it is likely that regulated migratory bird species have adapted to survive in urban areas and tolerate high levels of human activity given the limited forest or woodland areas present

Category		Summary of Impacts ^a
	Short-term Impacts	<p>Threatened and Endangered Species:</p> <ul style="list-style-type: none"> No adverse impacts on federal or state listed threatened or endangered species, or critical habitat because impacts are avoided through commitments <p>Habitat:</p> <ul style="list-style-type: none"> Temporary loss of vegetated areas associated with five natural land cover types, which could result in short-term loss of habitat Temporary loss of approximately 23 acres of habitat <p>Migratory Birds:</p> <ul style="list-style-type: none"> No adverse impacts because the Project’s light rail alignment will be located in a predominantly urban area, and the species of migratory birds that regularly travel throughout or nest within this region are likely familiar with and/or have adapted to dealing with construction activities similar to those associated with construction of the Project
3.11 Air Quality and Greenhouse Gases	Long-term Direct Impacts	<ul style="list-style-type: none"> Beneficial effects: <ul style="list-style-type: none"> Lower levels of mobile source air toxics emissions in the region, with projected reduction in vehicle travel when passengers switch from driving to light rail No adverse impacts
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Beneficial effects: <ul style="list-style-type: none"> Improved traffic conditions on the region’s travel network will reduce vehicle emissions and contribute to air quality improvements Net Greenhouse Gas emissions reduction in the region and beneficial GHG and climate change effects^f No adverse impacts
	Short-term Impacts	<ul style="list-style-type: none"> Temporary increase in air emissions from project construction Temporary increase in greenhouse gases from the construction equipment and vehicles Short-term increases in dust in and around the project area from construction activities
3.12 Noise	Long-term Direct Impacts	<ul style="list-style-type: none"> Without mitigation: 237 moderate noise impacts (52 buildings) and 558 severe noise impacts (69 buildings) for residential land uses; one moderate noise impact for institutional land uses With mitigation: 59 moderate noise impacts (22 buildings) for residential land uses^g
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Increased development near new light rail stations will likely result in more people having exposure to the noise produced by light rail vehicles and park-and-ride lots Increase in transit ridership will likely reduce roadway traffic noise
	Short-term Impacts	<ul style="list-style-type: none"> Elevated noise levels from construction equipment For residential land use, at-grade track construction noise impacts can extend 120 feet from the construction site If nighttime construction is conducted, noise impacts from at-grade construction can extend 380 feet from the construction site
3.13 Vibration	Long-term Direct Impacts	<p>Vibration:</p> <ul style="list-style-type: none"> No vibration impacts for residential or institutional land uses <p>Ground-borne noise:</p> <ul style="list-style-type: none"> Without mitigation: 54 units (five buildings) ground-borne noise impacts for residential land uses in the tunnel section south of the Kenilworth Channel, and one ground-borne noise impact at an institutional land use, an audiology clinic With mitigation: no vibration impacts to residential or institutional land uses

Category		Summary of Impacts ^a
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Increased development near new light rail stations will likely result in more people having exposure to vibrations produced by LRT and freight rail
	Short-term Impacts	<ul style="list-style-type: none"> Vibration will result from operation of heavy equipment (pile driving, vibratory hammers, hoe rams, vibratory compaction, and loaded trucks) needed to construct bridges, retaining walls, roads, and park-and-ride facilities
3.14 Hazardous and Contaminated Materials	Long-term Direct Impacts	<ul style="list-style-type: none"> Beneficial Effect: <ul style="list-style-type: none"> Removal of existing hazardous and contaminated soils within the construction area for the Project No adverse impacts as operation of the light rail vehicles will not generate hazardous materials or regulated wastes and due to the effectiveness of identified avoidance measures (i.e., BMPs for OMF)
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Beneficial Effect: <ul style="list-style-type: none"> Potential for known hazardous and contaminated material sites to be cleaned up as development/redevelopment occurs Long-term management of methane-related indirect impacts on the proposed Hopkins OMF site from the Hopkins Sanitary Landfill may be necessary to limit potential worker exposure to methane
	Short-term Impacts	<ul style="list-style-type: none"> Earthwork or other disturbance at or in proximity to contaminated areas could mobilize or result in the release of hazardous and contaminated materials Potential spills of hazardous materials during construction Discovery of previously undocumented contaminated soil or groundwater contamination encountered during construction Potential for structures on acquired land to contain contaminated or hazardous materials Potential exposure of hazardous material to people present within and adjacent to the project construction area
3.15 Electromagnetic Fields/ Electromagnetic Interference, and Utilities	Long-term Direct Impacts	<ul style="list-style-type: none"> No adverse impacts from electromagnetic fields due to the low levels of exposure to people riding the LRT or in adjacent buildings No adverse impacts from electromagnetic interference because there are no sensitive receptors in the study area No adverse impacts on utilities because conflicting utilities will be relocated and services maintained
	Long-term Indirect Impacts	<ul style="list-style-type: none"> No adverse impacts from electromagnetic fields or electromagnetic interference and no adverse impacts on utilities
	Short-term Impacts	EMI/EMF: <ul style="list-style-type: none"> No adverse impacts Utilities: <ul style="list-style-type: none"> Excavation and grading activities, placement of structural foundations and work that requires large-scale equipment could interfere with utilities Relocating water mains could temporarily affect access to and use of fire hydrants
3.16 Energy	Long-term Direct Impacts	<ul style="list-style-type: none"> Beneficial effects: <ul style="list-style-type: none"> The Project will have an annual regional energy consumption 109 billion Btu lower than the No Build Alternative Changes due to mode shifts from single-occupant vehicles to transit, reducing energy consumption No adverse impacts

Category		Summary of Impacts ^a
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Beneficial effects: <ul style="list-style-type: none"> Changes due to mode shifts from single-occupant vehicles to transit, reducing passenger vehicle miles traveled Increase in energy consumption from new development and redevelopment No adverse impacts because new development is typically more energy efficient than existing or less dense development
	Short-term Impacts	<ul style="list-style-type: none"> No adverse impacts because energy used for production of raw materials and components for construction will be localized and temporary
3.17 Cumulative Impacts	Cumulative Effects Assessment	Direct and indirect adverse impacts will be localized and the Project is not anticipated to generate substantial cumulative impacts for the environmental categories evaluated
Transportation Categories		
4.1 Transit	Long-term Direct Impacts	<ul style="list-style-type: none"> Changes to Metro Transit or SouthWest Transit facilities and service to accommodate and coordinate with the proposed light rail extension No adverse impacts
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Beneficial effects: <ul style="list-style-type: none"> Increase in transit trips Ridership and operations changes to the existing local bus system Demand for pedestrian and bicycle access to new light rail stations will increase Anticipate additional increase in transit ridership due to potential increases in development density or redevelopment in areas surrounding light rail stations No adverse impacts
	Short-term impacts	<ul style="list-style-type: none"> Intermittent impacts to bus operations on routes within the construction area, such as temporary stop relocations or closures, route detours, or suspensions of service on segments of routes operating on streets where light rail facilities are constructed
4.2 Roadways and Traffic	Long-term Direct Impacts	<ul style="list-style-type: none"> Physical modifications that will affect local circulation No adverse impacts
	Long-term Indirect Impacts	<ul style="list-style-type: none"> Beneficial effects: <ul style="list-style-type: none"> Decrease in auto trips on surrounding roadway network as people switch from auto to transit Additional vehicle traffic from anticipated new development surrounding the light rail stations No adverse impacts due to capacity upgrades and improvements in locations that could realize increased traffic generated in station areas
	Short-term Impacts	<ul style="list-style-type: none"> Short-term traffic impacts from construction activities such as: <ul style="list-style-type: none"> Relocation of existing utilities Removal of existing surface features within the right-of-way or between the curbs Excavation and construction of new subsurface features required for the LRT system and adjacent roadways including stormwater drainage systems and various electrical facilities Construction of new light rail track, stations, electrical power systems, roadways, and bridges Installation of above ground light rail system operation facilities Temporary, partial and full closures of existing streets and driveways

Category		Summary of Impacts ^a
4.3 Parking	Long-term Direct Impacts	<ul style="list-style-type: none"> • Removal of 692 off-street parking spaces at 16 properties • Removal of an existing publicly owned park-and-ride lot (52 spaces) • Addition of 98 on-street parking spaces at five locations • Removal of 252 on-street parking spaces at nine locations • New park-and-ride lots at nine light rail stations, for a combined addition of 2,487 new park-and-ride spaces
	Long-term Indirect Impacts	<ul style="list-style-type: none"> • Could affect supply of and demand for off-street and on-street parking around station areas as a result of development/redevelopment • Spillover parking could occur at stations where there are no park-and-ride lots planned • Spillover parking could occur in the vicinity of the proposed SouthWest and Beltline Stations
	Short-term Impacts	<ul style="list-style-type: none"> • Temporary removal of on-street parking spaces to facilitate construction
4.4 Freight	Long-term Direct Impacts	<ul style="list-style-type: none"> • Changes to existing freight rail infrastructure, such as shifting the freight mainline up to 45 feet, removing siding track, and reconstruction of existing freight rail bridges • No adverse impacts as there are no substantial changes to freight rail operations
	Long-term Indirect Impacts	<ul style="list-style-type: none"> • None^h
	Short-term Impacts	<ul style="list-style-type: none"> • Impacts to freight rail operations resulting from construction activities along the three freight rail corridors adjacent to the Project, including multiple stoppages
4.5 Bicycle and Pedestrian	Long-term Direct Impacts	<ul style="list-style-type: none"> • Changes to pedestrian and bicycle facilities including intersection modifications, new station area platform access points, new at-grade sidewalk and trail crossings of LRT tracks, and modifications to trail widths • Additions or modifications of facilities that will have a positive impact on pedestrian and bicycle travel, such as signalization of currently unsignalized roadway intersections, construction of new sidewalks or continuation of existing sidewalks around station areas, and geometry changes to roadways which may result in reduced pedestrian crossing distances • Adverse impacts may include relocation of public trails, trail and station area conflicts, Kenilworth Trail widths, displacement of private trails, and a loss of queuing space for the at-grade LRT and freight crossing near Penn Station
	Long-term Indirect Impacts	<ul style="list-style-type: none"> • Increase in pedestrian and bicycle activity in the station areas and along the regional trails
	Short-term Impacts	<ul style="list-style-type: none"> • Changes to pedestrian and bicycle facilities, including intersection modifications, reconstruction of freight rail crossings, and trail and sidewalk detours • Indirect impacts include reduced pedestrian and bicycle volumes on existing facilities
4.6 Safety and Security	Long-term Direct Impacts	<ul style="list-style-type: none"> • Modifications to existing freight rail facilities, introduction of light rail stations and related facilities, new at-grade LRT crossings of roadways, potential changes to emergency vehicle access and response times, light rail service in the vicinity of freight rail service, and new light rail tunnels. • No adverse impacts based on the incorporation of safety and security-related design and operational elements into the Project.
	Short-term Impacts	<ul style="list-style-type: none"> • Potential for temporary delays in emergency response resulting from construction activities

^a This table summarizes the anticipated impacts for the Project as identified in the Final EIS. All data in the table are approximate. See the corresponding sections of Chapters 3 and 4 of the Final EIS for a more detailed description of the anticipated impacts

^b 19 viewpoints were selected for assessment within six visual analysis units. The six visual analysis units and the exhibits on which they are mapped include Eden Prairie (Exhibit J-1), North Eden Prairie/Minnetonka/South Hopkins (Exhibit J 6), Hopkins (Exhibit J-9), St. Louis Park (Exhibit J-12), Kenilworth Corridor (Exhibit J 17), and Minneapolis Downtown Fringe (Exhibit J-24) (exhibit references are to Appendix J of the Final EIS).

^c The term “wetland” is used to describe any regulated aquatic resource, including streams. See Section 3.9 for additional information.

^d Long-term direct impacts on wetlands regulated under the Minnesota Wetlands Conservation Act are generally defined as impacts not fully restored within six months, and long-term direct impacts to wetlands regulated under the Clean Water Act are generally defined as impacts that are not fully restored.

^e Short-term impacts on wetlands under the Minnesota Wetlands Conservation Act are generally defined as impacts that will be fully restored within six months, and short-term impacts to wetlands regulated under the Clean Water Act are generally defined as impacts that will be fully restored.

^f Strikethrough indicates a change from the Final EIS. Subsequent to publication of the Final EIS, the FTA determined that removing the beneficial effects to emissions reduction and climate change is appropriate.

^g If the noise mitigation guidelines, as contained in the Regional Transitway Guidelines (March 2016) (see Appendix D of the Final EIS), are found to not meet reasonable criterion or if property owner(s) does not approve sound insulation, the Project will result in additional residual noise impacts. Noise mitigation measures include the implementation of quiet zones in some areas where the light rail alignment will be adjacent to freight rail. Quiet zones are locations, at least one-half mile in length, where the routine sounding of horns has been eliminated because of safety improvements at at-grade crossings, including modifications to the streets, raised median barriers, four quadrant gates, and other improvements designed and implemented by the Project and consistent with quiet zone readiness. Horns are sounded in emergency situations at these locations. Municipalities must apply to FRA for approval of quiet zones. If the municipality fails to apply for a quiet zone or FRA fails to approve the quiet zone, the Project may result in additional residual noise impacts. See Section 3.12 and Table 3.12-7 of the Final EIS for additional information.

^h See Section 4.4.4.2 of the Final EIS for a description of unavailable and unobtainable information on the effect that the proposed Southerly Connector could have on freight rail operations.

Notes: Data are approximate. BMP = best management practice; CFR = Code of Federal Regulations; EIS = Environmental Impact Statement; FRA = Federal Railroad Administration; HCRRA = Hennepin County Regional Railroad Authority; LRT = light rail transit; MOA = Memorandum of Agreement; MnDNR = Minnesota Department of Natural Resources; OMF = Operation and Maintenance Facility; OSHA = Occupational Safety and Health Administration.

Source: Council, 2015.

3.2 Measures to Avoid, Minimize, and Mitigate Adverse Impacts

Means to avoid, minimize, and mitigate effects from the Project were presented in the Final EIS and are summarized in Attachment A of this ROD. Implementation of the mitigation measures in Attachment A are material conditions of the Southwest LRT Project ROD and will be incorporated into any grant agreement that FTA may award the Council for the construction of the Southwest LRT Project. FTA will also require the Council to submit written reports, quarterly, on its progress in implementing mitigation measures. FTA will monitor this progress through quarterly reviews of the Project's progress.

FTA finds that, with the accomplishment of these mitigation measures, the Council will have taken all reasonable, prudent, and feasible means to avoid or minimize impacts from the Project.

4 Public and Agency Review Process

Since the Notice of Intent (NOI) initiating the NEPA process for the Project, public involvement has been an integral part of the design and engineering activities. The Council and HCRRA used a wide range of outreach techniques, including but not limited to meetings (e.g., multiple-participant meetings, one-on-one meetings with affected property owners), advisory committees, open houses, public hearings, newsletters, project website, e-mails, fact sheets on specific topics, and tables at events such as community fairs and festivals. Using these techniques, the Council and HCRRA coordinated with agency partners, local businesses, and residents since the NOI was published in the *Federal Register* on September 23, 2008, and in the *EQB Monitor* on September 8, 2008.

Chapter 9 of the Final EIS describes the Council's and HCRRA's public outreach program during the NEPA process and the creation of meaningful opportunities for public engagement for all members of the community, including traditionally under-represented stakeholders and environmental justice populations.

The following sections describe in greater detail the public engagement activities and opportunities for public comment through the various phases of the Project from NOI through to this ROD.

4.1 Scoping

Public involvement for the Project's NEPA and MEPA environmental review process began with the Draft EIS scoping process, which informed the public, interest groups, affected tribes, and government agencies of the Draft EIS. The Scoping process began with publication of a notice in Finance and Commerce on August 23, 2008, and the publication of the Notice of Intent for the Draft EIS in the *Federal Register* on September 23, 2008, (FTA, 2008b) and in the *EQB Monitor* on September 8, 2008 (Minnesota EQB, 2008). The notices announced the beginning of the Scoping Comment Period, which extended from September 8 to November 7, 2008, and included three public Scoping Meetings/Hearings held on October 7, October 14, and October 23, 2008, in the cities of Minneapolis, St. Louis Park, and Eden Prairie, respectively. A total of 340 comments were received and were reviewed and responded to individually. Comments were received during the Scoping period on the purpose and need for the project, alternatives, and environmental benefits and impacts. See Appendix J and K of the *Scoping Summary Report* (HCRRA, 2009) for documentation of the comments received during Scoping and responses to those comments.

4.2 Draft EIS

FTA, HCRRA, and the Council published the Draft EIS in October 2012 (HCRRA, 2012). The Notice of Availability was published in the *Federal Register* on October 12, 2012, and in the *EQB Monitor* on October 15, 2012, announcing a public comment period through December 11, 2012. Three public hearings on the Draft EIS were held on November 13, November 14, and November 29, 2012, in the cities of Minneapolis, St. Louis Park, and Eden Prairie, respectively. Each public hearing was preceded by an open house. Over 400 people attended the open houses and public hearings.

Translation services and Americans with Disabilities Act accommodations were provided upon request. On December 7 and 10, 2012, a notice was published in the *Federal Register* and *EQB Monitor*, respectively, extending the public comment period to December 31, 2012.

Approximately 1,000 comments were received during the public comment period and submitted in the form of letters, emails, testimony at the public hearings, and comment cards received at the open houses and public hearings. Comments were received from individuals, businesses, public interest groups, and public agencies, including municipalities and regulatory agencies. Agencies that submitted comments in response to the Draft EIS include: U.S. Environmental Protection Agency (EPA), USACE, U.S. Department of Interior, Surface Transportation Board, Minnesota Department of Transportation (MnDOT), Minnesota Department of Health-Environmental Health Division, Three Rivers Park District, Minnehaha Creek Watershed District, Nine Mile Creek Watershed District, Minneapolis Park and Recreation Board (MPRB), and the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and Minneapolis. The comments included support for and opposition to the Project and to specific elements of the Project. A summary of the comments received on the Draft EIS can be found in Section 9.4.1 of the Final EIS; Appendix L of the Final EIS documents all individual comments received on the Draft EIS and FTA's and the Council's responses to the comments.

4.3 Supplemental Draft EIS

In May 2015, FTA and the Council published the Supplemental Draft EIS (Council, 2015). The Notice of Availability was published in the *Federal Register* on May 22, 2015, and in the *EQB Monitor* on May 25, 2015. A notice extending the public comment period on the Supplemental Draft EIS to July 21, 2015 was published in the *Federal Register* on June 5, 2015, and in the *EQB Monitor* on June 8, 2015. Three public hearings on the Supplemental Draft EIS were held during the public comment period, on June 16, 17, and 18, 2015, in the cities of Hopkins, Eden Prairie, and Minneapolis, respectively. Each public hearing was preceded by an open house. Approximately 100 people attended the open houses and public hearings.

Approximately 225 comments were received during the public comment period for the Supplemental Draft EIS. Comments were submitted in the form of letters, emails, testimony at the public hearings, and comment cards received at the open houses and public hearings. Agencies that submitted comments in response to the Supplemental Draft EIS include EPA, U.S. Department of Interior, MnDOT, Minnesota Department of Natural Resources (MnDNR), Minnesota Department of Health (MDH), Minnesota Pollution Control Agency (MPCA), MPRB, Hennepin County Public Works, and the cities of Eden Prairie, Minnetonka, St. Louis Park, and Minneapolis. One representative and two senators from the Minnesota State Legislature submitted comments.

The comments included support for and opposition to the Project and to specific elements of the Project. A summary of the comments received on the Supplemental Draft EIS can be found in Section 9.4.2 of the Final EIS; Appendix M of the Final EIS documents all individual comments received on the Supplemental Draft EIS and FTA's and the Council's responses to the comments.

4.4 Amended Draft Section 4(f) Evaluation

A Notice of Availability for the Amended Draft Section 4(f) Evaluation was published in the *Federal Register* and *EQB Monitor* on January 11, 2016, announcing a public comment period through February 25, 2016. Two comments were received during the comment period (one from the EPA and one on behalf of a business) and are documented and responded to in Appendix M of the Final EIS.

4.5 Final EIS

The Notice of Availability for the Final EIS was published in the *Federal Register* on May 13, 2016, and in the *EQB Monitor* on May 16, 2016. In conformity with MEPA (4410.2700 Subp. 6), the

Council provided notice of publication of the Final EIS for public review and of the opportunity for public comment on the adequacy of the Final EIS. The comment period concluded on June 13, 2016.

During the written public comment period following the Notice of Availability of the Final EIS in the *Federal Register*, the Council and FTA received 50 comment letters. Refer to Attachment C of this Record of Decision for a list of commenters and comment letters received.

The comments included support for and opposition to the Project, comments about the sufficiency of the analysis and mitigation included in the Final EIS, and comments on the adequacy of the Final EIS. The comments received on the Final EIS are included in Attachment C and responses to the comments received are found in Attachment D of this Record of Decision.

4.6 Community Outreach

Ongoing engagement and communication with the public has been a fundamental element of the Southwest LRT Project since its initiation. Maintaining an open dialogue and offering opportunities for input and discussion—especially related to the identified technical issues and items of concern to the affected public—will continue to be a key component of Project implementation.

The Council's and HCRRA's public outreach program during the NEPA and MEPA process included a wide range of outreach techniques, including meetings; open houses; newsletters; a project website; development of an "e-list" used to send out newsletters, press releases, and meeting information; social media; Project-specific print material; door-to-door outreach; a Project mobile office; and Project staff attendance at community events.

Council staff hosted or attended numerous community and public events throughout the Southwest LRT corridor, in the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and Minneapolis to give the public opportunities to provide input on Project design and to receive updates and information about Project activities. Project ideas and requests from the public that were made at various meetings were documented on comment cards and/or transcripts (depending on the meeting) and were considered as part of the planning and design for the Project. Public events were accessible to those with disabilities in accordance with the Americans with Disabilities Act. Translation services and other accommodations were provided upon request. The Council selected meeting locations based on ease of access to the location and meeting room and proximity to affected areas.

In addition to hosting public open houses and other events, Project staff also frequently attended and presented at community meetings throughout the Southwest LRT Project corridor. Attending such meetings allowed groups with specific concerns or questions to interact with staff and to provide feedback in a more personal, less formal setting. Any concerns expressed at these meetings were shared with the appropriate Council staff members. A list of the public hearings, open houses, and community events held since the start of the EIS process can be found in the *Southwest LRT Community Events, Meetings, and Presentations Summary Report* listed in Appendix C of the Final EIS.

4.7 Agency Coordination

During Project Development, participating agencies provided input, identified Project concerns, and participated in issue resolution and design adjustment processes to further the Project within the NEPA framework. The complete list of participating agencies is included in Table 9.3-1 of the Final EIS. The cooperating agency for the Supplemental Draft EIS and Final EIS was the USACE due to its regulation over the dredging or filling of materials in any waters of the United States, including wetlands, through Section 404 of the CWA.

Throughout Project planning and development, an advisory committee structure was used to obtain feedback. After publication of the Draft EIS, the Council led the Project's advisory committee process. The advisory committee structure was expanded since publication of the Draft EIS, with

the addition of the Technical Project Advisory Committee, the Business Advisory Committee (BAC), and the Corridor Management Committee (CMC). Committee and Council meeting schedules, agendas, presentations, and minutes are posted on the Council's Southwest LRT Project website (<http://www.swlrt.org>). BAC, Community Advisory Committee, CMC, and Council meetings are open to the public. Advisory committee members also aided in promoting the public events in their communities.

5 Determination and Findings

This section describes FTA's NEPA determination for the Southwest LRT Project, as well as FTA's findings for other federal environmental requirements. The determination and findings are supported by the Project's Final EIS, as well as Section 3 of this ROD (which summarizes the environmental impacts of the Project) and Attachment A to this ROD (which itemizes mitigation measures that will be incorporated into the Project).

5.1 NEPA

Title 42, Sections 4321 through 4347 and 4372 through 4375 of the United States Code (U.S.C.), as well as Executive Order 11514, Protection and Enhancement of Environmental Quality, require that federal agencies evaluate the environmental impacts of their actions, integrate such evaluations into their decision-making processes, and implement appropriate policies.

The environmental record for the Southwest LRT Project includes the Southwest LRT Draft EIS (October 2012), the Southwest LRT Supplemental Draft EIS (May 2015), and the Southwest LRT Final EIS (May 2016), and the supporting materials incorporated therein. These documents represent the detailed statements required by NEPA describing:

- The environmental impacts of the proposed Project;
- The adverse environmental effects that cannot be avoided should the proposed Project be implemented;
- Alternatives to the proposed Project; and
- Potential irreversible and irretrievable impacts on the environment if the proposed Project should be implemented.

Having carefully considered the environmental record, mitigation measures (summarized in Attachment A of this ROD), public and agency comments, and the findings below, FTA has determined that:

- The environmental review documents include a record of: the environmental impacts of the proposal; adverse environmental effects that cannot be avoided; alternatives to the proposal; and irreversible and irretrievable impacts on the environment.
- The environmental process included cooperation and consultation with the U.S. EPA, Region 5.
- All reasonable steps have been taken to minimize adverse environmental effects of the proposed project.
- The project meets its purpose and need and satisfies the requirements of NEPA.

5.2 Section 106 of the National Historic Preservation Act

Section 106 requires federal agencies to consider the effects of their actions on historic properties before undertaking a project. The regulations implementing Section 106 are codified in 36 CFR Part 800. FTA is the Lead Federal Agency for the Project. The Council is the Project's local lead agency and project sponsor. The USACE is a federal Cooperating Agency for the Project, responsible for

implementing NEPA and related laws and Section 404 of the CWA. The USACE also recognized FTA as the Lead Federal Agency for the Section 106 process for the Project.¹⁰

Based on results of the effects assessments and implementation of the measures included in the Project's Section 106 MOA, FTA determined, in consultation with the Minnesota Historic Preservation Office (MnHPO) and other consulting parties that the Project will have:

- No Adverse Effect on 26 historic properties
- An Adverse Effect on five properties (Archaeological Site 21HE0436; Archaeological Site 21HE0437; the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot; the Kenilworth Lagoon; and the Grand Rounds Historic District, of which the Kenilworth Lagoon is a contributing element)

Therefore, FTA determined that the undertaking will have an Adverse Effect on historic properties. The Project's measures to resolve adverse effects, including avoidance, minimization, and mitigation measures, are specified in the Project's Section 106 MOA (Attachment B). Stipulations in the Section 106 MOA shall be followed by the Council during the Project's implementation.

FTA finds that the Project has satisfied the requirements of Section 106 of the National Historic Preservation Act.

5.3 Clean Water Act (Section 404) and Executive Order 11990 on Protection of Wetlands

The CWA (33 U.S.C. § 1251 et seq.) establishes the basic structure for regulating discharges of pollutants (including dredged materials) into the waters of the United States, and for regulating quality standards for surface waters. It therefore applies to the Project's wetland and stream impacts and stormwater discharges. The Council must obtain a Section 404 permit from the USACE, as well as other state and local permits. The Project will satisfy all requirements arising from these permits.

Accordingly, FTA finds that, with the mitigation measures identified in Attachment A of this ROD, the Project meets the requirements of the CWA (Section 404) and Executive Order 11990 on Protection of Wetlands.

5.4 Floodplain Management

Executive Order 11988, as amended by Executive Order 113690, and U.S. Department of Transportation (USDOT) Order 5650.2, requires federal agencies to avoid to the extent possible the long-term and short-term adverse impacts caused by using and modifying floodplains, and to avoid floodplain development wherever there is a practicable alternative. This order directs each agency to preserve the natural and beneficial values served by floodplains in carrying out its responsibilities with respect to approvals and project funding.

The Southwest LRT Project utilized Federal Emergency Management Administration Flood Insurance Rate maps and Flood Insurance Study data to identify hydraulically connected 100-year floodplains¹¹ and 500-year floodplains¹² in order to establish Federal Flood Risk Management Standard (FFRMS) flood hazard elevations, in compliance with Executive Order 13690. The Council determined that the Project-related improvements are Non-Critical Actions. The Council's method for determining the FFRMS was to use the 500-year floodplain elevation where available and to use

¹⁰ In a letter dated January 15, 2015, the USACE recognized FTA as the Lead Federal Agency pursuant to 36 CFR Part 800.2(a)(2), to act on its behalf for meeting the requirements of Section 106.

¹¹ According to 44 CFR Part 9.4, a 100-year floodplain (also known as a base floodplain) means the floodplain "for the flood which has a one percent chance of being equaled or exceeded in any given year."

¹² According to 44 CFR Part 9.4, a 500-year floodplain means the floodplain "for the flood which has a 0.2 percent chance of being equaled or exceeded in any given year."

the base flood elevation plus two feet where the 500-year floodplain is not available. Because the Project was designed in compliance with Executive Orders 11988 as amended by Executive Order 113690, USDOT Order 5650.2, floodplain impacts were minimized to the greatest practicable extent and tracks and structures associated with the Project will be built above the applicable FFRMS elevations.

FTA finds that, with the mitigation measures identified in Attachment A of this ROD, the Project meets the requirements of Executive Order 11988 as amended by Executive Order 13690, and by USDOT Order 5650.2.

5.5 Clean Water Act Sections 401 and 402

Discharges into water are addressed in the CWA in Section 401 and Section 402. 33 U.S.C. §§ 1341, 1342. Section 401 provides for EPA certification (delegated to the Minnesota Pollution Control Agency) that a project's discharges to water or to wetlands will meet state water quality standards. Under Section 402, a discharge of domestic or industrial wastewater into marine or fresh surface water requires a National Pollutant Discharge Elimination System (NPDES) permit (including a General Construction Permit for applicable construction activities).

The Project will obtain a CWA Section 401 Water Quality Certification from the MPCA and comply with conditions of that certification. To mitigate long-term degradation of surface water quality, the Project will direct long-term stormwater runoff into stormwater management facilities created as part of the Project as approved by local jurisdictions and through final permitting. These facilities will be designed to provide stormwater treatment in compliance with NPDES requirements. Short-term (construction) stormwater runoff will be directed into temporary stormwater management facilities created as part of the Project. These facilities will be designed to provide stormwater treatment in compliance with NPDES requirements. To address temporary impacts, the Project will develop a Stormwater Pollution Prevention Plan prior to construction.

Accordingly, FTA finds that, with the mitigation measures identified in Attachment A of this ROD, the project meets the requirements of Sections 401 and 402 of the CWA.

5.6 Endangered Species Act

The primary federal law protecting threatened and endangered species is Section 7 of the Endangered Species Act (ESA) of 1973 (16 U.S.C. §§ 1531-1534). Under Section 7 of the ESA, federal agencies are required to consult with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) to ensure that the federal agency is not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.

The Council participated in interagency cooperation with the USFWS in 2015. FTA made a determination that the Project will have "no effect" on the Higgins eye (pearlymussel) and Snuffbox mussel or their associated critical habitats, and that the Project "may affect, but is not likely to adversely affect," the northern long-eared bat. The USFWS concurred with these determinations on September 25, 2015 and October 27, 2015.¹³ Measures will be implemented during construction to avoid impacts to the northern-long-eared bat.

Minnesota's endangered species law (Minnesota Statutes § 84.0895) and associated rules (Minnesota Rules § 6212.1800-2300) regulate the taking, importation, transportation, and sale of state-listed threatened, endangered, or special concern species. MnDNR administers the state law and manages the listing of state threatened, endangered, and special concern species. The MnDNR

¹³ The Project's informal Section 7 consultation was completed under the interim 4(d) rule for the northern long-eared bat. The USFWS announced the final 4(d) rule for this species on January 13, 2016. FTA's original determination that the Project "may affect, but is not likely to adversely affect" the northern long-eared bat remains adequate under the final 4(d) rule.

identified element occurrences of one endangered species, four threatened species, and six special concern species within the MnDNR study area, as stated in a letter from MnDNR on January 31, 2014, and confirmed in a response dated August 4, 2015. Of these, the MnDNR identified one state threatened species, the Blanding's turtle (*Emydoidea blandingii*), as the only rare species that *may* be adversely affected by the proposed Project. The MnDNR provided recommendations to help avoid, minimize, and mitigate adverse effects on the Blanding's turtle.

FTA finds that, with the mitigation measures identified in Attachment A of this ROD, the Project meets the requirements of the ESA.

5.7 Migratory Bird Treaty/Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703-712) governs the taking, killing, possession, transportation, and importation of migratory birds, including related items such as eggs, parts, and nests. Such actions are prohibited unless authorized under a valid permit. This law applies to migratory birds that are native to the United States and its territories, as catalogued in the 50 CFR Part 10.13 List of Migratory Birds.¹⁴ In addition to being regulated by the Migratory Bird Treaty Act of 1918, bald eagles and golden eagles are protected by the Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668d, 54 Statutes [Stat.] 250), which prohibits taking, possession, or commerce of these two migratory bird species.

The Project is not expected to result in long-term impacts on migratory bird populations. Construction activities associated with the Project might temporarily disturb a nesting site or alter the path of a migratory bird. The Council will comply with the Bald and Golden Eagle Protection Act. Specifications within the construction contracts will state that if an eagle nest is observed during construction, contractors will follow the standards included in the *National Bald Eagle Management Guidelines* (USFWS; 2007).¹⁵

FTA finds that, with the mitigation measures identified in Attachment A of this ROD, the Project meets the requirements of the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

5.8 Clean Air Act

Under the Clean Air Act, EPA has established National Ambient Air Quality Standards (NAAQS), which specify maximum allowable concentrations for certain criteria pollutants. 42 U.S.C. §§ 7401-7431. Proposed transportation projects requiring federal funding or approval must demonstrate compliance with EPA's Transportation Conformity Rule (40 CFR Part 93). This rule requires showing that a project will not cause or contribute to any new violation of any NAAQS, increase the frequency or severity of any existing NAAQS violations, or delay timely attainment of the NAAQS.

This Project meets project-level air quality conformity in accordance with state and federal regulations as follows:

- The Project is included in the region's long-range transportation plan, the 2040 TPP (Council, January 14, 2015).
- The Project is included in the 2016-2019 Transportation Improvement Program that was adopted by the Council on September 23, 2015, and approved as part of the State Transportation Improvement Program by the Federal Highway Administration/FTA on October 28, 2015.
- The Project meets the local hot-spot conformity requirements. Because the Project has been included in the modeling for the TPP and the Transportation Improvement Program, it

¹⁴ See <http://www.gpo.gov/fdsys/granule/CFR-2000-title50-vol1/CFR-2000-title50-vol1-sec10-13>.

¹⁵ Standard USFWS guidelines for bald eagle management are located at <http://www.fws.gov/northeast/ecologicalservices/eaglenationalguide.html>.

demonstrates conformity to the State Implementation Plan. The Project meets project-level conformity requirements because it will not cause any new NAAQS exceedance or worsen any existing one, and will not delay the timely attainment of any standard.

5.9 Environmental Justice

FTA and the Council assessed the potential for the Southwest LRT Project effects on minority and low-income communities (known as environmental justice (EJ) populations). The analysis completed for the Final EIS was prepared in compliance with the Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994); the USDOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations (USDOT Order 5610.2(a), May 2, 2012); and FTA's Circular 4703.1, Environmental Justice Policy Guidance for Federal Transit Administration Recipients (FTA, August 15, 2012). Chapter 5 of the Final EIS provides more detail regarding the Environmental Justice analysis.

As outlined in FTA Circular 4703.1, the USDOT and FTA are required to make EJ part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority populations and/or low-income populations. FTA includes incorporation of EJ and non-discrimination principles into transportation planning and decision-making processes and project-specific environmental reviews. Specifically, USDOT Order 5610.2(a) sets forth the USDOT policy to consider EJ principles in all USDOT programs, policies, and activities. It describes how the objectives of EJ are integrated into planning and programming, rulemaking, and policy formulation.

A Communication and Public Involvement Plan (Council, 2015) was prepared for the Project, recognizing the need to communicate and engage with multiple audiences within the study area and the region as a whole and specifically focusing on EJ communities comprising low-income and minority populations. Throughout the Project's planning, design, and analysis, the Council and Project partners sought to develop broad public understanding and support of the Project as a necessary investment to improve access and mobility to employment, educational, and economic opportunities within the study area and beyond. In addition, the Council and Project partners sought to engage the public, including residents, businesses, travelers, and agencies, in the Project planning process to address their needs and concerns. The Communication and Public Involvement Plan identified key business and community groups, including new immigrant communities, communities of color, low-income communities, and people with disabilities within the corridor, as well as strategies to maximize opportunities for public involvement and communication during the engineering and construction process.

The Council developed a public outreach strategy for the Project that created meaningful opportunities for public engagement for all members of the community, including members of EJ communities. Throughout Project Development and the NEPA process, the Council used several avenues of communication and outreach to engage minority and low-income communities affected by the Project. First, Project staff reached out to established neighborhood groups, community leaders, and private organizations composed of and connected to minority and low-income communities in the study area. In addition, Project staff routinely communicated Project information, decisions, and upcoming opportunities for participation in a number of ways. See Section 5.3 of the Final EIS for a more detailed description of public involvement activities specific to EJ.

Environmental categories that will result in adverse effects as identified in the Final EIS were evaluated to determine if and to what extent these adverse effects would affect EJ populations (i.e., have the potential to be disproportionately high and predominately borne by EJ populations). While there will be adverse effects related to the Project, they will affect both EJ and non-EJ populations and will not be disproportionately borne by EJ populations. Both EJ and non-EJ populations in the study area will also benefit from the Project (e.g., improved transit access, travel times, and

reliability). Taking into account the adverse effects on EJ populations, committed mitigation measures, and benefits to EJ populations, the Council and FTA have concluded that the Project as a whole will not result in disproportionately high and adverse effects to EJ populations.

Therefore, FTA finds that the Project meets the intent of Executive Order 12898 and USDOT Order 5610.2(a) because the Project will not result in disproportionately high and adverse effects to EJ populations.

5.10 Final Section 4(f) Evaluation

Section 4(f) of the U.S. Department of Transportation Act of 1966, 49 U.S.C. §303(c), 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 at 23 CFR Part 774.

FTA cannot approve a transportation project that uses a Section 4(f) property, as defined in 23 CFR Part 774.17, unless FTA determines that:

- There is no feasible and prudent avoidance alternative, as defined in 23 CFR Part 774.17, to the use of land from the Section 4(f) property, and the action includes all possible planning, as defined in 23 CFR Part 774.14, to minimize harm to the property resulting from such use (23 CFR Part 774.3(a)); or
- The use of the Section 4(f) property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant will have a *de minimis* use, as defined in 23 CFR Part 774.17, on the property (23 CFR Part 774.3(b)).

Previously, FTA published the Southwest Transit Draft 4(f) Evaluation in conjunction with the Project's Draft EIS and the Southwest LRT Project Draft Section 4(f) Update in conjunction with the Project's Supplemental Draft EIS. The Final Section 4(f) Evaluation was published in the Final EIS as Chapter 6. The Draft Section 4(f) Evaluation was provided to the U.S. Department of the Interior for review and comment during the Draft EIS comment period, which concluded on December 31, 2012. The Department of Interior's comments on the Draft Section 4(f) Evaluation are included in Appendix L of the Final EIS and the agency's comments on the Draft Section 4(f) Evaluation Update are provided in Appendix M of the Final EIS. FTA also obtained concurrence from the officials with jurisdiction regarding its determinations of *de minimis* impacts and temporary occupancy exceptions.

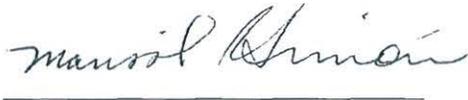
Based on consultation with Department of Interior, officials with jurisdiction, and the Section 4(f) Evaluation, published as Chapter 6 of the Final EIS, FTA has concluded that:

- There is no feasible and prudent alternative that would avoid a use of the Kenilworth Lagoon/Grand Rounds Historic District historic Section 4(f) property, and there is no feasible and prudent alternative that would avoid a use of this historic resource. In addition, FTA has determined, in accordance with 23 Part CFR 774.17, that all possible planning to minimize harm has been conducted and implemented through the completion of the Project's Section 106 process through the execution of the Section 106 Memorandum of Agreement (see Attachment B). Further, FTA has determined that the Project is the alternative that would result in the least overall harm in light of the statute's preservation purpose.
- The Project will have Section 4(f) *de minimis* impacts on two Section 4(f) park/recreational properties – Kenilworth Channel/Lagoon (as an element of the Minneapolis Chain of Lakes Regional Park) and Bryn Mawr Meadows Park; Section 4(f) *de minimis* impacts on two recreation areas – Unnamed Open Space B and the Opus development trail network; and a

Section 4(f) *de minimis* impact on one historic resource – the St. Paul, Minneapolis & Manitoba Railroad Historic District.

- The Project will result in temporary occupancies of two park properties – Purgatory Creek Park and Cedar Lake Park; and two historic properties – Minikahda Club and Cedar Lake Parkway.

The Final Section 4(f) Evaluation is included in the Final EIS as Chapter 6, with supporting documentation in Appendix I of the Final EIS. The measures to minimize harm to Section 4(f) resources are included in the list of mitigation measures in Attachment A and in the Section 106 MOA in Attachment B. Accordingly, FTA finds that the Project meets the requirements of Section 4(f).



Marisol Simón

Regional Administrator, Region V



Date of Approval

Attachment A
Project Mitigation Measures and Responsible Parties by
Environmental and Transportation Category

This attachment to the Southwest LRT ROD describes the mitigation measures that will be undertaken by FTA and the Council as part of the Project. The list of mitigation measures in Attachment A of this ROD supersedes the list in the Final EIS. The mitigation measures identified for the Project in the ROD must be implemented by FTA and the Council if the Project proceeds with FTA financial assistance. These mitigation measures are now incorporated into the definition of the Project. The Council is prohibited from withdrawing or substantially changing any of the mitigation measures identified in the Final EIS and ROD for the Project without written approval by FTA. In addition, any changes to the Project that are inconsistent with this ROD must be evaluated in accordance with 23 CFR Parts 771.129 and 771.130, and if required therein, they must be approved by FTA in writing before the Council can proceed with the change.

Upon FTA's signing of the ROD, FTA will require that the Council establish a mitigation monitoring program to monitor and track mitigation measures. The mitigation monitoring program will provide a means for the FTA and the Council to track progress in accomplishing the mitigation measures. The mitigation monitoring program will also describe the timing of the mitigation measures and the close-out procedures. The mitigation monitoring program will consist of these activities:

- The Council will maintain and update the status of the mitigation measures in this attachment;
- The Council will add mitigation measures to the list resulting from consultations and coordination, permits and/or approvals issued by Federal, State, County, or City agencies, and new information that becomes available and known during Engineering or construction phases;
- The Council will track the status of implementation of each mitigation measure; and
- FTA and the Council will conduct quarterly reviews of the mitigation monitoring program.

The table of mitigation measures in this attachment will assist the Council in meeting its responsibilities by providing a summary list of the mitigation measures stipulated in the Project's environmental record. However, the Final EIS and other parts of the ROD provide the details about each item listed in this table and reflect the specifics of the mitigation measures. The Council will incorporate these mitigation measures into the Project's design, specifications and contract documents, as appropriate. Using its monitoring program, the Council will track the implementation and completion of each mitigation measure during the appropriate Engineering, construction and/or operational action periods.

The table of mitigation measures in this attachment includes a column titled "Timing." That column indicates when the mitigation measures will be implemented during Engineering, Construction, and/or Operations (i.e., after Construction).

Within this attachment and the Final EIS, several conventions are used for the names or titles of plans or other documents:

- Names or titles of plans or other documents that are capitalized and italicized are existing documents prepared and published by the Council or another party (e.g., the *Visual Quality Guidelines for Key Structures*).
- Names or titles of plans or other documents that are capitalized and not italicized are standalone documents that will be prepared by the Council or another party as part of mitigation for the Project. (e.g., Construction Mitigation Plan).
- Names or titles of plans or other documents that are lower case and not italicized will be elements of a larger standalone plan or document (e.g., construction staging plan, which will be part of the Construction Mitigation Plan).

TABLE A-1
Project Mitigation Measures by Environmental and Transportation Category

Category	Mitigation Measures ^a	Responsible Party	Timing
Environmental Categories			
3.1 Land Use	<p>Short-term:</p> <ul style="list-style-type: none"> • Develop and implement a Construction Mitigation Plan, including a construction staging plan, which will be reviewed with the appropriate jurisdictions and railroads. Components of the staging plan include traffic management plans and a construction timeline. • Develop and implement a Construction Communication Plan that will address short-term impacts to land use related to temporary construction easements and other construction activities; strategies may include: <ul style="list-style-type: none"> - Issue construction updates and post them on the Project website - Provide advance notice of roadway closures, driveway closures and utility shutoffs - Conduct public meetings - Establish a 24-hour construction hotline - Prepare materials with information about construction - Address property access issues - Assign staff to serve as liaisons between the public and contractors during construction 	Council	Engineering and Construction
3.2 Economic Activity	<p>Long-Term/Existing Businesses and Development/Redevelopment Effects:</p> <ul style="list-style-type: none"> • Pursue with the City of St. Louis Park the joint development opportunity at the proposed Beltline Station that could increase property tax revenues^b • Coordinate changes to freight rail tracks, sidings, or other facilities with the freight railroad owner and operator • Onsite flaggers to manage freight rail traffic during construction • When acquiring property from a property owner, the Council will provide compensation for businesses for property acquired in accordance with the Uniform Relocation and Real Property Acquisitions Policies Act of 1970, as amended, (42 U.S.C. 4601 et seq.) (Uniform Act) and Minnesota law <p>Short-term/Existing Businesses and Development/Redevelopment Effects:</p> <ul style="list-style-type: none"> • Develop and implement a Construction Mitigation Plan, including a construction staging plan, and a Construction Communication Plan (see 3.1) <p>Short-term/Freight Rail Owners and Operators:</p> <ul style="list-style-type: none"> • Develop and implement freight rail operation coordination plans with each freight rail owner and operator as part of future construction agreements to mitigate short-term impacts to freight rail operations related to construction activities • Flaggers will be used during construction to allow freight rail operations to continue; the use of flaggers will require construction activities adjacent to active freight rail to halt while freight trains traverse the construction area. • Work with affected freight rail owners and operators to provide provisions in the construction contract to identify how the contractor will interact with the railroads • Work with affected freight rail owners and operators to sequence construction to minimize effects on freight movements and to identify optimal periods for closing the rail service and reducing speeds • Determine dates and times for all stoppages through coordination with the railroad owners and operators 	Council	Engineering and Construction
3.3 Neighborhood and Community	<p>Short-term:</p> <ul style="list-style-type: none"> • Develop and implement the Construction Mitigation Plan, including a construction staging plan, and a Construction Communication Plan (see 3.1) 	Council	Engineering and Construction

Category	Mitigation Measures ^a	Responsible Party	Timing
3.4 Acquisitions and Displacements	<p>Long-term and Short-term:</p> <ul style="list-style-type: none"> • Compensate businesses or persons for property acquired in accordance with Minnesota Law • Provide relocation benefits for displaced businesses or persons in accordance with the Uniform Act • Compensate businesses or persons for temporary construction easements in accordance with Minnesota law; in the event the Council acquires the temporary construction easement through agreement, the Council will address restoration of the property in the agreement • Compensate businesses or persons for permanent easements in accordance with Minnesota law 	Council	Engineering and Construction
3.5 Cultural Resources	<p>Long-term and Short-term:</p> <ul style="list-style-type: none"> • Explored alternative locations for Project elements where adverse effects occur to archaeological resources • Implement Section 106 Memorandum of Agreement (MOA) measures to avoid/minimize adverse effects • Implement the mitigation measures outlined in the Section 106 MOA, as follows: <ul style="list-style-type: none"> - Architecture/History Properties <ul style="list-style-type: none"> ○ Install a parapet wall and rail damper on LRT bridge over waterway to mitigate the moderate noise impact at the Kenilworth Lagoon (see Section 3.12) ○ Rehabilitate/Reconstruct Works Progress Administration Rustic Style Retaining Walls to minimize and mitigate the direct physical and indirect visual adverse effects on the Grand Rounds Historic District, including the Kenilworth Lagoon ○ Design Project elements within and adjacent to the historic properties identified in Stipulation I.A of the Section 106 MOA in accordance with the SOI's Standards (36 CFR Part 68), to be reviewed by the MnHPO and consulting parties, to further minimize the direct physical and indirect visual adverse effects ○ Develop a Construction Protection Plan detailing measures to be implemented during Project construction to avoid direct physical and indirect adverse effects ○ Prepare guidance for future preservation activities within the portion of the Grand Rounds Historic District: Canal System, including adjacent parkland, extending from the north end of Lake Calhoun to the east end of Cedar Lake, and including the entirety of the Lake of the Isles Park and Kenilworth Lagoon elements to mitigate the direct physical and indirect visual adverse effects to the Grand Rounds Historic District ○ Revised the Project design to relocate the crossover location near the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot 3,420 feet west along the alignment to allow the noise wall to shift at least 240 feet west, and avoid adverse visual effect ○ Revised the Project design to relocate the signal bungalow near the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot to the alternate crossover location to further avoid adverse visual effects (complete) ○ Prepare a National Register of Historic Places (NRHP) nomination form for the Hopkins Commercial Historic District and provide information on financial incentives for historic preservation to the owners of historic properties - Archaeological Resources <ul style="list-style-type: none"> ○ Conduct a Phase III Archaeological Data Recovery of Sites 21HE0436 and 21HE0437 ○ Incorporate into the design of the Royalston Station interpretation of Sites 21HE0436 and 21HE0437, based on the results of the Phase II investigations and allowing for the incorporation of any additional information from the Phase III data recovery ○ Develop an interpretive plan for interpretation in conformance <i>with Standards and Practices for Interpretive Planning</i> from the National Association of Interpretation and <i>Creating Outdoor Trail Signage</i> technical leaflets 	FTA, Council, MnHPO	Engineering and Construction

Category	Mitigation Measures ^a	Responsible Party	Timing
<p>3.6 Parks and Recreation</p>	<p>Long-term:</p> <ul style="list-style-type: none"> • Kenilworth Channel/Lagoon: Conclude consultation on the design of the proposed bridges prior to construction • Bryn Mawr Meadows Park: <ul style="list-style-type: none"> – Continue consultation with the MPRB to determine realignment of trails within the park prior to construction – Conclude consultation with the MPRB on the design of the proposed new bridge prior to construction <p>Short-term:</p> <ul style="list-style-type: none"> • Kenilworth Channel/Lagoon: Develop BMPs to be implemented during removal of the existing bridges and construction of the new bridges • Bryn Mawr Meadows Park: Maintain connectivity with temporary trails during construction • Continue efforts to avoid, minimize, and mitigate impacts to Purgatory Creek Park, Nine Mile Creek Conservation Area, two unnamed open spaces in Minnetonka, Overpass Skate Park, Minnehaha Creek Open Space, Edgebrook Park, Jorvig Park, Park Siding Park, Kenilworth Channel/Lagoon, and Bryn Mawr Meadows Park; and develop a Construction Communication Plan that includes coordination with park owners, advance notice of construction activities, and highlight road, sidewalk, and trail closures, and detour routes • Restore areas and features of parks and recreation areas altered or disturbed due to construction activities to original conditions or better in coordination with the jurisdictional owner 	<p>Council and appropriate jurisdictions</p>	<p>Engineering and Construction</p>
<p>3.7 Visual Quality and Aesthetics</p>	<p>Long-term:</p> <ul style="list-style-type: none"> • Designed stations to have a minimal impact on the surrounding environs. Each of the stations has been designed to be compatible or attractive additions to the surrounding community. • Screen or landscape power stations located in areas of moderate or high visual sensitivity, to be compatible with the surrounding neighborhood character • Follow design guidelines for key structures throughout the proposed light rail alignment found in the Council’s <i>Visual Quality Guidelines for Key Structures</i> • Follow exceptions to design guidelines where context sensitive designs have and will be prepared including the proposed light rail structures over Highway 212, I-394, and Highway 100, as well as individual retaining wall and bridge designs at 5th Avenue South and 7th Avenue South, in Hopkins • Implement landscaping into design at appropriate locations to address identified visual impacts, within available landscape budget and balancing other priorities for landscaping (e.g., surface water quality, habitat preservation, species of concern), which could include the following: <ul style="list-style-type: none"> – Retain as much existing vegetation as appropriate to provide shielding for sensitive viewpoints, including techniques such as chaining and mowing without removal of the root systems, and/or tying back large shrubs and trees to provide adequate areas for construction activities – Restore and replant cleared areas in a timely manner, where appropriate, considering such factors as species type, seasonal growing conditions, and other construction-related activities – Place new and replacement trees based on such factors such as helping to provide the maximum screening of views to and from sensitive viewpoints (e.g., adjacent residential areas) or providing street ornamentation, where appropriate – Develop landscape plans for areas adjacent to elevated structures, retaining walls, noise walls, and TPSS sites^c to achieve such effects as providing partial screening from sensitive viewpoints – Incorporate visual mitigation measures for Section 106-protected resources and Section 4(f)-protected properties as specified in Section 106 Memorandum of Agreement and Final Section 4(f) Evaluation, respectively 	<p>Council</p>	<p>Engineering and Construction</p>

Category	Mitigation Measures ^a	Responsible Party	Timing
	<p>Short-term:</p> <ul style="list-style-type: none"> • Follow the Council’s design plans, specifications, and construction documents to address construction impacts where appropriate and practical; these include: <ul style="list-style-type: none"> – Locate staging areas in places where their visibility will be minimal and provide temporary construction screens or barriers to limit views into them from nearby residential areas, community facilities, recreational areas and trails, or other public open spaces from which they will be seen by visually sensitive viewers – Use construction methods that minimize the need to remove vegetation to accommodate construction activities • Shield light sources used in nighttime construction to reduce lighting impacts for residential areas • Restore areas disturbed during construction 		
<p>3.8 Geology and Groundwater</p>	<p>Long-term/Geology:</p> <ul style="list-style-type: none"> • Address areas of compressible soils with appropriate design and construction techniques to avoid the potential for settlement and bearing failure of building foundations • No soils will be placed in floodplains or wetlands unless permitted <p>Short-term/Geology:</p> <ul style="list-style-type: none"> • Develop a Stormwater Pollution Prevention Plan (SWPPP) as a part of the permitting process • Use wildlife-friendly BMPs to avoid the potential effects of soil erosion when topsoil is removed <p>Long-term/Groundwater:</p> <ul style="list-style-type: none"> • Tunnels designed to minimize inflow of groundwater through various design features and BMPs • Prepare a Groundwater Management Plan, to be approved by MnDNR and applicable local jurisdictions before construction, which will address collection, storage, and disposal of surface water runoff and pumped groundwater following construction of the Project, and consider concerns about placement of stormwater handling facilities in or near wellhead protection areas • Include in the Groundwater Management Plan, particularly within the Kenilworth Corridor, monitoring, which will be used to assess excessive groundwater infiltration and to prioritize any potential repairs to the waterproofing systems <p>Short-Term/Groundwater:</p> <ul style="list-style-type: none"> • Adhere to permit requirements related to groundwater pumping and discharge from pumping • Employ proper BMPs associated with groundwater removal during construction, to minimize the risk of building settlement • Within Minneapolis, send groundwater discharged to the sanitary sewer system to the treatment plant on the Mississippi River • Develop and implement a Geotechnical Monitoring Plan that provides means for detecting the settlement of buildings, roads, or parking areas, so that additional remediation methods could be employed, if necessary • The Groundwater Management Plan shall include required groundwater monitoring and management practices during construction • Seal and abandon all water or monitor wells or boreholes installed as part of soil and groundwater investigation; contractor will notify the Minnesota Department of Health if previously unidentified well(s) are encountered during construction and also retain a licensed well contractor to abandon the well(s), if required 	<p>Council</p>	<p>Engineering and Construction</p>
<p>3.9 Surface Water Resources</p>	<p>Long-term/Wetlands:</p> <ul style="list-style-type: none"> • Purchase the required amount of wetland mitigation bank credits based on the replacement ratios identified in the WCA and CWA Section 404 permit applications <p>Short-term/Wetlands:</p>	<p>Council with USACE and other appropriate jurisdictions and regulatory agencies</p>	<p>Engineering and Construction</p>

Category	Mitigation Measures ^a	Responsible Party	Timing
	<ul style="list-style-type: none"> • Avoid in-stream construction when possible; install temporary portable dams or cofferdams as required • Implement appropriate wildlife-friendly (e.g. natural materials, no welded webbing) construction BMPs • Restore wetlands temporarily affected during construction to existing grade, hydrology, and reseed with appropriate native wetland species seed mix, as required by the WCA and CWA; purchase wetland mitigation bank credits for CWA regulated short-term impacts lasting longer than 180 days <p>Long-term/Public Waters and Surface Water Quality:</p> <ul style="list-style-type: none"> • Implement various design features that meet stormwater regulatory requirements including minimizing or eliminating pollutant sources and implementing structural and non-structural BMPs to treat and control runoff • Design stormwater management facilities, which will be approved by local jurisdictions and through final permitting, to provide stormwater treatment in compliance with NPDES requirements <p>Short-term/Public Waters and Surface Water Quality:</p> <ul style="list-style-type: none"> • Design stormwater management facilities to provide stormwater treatment in compliance with NPDES requirements • Develop a stormwater pollution prevention plan that complies with the Construction General Permit <p>Long-term/Floodplains:</p> <ul style="list-style-type: none"> • Develop appropriate plans and obtain applicable permits for floodplains, as well as implement BMPs • Implement appropriate compensatory storage within or adjacent to the affected waterbody and where it is not feasible to meet this requirement, request a variance from applicable regulatory agency <p>Short-term/Floodplains:</p> <ul style="list-style-type: none"> • Remove fill placed during construction and restore elevations to pre-existing conditions resulting in a no net-loss of flood storage volume 		
<p>3.10 Ecosystems</p>	<p>Long-term/Threatened and Endangered Species:</p> <ul style="list-style-type: none"> • Implement MnDNR recommendations to avoid direct impacts to the Blanding’s turtle (for measures see Section 3.10.3.1) <p>Short-term/Threatened and Endangered Species:</p> <ul style="list-style-type: none"> • Seasonal restriction on removal of trees during the summer northern long-eared bat pup season (June 1 to July 31) at the South Fork Nine Mile Creek • No activities within ¼ mile of a known hibernacula • Implement MnDNR recommendations to avoid impacts to Blanding’s turtle as part of the Project’s design <p>Long-term/Habitat:</p> <ul style="list-style-type: none"> • Incorporate native landscaping into the Project’s design, where applicable and appropriate <p>Short-term/Habitat:</p> <ul style="list-style-type: none"> • Include invasive species and noxious weeds management plan in the Project’s construction specifications • Implement measures such as fencing to isolate areas of disturbance, minimize amount of trees and vegetation removed as part of and implement measures to protect aquatic habitat • Reseed and restore habitat that is temporarily disturbed during construction, where appropriate, upon construction completion <p>Short-term/Migratory Birds:</p> <ul style="list-style-type: none"> • Avoid removing nest habitat during primary migratory bird nesting season (May 1 to Aug. 31), where appropriate • Conduct field survey prior to removal of nest habitat during primary bird nesting season (May 1 to Aug. 31) and follow developed protocol should an active nest be encountered • Comply with the Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668d, 54 Statutes [Stat.] 250), which prohibits taking, possession, or commerce of these species 	<p>Council</p>	<p>Engineering and Construction</p>

Category	Mitigation Measures ^a	Responsible Party	Timing
3.11 Air Quality and Greenhouse Gases	<p>Short-term/Greenhouse Gases:</p> <ul style="list-style-type: none"> • Implement BMPs, such as energy efficient construction equipment vehicles and limiting equipment and vehicle idling time during construction to reduce greenhouse gas emissions from construction activities <p>Short-term/Air:</p> <ul style="list-style-type: none"> • Comply with federal and state regulations, including the EPA’s emission standards for on-road vehicles and off-road construction equipment, the state air rules in Chapter 7023: Mobile and Indirect Sources, and the applicable MnDOT’s Standard Specifications for construction • Implement BMPs to minimize temporary construction emission impacts, including, but not limited to: <ul style="list-style-type: none"> – Minimization of land disturbance during site preparation – Watering of the construction site – Stabilization of dirt piles if they are not removed immediately – Use dust suppressants on unpaved areas – Covering trucks while hauling soil/debris off-site or transferring materials – Minimization of unnecessary vehicle and machinery idling – Use of energy efficient equipment and vehicles • Implement EPA-recommended measures where applicable (See Section 3.11.3.5 of the Final EIS for a detailed list of measures) 	Council	Construction
3.12 Noise	<p>Long-term:</p> <ul style="list-style-type: none"> • Employ BMPs to minimize noise project-wide, including use of wheel skirts (panels over the wheels) to reduce wheel/rail noise and continuously welded rail to eliminate gaps in the tracks that generate additional noise; conduct wheel truing to keep wheels smooth and round and rail grinding to remove corrugations; and apply lubrication if/where needed • Conduct wheel truing (to keep wheels smooth and round) and rail grinding (to remove corrugations) on a regular basis, and employ lubrication where appropriate and as needed • Locate noise generating elements (e.g., crossovers) away from sensitive locations, where possible • Implement the following mitigation measures for severe and moderate impacts at residential and institutional locations where the existing noise levels exceed 65 dBA Ldn or where there is an increase in noise due to the Project of three dB or greater, where reasonable and feasible, in accordance with the noise mitigation guidelines contained in the <i>Regional Transitway Guidelines</i> (March 2016): <ul style="list-style-type: none"> – Provide sound insulation improvements at building nearest LRT track: Residence Inn, Eden Prairie – Construct 8’ high noise barrier extending 1,800’; Claremont Apartments, Minnetonka – Implement design elements for quiet zones, where the routine sounding of horns would be eliminated because of safety improvements at at-grade crossings, including modifications to streets, raised median barriers, four quadrant gates, and other improvements designed and implemented by the Project and consistent with quiet zone readiness at the following locations: <ul style="list-style-type: none"> ○ Hopkins Plaza Apartments, Hopkins ○ 7th Avenue, Hopkins ○ Sonoma Apartment, Hopkins ○ 6th Avenue, Hopkins ○ Town Terrace Apartments, Hopkins ○ Westside Apartments, Hopkins ○ Creekwood Estates, Hopkins ○ Railroad Avenue, St. Louis Park ○ Village in the Park Condos, St. Louis Park ○ TowerLight, St. Louis Park 	Council	Engineering, Construction, and Operations

Category	Mitigation Measures ^a	Responsible Party	Timing
	<ul style="list-style-type: none"> ○ 35th Street Apartments, St. Louis Park - Construct 3’ high parapet barrier extending 500’ on elevated structure over Excelsior Boulevard, Hopkins - Construct 8’ to 11’ noise barrier extending 760’, Railroad Avenue, Hopkins - Construct 2’ high parapet wall and rail dampers 300’, Kenilworth Channel, Minneapolis - Complete on-site testing to determine if residences meet interior noise level criteria: one residence at Burnham Road North located NW of the channel; three residences at Thomas Ave South - Implement wayside bell at 21st Street^c <p>Short-term:</p> <ul style="list-style-type: none"> • Require construction equipment used by contractors be properly muffled and in proper working order • Conduct construction activities during daytime hours, except when required and allowable within local noise ordinance procedures • Contractors will prepare a detailed Noise Control Plan for the Project’s construction duration. A noise control engineer or acoustician will work with the contractor to prepare a Noise Control Plan in conjunction with the contractor’s specific equipment and methods of construction. Key elements of this plan will include: <ul style="list-style-type: none"> - Contractor’s specific equipment types - Schedule and methods of construction - A nighttime construction mitigation plan for all residential areas, if nighttime construction is deemed necessary - Maximum noise limits for each piece of equipment with certification testing - Prohibitions on certain types of equipment and processes during the nighttime hours without local agency coordination and approved variances - Identification of specific sensitive sites where near construction sites - Methods for determining construction noise levels - Implementation of noise control measures where appropriate - Include a 24-hour construction hotline 		
3.13 Vibration	<p>Long-term/Ground-borne noise:</p> <ul style="list-style-type: none"> • Construct a tunnel slab within the Kenilworth Corridor to significantly reduce the number and magnitude of ground-borne noise impacts • Implement highly resilient rail fasteners in the tunnel section (2,200 feet) to mitigate ground-borne noise impacts (the fasteners should be designed to provide at least 5 dB of reduction in vibration levels at 80 Hz and higher) • Replace the existing vibration isolation elements between the floor of the building and the sound booth at Hearing Care Specialists (audiologist) (the isolation elements should provide at least 10dB of reduction in vibration levels at 80Hz and higher) <p>Short-term/Vibration:</p> <ul style="list-style-type: none"> • Apply the following measures where feasible to minimize impacts from construction vibration: <ul style="list-style-type: none"> - Limit Construction Hours: Limit high-vibration activities at night - Construction Specifications: Include limits on vibration in the construction specifications, especially at locations with high-vibration activities - Alternative Construction Methods: Minimize the use of impact and vibratory equipment, where feasible and appropriate 	Council	Engineering and Construction

Category	Mitigation Measures ^a	Responsible Party	Timing
	<ul style="list-style-type: none"> - Truck Routes: Use truck haul routes that minimize exposure to sensitive receptors and minimize damage to surface roadways, where appropriate - Pre-Construction Survey: Perform pre-construction surveys to document the existing conditions of structures in the vicinity of sites where high-vibration construction activities will be performed • Vibration Monitoring: If a construction activity has the potential to exceed the damage criteria at a building, the contractor will be required to conduct vibration monitoring and, if the vibration exceeds the limit, the activity must be modified or suspended until an acceptable means and method of construction is identified 		
<p>3.14 Hazardous and Contaminated Materials</p>	<p>Long-term:</p> <ul style="list-style-type: none"> • Responsible management and containment of hazardous materials that will be used and stored onsite at the proposed Hopkins OMF • Implement industry BMPs for the collection and disposal of oils, grease, and other waste materials generated during vehicle maintenance and repair activities at the Hopkins OMF • Obtain a Generator License through Hennepin County for the Hopkins OMF and comply with applicable requirements for annual reporting/licensing, storage, shipping, record keeping, emergency planning, and disposal requirements • Develop a Spill Prevention, Control, and Countermeasure (SPCC) plan to minimize potential long-term effects related to accidental spillage of petroleum products stored at the Hopkins OMF • Design tunnels to minimize inflow of groundwater through various design features and BMPs preventing hazardous materials or contaminated stormwater from entering groundwater <p>Short-term:</p> <ul style="list-style-type: none"> • Follow OSHA guidelines during construction • Prevent public exposure through physical contact with a contaminated material by site access barriers • Use engineering controls and BMPs to avoid spills of hazardous materials during construction; this includes preparation and adherence to a SWPPP and best management practices, to limit and contain releases and spills to minimize the likelihood of soil and groundwater contamination during construction • Conduct mitigation within the MPCA Brownfield Program regulatory framework and approved RAPs • Prepared <i>Response Action Plans</i> (RAPs) for remediation in cases where the presence of contamination has been verified through the Phase II ESAs • Implement RAPs, approved by MPCA, to address the risks identified in the Phase I and Phase II environmental site assessments • Prepared a <i>Construction Contingency Plan</i> (CCP) to address the discovery of unknown contamination, and obtained MPCA approval • Handle and manage potentially hazardous materials in compliance with applicable regulatory standards and dispose of in accordance with a Hazardous Materials Abatement Plans for in-place hazardous/regulated materials, and the RAP/CCP for hazardous/regulated materials in the site soils • Survey structures on acquired land for the presence of hazardous/regulated materials prior to their demolition or modification 	<p>Council</p>	<p>Engineering, Construction, and Operations</p>
<p>3.15 Electromagnetic Fields/ Electromagnetic Interference, and Utilities</p>	<p>Long-term:</p> <ul style="list-style-type: none"> • Relocate all conflicting utilities to avoid utility impacts to and to maintain utility service, in accordance with the Southwest LRT Utility Relocation and Management Plan • Include measures to minimize stray current and reduce amount of corrosion due to stray current • Prior to construction, determine necessary improvements to transmission systems along the corridor through consultation with Xcel Energy • Prior to beginning service, conduct a test to verify there are no EMI impacts from the 750 V DC LRT power supply or catenary lines and/or other nearby utilities for the Rail Signal System <p>Short-term:</p>	<p>Council</p>	<p>Engineering and Construction</p>

Category	Mitigation Measures ^a	Responsible Party	Timing
	<ul style="list-style-type: none"> • Provide temporary utility connections to customers prior to permanent relocation activities • Contact area utility companies and utility agencies to request providing line relocation measures and approval of the proposed alteration of utility lines prior to construction • Notify affected businesses and residences of planned disruption of service due to construction activities • Contact appropriate utility companies and agencies to identify utility lines discovered during construction that were not identified in the contract documents • Coordinate with local and state agencies, as required, to relocate specific utilities outside the project corridor: <ul style="list-style-type: none"> – Adhere to Minn. Stat. ch. 216B, Public Utilities, which provides terms for which utility companies may operate in public right-of-way – Conform to <i>MnDOT Utility Accommodation Policy</i>, which requires public and private utilities to obtain a permit to place utility facilities on trunk highway right-of-way • Review any utility installations on, over, or under railroad property, with railroad(s) and obtain approval(s) 		
3.16 Energy	<p>Long-term:</p> <ul style="list-style-type: none"> • Design the Project to incorporate opportunities to reduce energy consumption into the Project, including: <ul style="list-style-type: none"> – Follow the State of Minnesota Sustainable Building Guidelines (MSBG-B3) – Use LED lighting throughout the Project (street lighting to building lighting) – Maximize use of daylight at OMF, supplemented with lighting control system – Coordinate with Xcel Energy for efficient OMF heating, cooling, and lighting control systems – Use energy recovery units in the OMF – Use a high-efficiency chiller at OMF – Use condensing boilers at OMF – Use closed-cell cooling tower (free winter cooling) 	Council	Engineering and Construction
Transportation Categories			
4.1 Transit	<p>Long-term:</p> <ul style="list-style-type: none"> • Follow Federal and local procedures for route modifications or the suspension of transit service, including completing a Title VI analysis and outreach plan to determine how service changes would affect low-income and minority communities and communicate these changes prior to implementation <p>Short-term:</p> <ul style="list-style-type: none"> • Reevaluate transit routes and construction plans to minimize disruption to transit service • Develop and implement the Construction Mitigation Plan, including a construction staging plan, which will be reviewed with the appropriate jurisdictions and railroads. Components of the staging plan include traffic management plans and a construction timeline. • Develop and implement a Construction Communication Plan. Strategies may include: <ul style="list-style-type: none"> – Issue construction updates and post them on the Project website – Provide advance notice of roadway closures, driveway closures and utility shutoffs – Conduct public meetings – Establish a 24-hour construction hotline – Prepare materials with information about construction – Address property access issues – Assign staff to serve as liaisons between the public and contractors during construction – Post information at bus stops indicating temporary stop closures and/or detour details – Publish information in advance of bus detours on Metro Transit’s website and in its on-board information brochure 	Council (Metro Transit) with SouthWest Transit	Engineering, Construction, and Operations

Category	Mitigation Measures ^a	Responsible Party	Timing
4.2 Roadways and Traffic	<p>Long-term:</p> <ul style="list-style-type: none"> • Implement roadway and intersection improvements listed and illustrated in Appendix E of the Final EIS to avoid any new or worsened congested intersections, compared to the No Build Alternative in 2040 <p>Short-term:</p> <ul style="list-style-type: none"> • Develop and implement the Construction Mitigation Plan, including a construction staging plan, and a Construction Communication Plan (see 4.1) • Comply with applicable state and local regulations related to the roadway closures and the effects of construction activities, including MnDOT, Hennepin County, and all municipalities • Contractor compliance with all guidelines established in the Minnesota Manual on Uniform Traffic Control Devices (2015) • Appropriate jurisdictions to review construction staging and mitigation documents • Secure required permits to construct in public right-of-way • Contractor to develop a Traffic Management and Control Plan and Traffic Control Plan Sheets and Special Provisions based on information identified in the construction documents and the Construction Mitigation Plan. Traffic control plans will be reviewed by appropriate jurisdictions and the Council prior to initiation of construction activities. 	Council	Engineering and Construction
4.3 Parking	<p>Long-term:</p> <ul style="list-style-type: none"> • Compensate business owners for loss of off-street parking spaces, in accordance with federal and state law • Complete a Regional Park-and-Ride System Report on an annual basis. As part of this effort, the Council and Metro Transit will collaborate with regional transit partners, local governments, and MnDOT to conduct an annual regional park-and-ride survey, which tracks facility use and emerging travel patterns by park-and-ride users across the region to identify the appropriate mitigation, as needed and where feasible. The results of this survey are published in the annual report. • Develop a joint use agreement to share parking with SouthWest Transit for the park-and-ride lot adjacent to the station • Identify suitable replacement locations prior to any displacement of on-street handicap parking spaces or on-street truck loading zones <p>Short-term:</p> <ul style="list-style-type: none"> • Develop a Construction Mitigation Plan that will address temporary on-street parking loss during the construction of the Project (see 4.1) 	Council (Metro Transit) with SouthWest Transit	Engineering, Construction, and Operations
4.4 Freight	<p>Short-term:</p> <ul style="list-style-type: none"> • Develop specifications for the contractor to follow in developing and implementing construction staging and sequencing plans • Develop and implement freight rail operation coordination plans with each freight rail owner and operator as part of future construction agreements to facilitate coordination between the Project and the affected freight railroads during construction activities affecting freight rail operations <ul style="list-style-type: none"> – Provide provisions in construction contract to identify how the contractor will interact with railroads – Work with affected freight rail owners and operators to sequence construction to minimize effects on freight movements and to identify optimal periods for closing the rail service and reducing speeds – Use flaggers to allow freight rail operations to continue 	Council	Engineering and Construction

Category	Mitigation Measures ^a	Responsible Party	Timing
4.5 Bicycle and Pedestrian	<p>Long-term:</p> <ul style="list-style-type: none"> • Apply the following to changes to pedestrian and bicycle facilities based on the manuals, standards, and engineering best practices: <ul style="list-style-type: none"> - Construct ADA-compliant curb ramps and detectable warnings to the latest standard at light rail stations, at-grade crossings of LRT tracks, as well as at roadway intersections that will be modified - Update pedestrian change interval times at signalized intersections to allow additional crossing time; this will be done by the appropriate jurisdiction, with the assistance from the Council - Conform modifications to roadway geometry and local jurisdiction’s changes to signalized intersections to the <i>Minnesota Manual of Uniform Traffic Control Devices</i>, 2015 Edition, as appropriate and in coordination with the applicable jurisdiction - Provide stairs and ramps to make the pedestrian and bicycle connections possible at the Opus, West Lake, and Penn light rail stations in areas where grades inhibit pedestrian and bicycle access to stations - Follow the recommendations from the AASHTO <i>Bike Design Guide</i>, where appropriate - Provide elevators at the SouthWest, West Lake, and Penn stations - Replace all existing public regional and local trails relocated by the Project with similar facilities that will provide the same connectivity; in some cases trail relocations include the addition of grade-separation where a trail crosses a roadway under existing conditions • Include wayfinding, regulatory and warning signage, and markings of trail intersections to address conflicting movements at station areas • Any measures to address the removal of the trail between Flying Cloud Drive and West 70th Street (e.g., replacement of the trail), will be determined by the property owner as part of the Project’s property acquisition process <p>Short-term:</p> <ul style="list-style-type: none"> • Provide a trail detour route or facility prior to construction activity at locations where existing trails and sidewalks may be obstructed by construction activity. Pedestrian and bicycle facilities will be maintained during construction in one of the following ways: <ul style="list-style-type: none"> - Trail detour route. A signed route along other trails or roadways that provides a bicycle and pedestrian connection around an obstruction of the existing trail. Bicycle connections could be on another trail or on an existing street (with or without bike lanes). Pedestrian connections could be on another trail or on a sidewalk along an existing street. - Trail detour facility. A temporary trail facility built to re-route bicycle and pedestrian traffic around an obstruction, usually located close to the existing trail. - Sidewalk detour route. A signed route that provides pedestrian access to an area where access currently exists via another nearby sidewalk, frequently on the opposite side of a roadway. Where feasible, these temporary facilities will be as ADA compliant as the existing facilities. • Sidewalk detour facility. A temporary paved facility built to re-route pedestrian traffic in areas where another nearby sidewalk does not exist. Where feasible, these temporary facilities will be as ADA compliant as the existing facilities. An exception to the above is an unforeseen safety issue during construction that would obstruct the trail or sidewalk and necessitate an immediate, short-term closure. In this case, the trail or sidewalk may be closed and remain closed for five days or less without an available detour route or facility. • Develop and implement the Construction Mitigation Plan, including a construction staging plan, and a Construction Communication Plan(see 4.1) 	Council	Engineering and Construction

<p>4.6 Safety and Security</p>	<p>Long-term:</p> <ul style="list-style-type: none"> • Conform to FTA’s Rail Fixed Guideway Systems; State Safety Oversight Program for Safety and Security Guidance for Recipients with Major Capital Projects (Circular C 5800.1), covered under 49 CFR Part 633 – Project Management Oversight • Implement the Project’s Safety and Security Management Plan (SSMP) and the Metro <i>Light Rail Transit Design Criteria</i> to avoid potential safety issues at new light rail stations, including emergency equipment and appropriate lighting for public areas • Install fencing near at-grade trail or sidewalk crossing, in station areas, and between light rail and freight rail alignment when adjacent to a trail or sidewalk, where possible • Design at-grade LRT crossings of sidewalks and trails per the <i>Metro Light Rail Transit Design Criteria</i> to include flashing light signals with an audible warning to notify pedestrians of a train’s arrival and detectable warnings and signs • Design shared freight rail and light rail crossings to meet FRA requirements for at-grade crossings, including requirements for train horn quiet zones as described in the Train Horn Quiet Zone Final Rule (49 CFR Part 222), where applicable • Maintain emergency vehicle access to areas within the vicinity of the Project (except where the Council will fully acquire a parcel, thereby eliminating the need for access): <ul style="list-style-type: none"> – Access via public roadways will be maintained by providing either at-grade, above-grade, or below-grade light rail crossings of roadways – In the few areas where existing roadway connections or driveways to properties will be affected by the Project, alternate roadway connections or driveways will be provided for continued emergency vehicle access – Emergency vehicle access to individual properties, except where the property will be fully acquired by the Council, will also be maintained under the Project: (1) either the existing vehicular access to a property will be maintained; or (2) alternate vehicular access will be provided where existing vehicular access to a property will be closed to accommodate the Project • Coordinate with affected emergency service providers including identification of alternative crossing routes • Implement safeguards from the Metro <i>Light Rail Transit Design Criteria</i>, including emergency guardrails for LRT tracks on retained fill and bridges • Implement freight rail safety improvements in the Kenilworth Corridor including emergency freight rail guardrails^d • Implement freight rail safety improvements in the Kenilworth Corridor, including: <ul style="list-style-type: none"> – Replace existing 115 RE rail with new 136 RE continuous welded rail east of Beltline Boulevard to north of 21st Street^e – Replace existing railroad ties east of Beltline Boulevard to near Cedar Lake Junction • Install intrusion detection for possible freight derailment where clearance between the centerline of the LRT tracks and the centerline of the freight tracks is less than 50 feet • Install corridor protection barriers between freight rail and light rail tracks where clearance between centerlines is less than 25 feet • Include safeguards in the catenary system for the Project to help minimize the possibility of sparking occurring in the overhead catenary wires • Regularly inspect pantographs for grooves along the pantograph’s carbon strip, which could cause arcing • Where the light rail alignment will be adjacent to a freight rail alignment, the light rail alignment will be primarily on segregated right-of-way, in accordance with the National Electric Safety guidelines • Participate in the planning, performance, and evaluation of emergency simulations on the system in coordination with the LRT FLSSC • Implement Metro <i>Light Rail Transit Design Criteria</i>, as well as <i>National Fire Protection Association 130: Standard for Fixed Guideway Transit and Passenger Rail Systems</i>, and Circular C 5800.1, <i>Safety and</i> 	<p>Council</p>	<p>Engineering, Construction, and Operations</p>
--------------------------------	--	----------------	--

Category	Mitigation Measures ^a	Responsible Party	Timing
	<p><i>Security Guidance for Recipients with Major Capital Projects</i> in the shallow tunnel in the Kenilworth Corridor and at Highway 62 to provide security and/or enhanced safety</p> <p>Short-term:</p> <ul style="list-style-type: none"> • Coordinate with emergency service providers to provide schedule for construction activities and identify detour routes to minimizing delay for emergency response vehicles • Maintain required access during established periods or keep one lane of traffic open on main arterials as described in the Construction Mitigation Plan • Maintain federal OSHA and Minnesota OSHA standards for safety of construction site personnel to minimize and/or avoid injury to construction workers • Contractors will prepare a project safety and health program along with a site-specific safety plan to ensure that, while on the work site and construction activities, contractor and subcontractor personnel comply with the specified safety practices, codes, and regulations as described in the Project’s SSMP • Use construction safeguards, such as horizontal and vertical movement and settlement monitoring for both existing freight rail infrastructure and light rail tunnel in support of excavation • Collect and analyze monitoring data (by construction staff) and coordinate with freight railroad operations staff to verify that safe freight rail operations can be maintained through the construction area at all times • Develop and implement freight rail operation coordination plans to facilitate coordination between the Project and the affected freight railroads during construction activities affecting freight rail operations (see 4.4) • Develop and implement a Construction Mitigation Plan, including a construction staging plan, and a Construction Communication Plan (see 4.1) 		

^a This table summarizes the mitigation measures for the Project as identified in the Final EIS. All data in the table are approximate. See the corresponding sections of Chapters 3 and 4 of the Final EIS for a more detailed description of the mitigation measures.

^b Subsequent to publication of the Final EIS, the Council determined that the proposed joint development project at the Beltline Station will no longer be part of the federally funded Project. Therefore, pursuit of the Beltline Station joint development project is no longer a measure that will be incorporated into the Project to mitigate identified adverse impacts to economic activity.

^c The Final EIS identified this mitigation as “Implement wayside bell at Thomas Avenue South, Sheridan Avenue South, and South Upton Avenue, Minneapolis.” The description in Attachment A of this ROD more accurately reflects the location of the wayside bell; the mitigation measure has not changed.

^d Freight rail guardrail will be located at the new freight track located on the new freight rail bridge over the Kenilworth Lagoon.

^e RE = AREMA

A TPSS is an electrical substation that converts electric power from the form provided by the electrical power industry for public utility service to an appropriate voltage, current type, and frequency to supply railways, trams (streetcars), or trolleybuses with traction current.

Notes: section: Data are approximate. ADA = Americans with Disabilities Act; AASHTO = American Association of State Highway and Transportation Officials; BMP = best management practice; CWA = Clean Water Act, CCP = Construction Contingency Plan; CFR = Code of Federal Regulations; EIS = Environmental Impact Statement; dB = decibels; dBA = A-weighted decibels; EPA = U.S. Environmental Protection Agency; FLSSC = Fire Life Safety and Security Committee; FRA = Federal Railroad Administration; LRT = light rail transit; MOA = Memorandum of Agreement; MnDOT = Minnesota Department of Transportation; MnDNR = Minnesota Department of Natural Resources; MnHPO = Minnesota Historic Preservation Office; MPCA = Minnesota Pollution Control Agency; MPRB = Minneapolis Park and Recreation Board; OMF = Operation and Maintenance Facility; OSHA = Occupational Safety and Health Administration; RAP = Response Action Plan; SOI’s Standards = Secretary of the Interior’s Standards for the Treatment of Historic Properties; SPCC = Spill Prevention, Control, and Countermeasure; SSMP = Safety and Security Management Plan; SWPPP = Stormwater Pollution Prevention Plan; TPSS = traction power substation; USACE = U.S. Army Corps of Engineers; U.S.C. = United States Code; WCA = Minnesota Wetlands Conservation Act of 1991.

Source: Council, 2016.

Attachment B – Section 106 Memorandum of Agreement

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

WHEREAS, the Metropolitan Council (COUNCIL) is proposing to construct the Southwest Light Rail Transit Project (PROJECT), an approximately 14.5-mile long double-track light rail transit line (LRT) located in dedicated right-of-way, with 16 stations, of which one is deferred, and one operations and maintenance facility, beginning at the connection with the METRO Green Line and METRO Blue Line LRT lines at the existing Interchange (Target Field) Station, in Minneapolis, and extending along a southwesterly alignment to connect the cities of Minneapolis, St. Louis Park, Hopkins, Minnetonka and Eden Prairie, Minnesota; and

WHEREAS, the United States Department of Transportation, Federal Transit Administration (FTA) may fund the PROJECT and has determined it is an undertaking subject to the requirements of Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and its implementing regulations, 36 CFR § 800; and

WHEREAS, the United States Army Corps of Engineers (USACE) may issue permits to construct the PROJECT pursuant to 33 U.S.C. § 11 and Section 404 of the Clean Water Act (Section 404), 33 U.S.C. § 1251-1376, as amended, and has determined this is an undertaking subject to the requirements of Section 106 and 36 CFR § 800; and

WHEREAS, pursuant to 36 CFR § 800.2(a)(2) the USACE has recognized FTA as the lead Federal agency for the PROJECT to fulfill their collective responsibilities under Section 106 and, therefore, does not need to be a signatory to this Memorandum of Agreement (AGREEMENT); and

WHEREAS, pursuant to 36 CFR § 800.1(a)(3) FTA has designated the professionally qualified staff of the Minnesota Department of Transportation (MnDOT) Cultural Resources Unit (CRU) to assist with some aspects of the Section 106 review, including initiating the consultation process, defining the area of potential effect (APE), identifying historic properties, assessing effects, and coordinating consultation with concurring parties; and

WHEREAS, the COUNCIL is the local sponsor for the PROJECT and is responsible for obtaining the necessary approvals and permits to undertake the PROJECT; and

WHEREAS, FTA, MnDOT CRU, and the COUNCIL have consulted with the Minnesota Historic Preservation Office (MnHPO), interested and affected Indian Tribes, and other parties with a

demonstrated interest in the effects of the PROJECT on historic properties in accordance with Section 106 and 36 CFR § 800; and

WHEREAS, pursuant to 36 CFR § 800.16(d) FTA and MnDOT CRU, in consultation with MnHPO, have defined an APE for the PROJECT as shown in Attachment A to this AGREEMENT; and

WHEREAS, FTA, MnDOT CRU, and the COUNCIL, in consultation with MnHPO, have undertaken surveys of the PROJECT APE to identify historic properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP), the results of which are shown in Attachment B to this AGREEMENT, and MnHPO has concurred with these determinations; and

WHEREAS, FTA has found, based on the PROJECT's 60 percent design plans (60% Plans), and MnHPO has concurred, that the construction of the PROJECT will have no adverse effect on the following twelve (12) historic properties: Minneapolis Warehouse Historic District; Osseo Branch of the St. Paul, Minneapolis & Manitoba Railroad / Great Northern Railway Historic District; Kenwood Parkway Residential Historic District (KPRHD); Kenwood Park (Grand Rounds Historic District [GRHD] element); Kenwood Parkway (GRHD and KPRHD element); Kenwood Water Tower (individual resource and GRHD element); Mac and Helen Martin House; Frieda and Henry J. Neils House; Mahalia and Zachariah Saveland House; Frank and Julia Shaw House; Hoffman Callan Building; and Hopkins City Hall; and

WHEREAS, FTA has found, based on the 60% Plans, and MnHPO has concurred, that the construction of the PROJECT will have no adverse effect on the following fourteen (14) historic properties, provided measures identified in the stipulations of this AGREEMENT are implemented: St. Paul, Minneapolis & Manitoba Railroad / Great Northern Railway Historic District; William Hood Dunwoody Industrial Institute; Lake of the Isles Residential Historic District (LIRHD); Lake Calhoun (GRHD element); Cedar Lake (GRHD element); Cedar Lake Parkway (GRHD element); Lake of the Isles (GRHD and LIRHD element); Lake of the Isles Parkway (GRHD and LIRHD element); Park Board Bridge No. 4 / Bridge No. L5729 (individual resource and GRHD and LIRHD element); Minikahda Club; Peavey-Haglin Experimental Concrete Elevator; Minneapolis & St. Louis Railway Depot; Hopkins Commercial Historic District; and Archaeological Site 21HE0409; and

WHEREAS, FTA has found, based on the 60% Plans, and MnHPO has concurred, that the construction of the PROJECT will have an adverse effect on the following five (5) historic properties: GRHD; Kenilworth Lagoon (GRHD and LIRHD element); Chicago, Milwaukee, St. Paul & Pacific Railroad Depot; Archaeological Site 21HE0436; and Archaeological Site 21HE0437; and

WHEREAS, upon initiation of the Section 106 process for the PROJECT, and in accordance with 36 CFR § 800.2(c)(2)(ii), FTA notified the Shakopee Mdewakanton Sioux Community, the Prairie Island Indian Community, the Lower Sioux Indian Community, the Upper Sioux Indian Community, the Fort Peck Tribes, the Santee Sioux Nation and the Sisseton-Wahpeton Oyate, all federally recognized tribes, and invited their participation in the consultation and none requested to participate; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), FTA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

WHEREAS, the COUNCIL is responsible for designing and constructing the PROJECT, as well as carrying out many of the terms of this AGREEMENT, as required, to receive FTA funding and USACE permits, and therefore is an invited signatory to this AGREEMENT; and

WHEREAS, MnDOT CRU is responsible for assisting the FTA in completing the Section 106 process, and will be providing technical assistance to the PROJECT to complete the terms and conditions of this AGREEMENT, and therefore MnDOT is an invited signatory to this AGREEMENT; and

WHEREAS, FTA, MnDOT CRU, and the COUNCIL have consulted with Hennepin County; the Cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park and Minneapolis; the Minneapolis Heritage Preservation Commission (HPC) and the Eden Prairie HPC; the Minneapolis Park and Recreation Board (MPRB); the Three Rivers Park District; the St. Louis Park Historical Society; the Cedar-Isles-Dean Neighborhood Association; and the Kenwood Isles Area Association regarding the effects of the PROJECT on historic properties, and has invited them to sign this AGREEMENT as concurring parties; and

WHEREAS, this AGREEMENT was developed with appropriate public involvement pursuant to 36 CFR § 800.2(d) and § 800.6(a), and coordinated with the scoping, public review and comment, and public hearings conducted by FTA and the COUNCIL to comply with the National Environmental Policy Act, as amended, and its implementing regulations; and

WHEREAS, FTA and MnDOT CRU, in consultation with MnHPO and other consulting parties, have assessed potential PROJECT effects on historic properties and have considered ways to avoid, minimize and/or mitigate adverse effects, agreed upon measures for minimizing and mitigating the identified adverse effects, as outlined in this AGREEMENT, and this AGREEMENT provides for additional consultation to assess effects and resolve adverse effects in accordance with 36 CFR § 800.14(b)(1)(ii); and

WHEREAS, the COUNCIL shall administer the implementation of the PROJECT and, with the assistance of MnDOT CRU, shall complete the stipulations of this AGREEMENT, and FTA shall be responsible for ensuring that the COUNCIL's implementation of the PROJECT meets the terms of this AGREEMENT.

NOW, THEREFORE, the FTA and MnHPO agree that the PROJECT shall be implemented in accordance with the following stipulations in order to take into account the effects of the PROJECT on historic properties.

STIPULATIONS

FTA shall ensure that the COUNCIL, with the assistance of the MnDOT CRU, carries out the terms of this AGREEMENT and shall require, as a condition of any approval of FTA funding or USACE permit for the PROJECT, adherence to the stipulations of this AGREEMENT.

I. PROJECT DESIGN DEVELOPMENT

The PROJECT design will effectively meet the PROJECT purpose and need, while avoiding, minimizing, and/or mitigating adverse impacts to the environment, including adverse effects to historic properties. Avoidance of adverse effects to historic properties is preferable and will be considered to the extent feasible. The review and findings of effects for the 60% Plans have been completed prior to the signing of this AGREEMENT, and an Adverse Effect finding was made for the PROJECT (see WHEREAS clauses for findings of effects for individual historic properties).

- A. Design Review of PROJECT Elements that need to meet the *Secretary of the Interior's (SOI's) Standards for the Treatment of Historic Properties* (36 CFR § 68) and Design Review.

All PROJECT elements, including but not limited to, the guideway, bridges, stations, platforms, shelters, ramps, walkways, overhead power system, traction power substations (TPSSs), signal bungalows, street and streetscape improvements, landscaping, and public art within, and in the vicinity of, the historic properties listed below, and as shown in Attachment C, shall be designed in accordance with the *SOI's Standards for the Treatment of Historic Properties* (36 CFR § 68).

- Minneapolis & St. Louis Railway Depot and environs (from a point beginning 600 feet west along the PROJECT alignment from the western boundary of the depot property and eastward along the PROJECT alignment to include the entirety of Bridge 27C10 - LRT bridge over Excelsior Boulevard and the Twin Cities & Western Railroad line and its eastern approach).
- Chicago, Milwaukee, St. Paul & Pacific Railroad Depot and environs (from a point beginning 600 feet west along the PROJECT alignment from the western boundary of the depot property and extending eastward along the PROJECT alignment to a point 500 feet east along the PROJECT alignment from the eastern boundary of the depot property).
- GRHD: Chain of Lakes Segment, and environs (from a point beginning 600 feet west along the PROJECT alignment from the southern right-of-way limit of the Cedar Lake Parkway crossing and extending eastward along the PROJECT alignment to a point 600 feet east along the PROJECT alignment from the northern boundary of Kenilworth Lagoon where it is crossed by the PROJECT). Elements in this area shall also include the LRT tunnel portals, freight rail realignment and related infrastructure, and landscaping.
- St. Paul, Minneapolis, & Manitoba Railroad / Great Northern Railway Historic District, Minneapolis, and environs (from a point beginning at the western limits of the Cedar

Lake Trail improvements at the Penn Station, and including the Penn Station, and extending eastward along the PROJECT alignment to the point where the PROJECT alignment passes the northern edge of the intersection of North 12th Street and Holden Street North).

- William Hood Dunwoody Industrial Institute and environs (from a point beginning at the eastern limits of the PROJECT improvements on and along Dunwoody Boulevard, and extending westward along Dunwoody Boulevard to where the eastbound bridge of Interstate 394 passes over the boulevard).

The purpose of this requirement is to 1) avoid adverse effects to the Minneapolis & St. Louis Railway Depot; St. Paul, Minneapolis & Manitoba Railroad / Great Northern Railway Historic District; and William Hood Dunwoody Industrial Institute; and 2) minimize effects, including adverse effects, to the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot and the Grand Rounds Historic District: Chain of Lakes Segment, including the Kenilworth Lagoon.

B. Design Review of PROJECT Elements that do not need to meet the *SOI's Standards for the Treatment of Historic Properties* (36 CFR § 68).

PROJECT elements in the vicinity of the historic properties listed below, and as shown in Attachment C, do not need to be developed in accordance with the *SOI's Standards for the Treatment of Historic Properties* (36 CFR § 68), but require the following specifications:

- Peavey-Haglin Experimental Concrete Elevator – Location for the proposed TPSS in the vicinity of the elevator to confirm that the location does not change, or if it changes, that the final location of the TPSS does not cause an adverse effect to the property.
- GRHD: Lake Calhoun – Design of the street improvements adjacent to Lake Calhoun (Lake Calhoun Playing Fields) to confirm that there is no change in design, or if there is a change in the final design, it will not cause an adverse effect to the property.
- Archaeological Site 21HE0436 and Archaeological Site 21HE0437 interpretation at the Royalston Station – Location and physical design (not interpretative content) of the interpretation measures of the archaeological sites required by Stipulation V.B.i.a-b of this AGREEMENT.

II. PRE-CONSTRUCTION DESIGN REVIEW PROCESS

MnDOT CRU shall review and compare the PROJECT's 90% design plans (90% Plans) and 100% design plans (100% Plans), as well as any modifications to the approved 100% Plans, prior to the start of construction, as described in Subparagraph C of this stipulation with the PROJECT's approved 60% Plans.

- A. If MnDOT CRU determines that there are no substantive changes, defined as design variations resulting in a change of effect to a historic property, they will inform FTA. If FTA agrees, it will issue a notice to MnHPO that the reviews were completed and that no substantive changes were identified, and therefore, no further Section 106 review is needed and that the findings made based on the PROJECT's 60% Plans remain valid.
- B. If MnDOT CRU identifies substantive changes, as defined in Subparagraph A of this stipulation, MnDOT CRU will make a recommendation on the effects of the design changes on the historic property to FTA. If FTA agrees that there is a change of effect to a historic property, FTA will consult with MnHPO and the concurring parties on the changes to the PROJECT and will issue new findings of effect.
 - i. If FTA makes a No Adverse Effect finding, MnHPO and the concurring parties shall have thirty (30) calendar days to provide comments on FTA's findings of effect. The COUNCIL and FTA shall carefully consider any comments provided by MnHPO and concurring parties to this AGREEMENT and incorporate suggested modifications, as appropriate. If there are any comments from MnHPO or the concurring parties that are not feasible to incorporate into PROJECT plans, the COUNCIL shall provide an explanation to FTA. If FTA agrees, it will issue a notice to MnHPO and the concurring parties.
 - ii. If FTA makes an Adverse Effect finding, the PROJECT will follow the measures outlined in Stipulation III of this AGREEMENT.
- C. If, after the completion of 100% Plans, the COUNCIL modifies the PROJECT prior to the start of construction, MnDOT CRU shall review the modifications to determine if there are any substantive changes in the PROJECT's design that that would result in new and/or additional adverse effects on historic properties. If there are substantive changes that would result in a new and/or additional adverse effect, FTA shall consult with MnHPO and the concurring parties in accordance with Stipulations II.B and III of this AGREEMENT.

III. RESOLUTION OF ADDITIONAL ADVERSE EFFECTS

- A. If FTA finds there is an additional adverse effect through the processes described in Stipulations II and XII.C of this AGREEMENT, FTA will consult with MnHPO and the concurring parties in accordance with 36 CFR § 800.6 to avoid and/or minimize the adverse effect. MnHPO and the consulting parties shall have thirty (30) calendar days to provide comments on any FTA findings made under Stipulation II of this AGREEMENT and ten (10) calendar days to provide comments on any FTA findings made under Stipulation XII. If it is determined that the adverse effect cannot be avoided, FTA will consult with MnHPO, other concurring parties to this AGREEMENT, and the public, as appropriate, to develop a mitigation plan for the historic property, taking into account the nature and scale of the adverse effect. Any newly identified consulting parties will be invited to sign the AGREEMENT as concurring parties.

- i.** The mitigation plan shall be developed within forty-five (45) calendar days of any adverse effect finding made under Subparagraph A of this stipulation. FTA will provide a copy of the draft mitigation plan to MnHPO and other concurring parties. MnHPO and the concurring parties shall have thirty (30) calendar days to provide comments on any mitigation plan prepared prior to the initiation of PROJECT construction and ten (10) calendar days to provide comments on any mitigation plan prepared during PROJECT construction.
 - a.** If the MnHPO and other concurring parties do not provide comments during the review periods specified in Subparagraph A.i of this Stipulation, FTA shall move forward with the mitigation plan as provided.
 - b.** FTA and the COUNCIL shall take into account any comments provided by MnHPO and concurring parties during the review period specified in Subparagraph A.i of this Stipulation in the development of a final mitigation plan. The mitigation plan will be final upon acceptance by FTA and MnHPO. Concurring parties will receive copies of all final mitigation plans and may also be invited to concur in mitigation plans.

IV. CONSTRUCTION PROTECTION PLAN

Prior to initiating PROJECT construction (defined as demolition activities and earthwork, and construction of PROJECT infrastructure and related improvements), the COUNCIL, with assistance from MnDOT CRU, shall develop a Construction Protection Plan (CPP) in consultation with FTA and MnHPO detailing the measures to be implemented during PROJECT construction to avoid adverse effects to historic properties. The COUNCIL shall include the CPP within specific contract packages to inform contractors of their responsibilities relative to historic properties. This plan may be a separate document or combined with other PROJECT construction monitoring plans, as appropriate. The CPP shall include the following:

- A.** Construction Protection Measures (CPMs). The CPP shall detail the measures to be implemented during PROJECT construction to protect the following historic properties from physical damage or indirect adverse effects during the construction of the PROJECT: Minikahda Club; Peavey-Haglin Experimental Concrete Elevator; Chicago, Milwaukee, St. Paul & Pacific Railroad Depot; Minneapolis & St. Louis Railway Depot; Archaeological Site 21HE0409; and the following elements of the GRHD: Cedar Lake, Cedar Lake Parkway, Kenilworth Lagoon, and Lake of the Isles.
 - i.** The CPMs shall include:
 - a.** Inspection and documentation of existing conditions of each historic property (e.g., limits of the site, dimensions of the structure, photographs of the property, aerial photographs as required, assessment of geological conditions, identification of ancillary structures in the vicinity of the property).

owners of the historic properties shall have thirty (30) calendar days to provide comments on the CPP. The COUNCIL shall consider all comments received and use them to prepare the final CPP. If there are any comments from MnHPO or the concurring parties that are not viable to incorporate into the CPP, the COUNCIL shall provide an explanation to FTA. If FTA agrees with the COUNCIL's assessment that suggestions cannot be incorporated, FTA shall notify MnHPO and the concurring parties. If agreement cannot be reached on if their suggestions are viable to incorporate, FTA shall consult with the COUNCIL, MnHPO and the concurring parties as per the terms of Stipulation XIII of this AGREEMENT. The COUNCIL shall submit the final CPP to FTA for approval. Upon FTA approval, the final CPP shall be submitted to MnHPO for a thirty (30) calendar day review and concurrence that must be completed prior to the initiation of PROJECT construction.

- F.** Before PROJECT construction activities begin (defined as demolition activities and earthwork, and construction of PROJECT infrastructure and related improvements) in the vicinity of the historic properties subject to this stipulation, the COUNCIL shall meet with the construction contractor(s) to review the CPP, and confirm that construction plans are consistent with the PROJECT design as reviewed by FTA and MnHPO.
- G.** The COUNCIL will monitor PROJECT construction to ensure that all measures identified in the CPP are implemented and shall provide a record of monitoring activities in the quarterly reports prepared pursuant to Stipulation X of this AGREEMENT.

V. ARCHAEOLOGICAL SITES 21HE0436 AND 21HE0437

A. Phase III Data Recovery

- i.** Prior to the start of PROJECT construction, as defined in Stipulation IV of this AGREEMENT, in the vicinity of Archaeological Sites 21HE0436 and 21HE0437, the COUNCIL shall complete a Phase III Data Recovery of both sites.
 - a.** The COUNCIL will ensure that the Phase III data recovery is carried out under the direct supervision of a qualified historical archaeologist meeting the *SOI's Professional Qualifications Standards* (36 CFR § 61) for archaeology. Direct supervision entails developing the Data Recovery Plan, conducting the field work, doing a majority of the laboratory analysis, and the majority of the writing of the report, especially the results.
 - b.** All archaeological field work and documentation shall be completed in accordance with the *SOI's Guidelines for Archaeological Documentation* and the guidelines of the Minnesota Office of the State Archeologist (OSA), MnHPO and MnDOT CRU.
 - c.** The cost of curation shall be borne by the PROJECT. The COUNCIL will work with MnHPO to identify a repository for curation that shall meet Federal repository standards established under 36 CFR § 79.9, and as outlined on the Minnesota Historical Society's (MNHS) web site: <http://www.mnhs.org/collections/archaeology/curation.php>.

- d. Newly identified information about Sites 21HE0436 and 21HE0437 gained through the Phase III Data Recovery shall be incorporated into the interpretation required by Subparagraph B of this stipulation.

B. Interpretation of the Archaeological Sites at Royalston Station

- i. The COUNCIL shall incorporate site interpretation of 21HE0436 and 21HE0437 into the design of the Royalston Station. The interpretation shall be based on the results of the Phase II evaluation completed for both sites during the historic property identification stage of the PROJECT and the Phase III excavation of both sites required by Subparagraph A of this stipulation. Interpretation to be incorporated into the Royalston Station and related PROJECT improvements shall include:
 - a. Up to eight (8) double-sided panels, four (4) on each platform, which will be approximately one foot, six inches (1'6") by three feet, six inches (3'6") in size. MnHPO and the concurring parties have agreed on the size, number, and location of the panels prior to the signing of this AGREEMENT. Based on panel theme, content should include various combinations of text, historical content (e.g. photographs, maps, atlases and other materials), and modern graphics (photographs, maps, depictions of artifacts uncovered, etc.). The content of the panels shall be finalized after the completion of the Phase III Data Recovery.
 - b. Interpretation of the actual location of elements of the archaeological sites (e.g. building footprints/foundations and/or locations of significant finds) may be incorporated into the ground surfaces of the station and/or other PROJECT improvements in the vicinity of the station. Because the design could create ADA or future maintenance concerns, the COUNCIL will present the proposed design to the City of Minneapolis. The City of Minneapolis will have approval authority over the design of elements on City of Minneapolis owned property. If no design can be developed that incorporates the location of archaeological site elements due to lack of approval by the City of Minneapolis, FTA shall notify the MnHPO of the reasons for the City of Minneapolis' rejection of the design, and no additional mitigation shall be required for this adverse effect.
- ii. The COUNCIL, with the assistance of MnDOT CRU, shall develop an interpretative plan for the interpretation in conformance with the *Standards and Practices for Interpretive Planning from the National Association for Interpretation (NAI)* and *Creating Outdoor Trail Signage* technical leaflets.¹ The team preparing the content of the interpretation and identification of the location of the in-ground interpretation shall include a qualified historical archaeologist

¹ Miller, Ellen, and Aaron Novodorsky
2008 Creating Outdoor Trail Signage, Part 1: Planning and Design *Minnesota History Interpreter*, 2008 (May-June), 3-6.

2008 Tech Talk: Creating Outdoor Trail Signage, Part 2: Fabrication and Installation *Minnesota History Interpreter*, 2008 (Summer), 3-6

who meets the *SOI's Professional Qualifications Standards* (36 CFR § 61) for archaeology, and an interpretative planner certified by the National Association for Interpretation (NAI) as a Certified Interpretative Planner.

- a. A draft interpretative plan shall be prepared that includes themes for the interpretation, as well as draft text and graphics for the interpretative panels, and a draft design for the ground surface interpretation. MnDOT CRU shall review the draft interpretative plan for sufficiency and forward it with a recommendation to FTA for review. If FTA determines the draft plan is sufficient, it will submit the plan to MnHPO, the Minneapolis HPC, and the City of Minneapolis. MnHPO, the Minneapolis HPC, and the City of Minneapolis shall have thirty (30) calendar days to provide comments on the draft plan.
- b. A final interpretative plan shall be prepared that includes the final content and layout of the interpretative panels, and the final design of the ground surface interpretation. As feasible, the final plan shall incorporate any recommendations made by MnHPO, the Minneapolis HPC, or the City of Minneapolis on the draft plan. MnDOT CRU shall review the final interpretative plan for sufficiency and forward it with a recommendation to FTA for review. If FTA determines the final plan is sufficient, FTA shall submit the plan to MnHPO for concurrence. MnHPO shall have thirty (30) calendar days to review and concur with the final plan. If MnHPO does not concur, it shall provide comments to FTA on the grounds for its disagreement with the plan. Upon receiving such comments FTA shall consult with MnHPO to resolve the disagreement in accordance with Stipulation XIII of this AGREEMENT.
- iii. The content of the interpretive panels shall be developed into a webpage and placed on the MnDOT CRU website and also provided to MnHPO to place on the MnHPO or MNHS website in order to make it accessible to the general public.

VI. CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC RAILROAD DEPOT

- A. In order to avoid adverse visual effects to the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot from a noise wall included in the 60% Plans for the PROJECT upon which the Final Determination of Effect was made, the COUNCIL shall implement the following design measures:
 - The crossover tracks between the east and westbound LRT tracks, including the proposed switches and signal bungalow, which are shown on the PROJECT's 60% Plans as being located directly in front (north) of the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot property, will be relocated to 3,420 feet west (center point-to-center point) along the PROJECT alignment from the original proposed location near the depot.
 - The beginning point of the eastern end of the noise wall shown on the PROJECT's 60% Plans as beginning directly in front of (north), near the east end of the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot will be shifted at least 240 feet west of the

originally proposed starting point to allow for a direct visual connection to be maintained between the depot and the adjacent railroad corridor in which the PROJECT will be constructed.

- i. The relocated crossover and the revised design for the noise wall shall be incorporated into the 90% Plans and 100% Plans that shall be reviewed in accordance with Stipulations I.A and II of this AGREEMENT.
- ii. Prior to completing the 100% Plans, FTA, the COUNCIL, and MnDOT CRU will continue consultation with MnHPO and the concurring parties, as appropriate, on the design of the noise walls in the vicinity of the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot, as identified in Stipulations I.B and VII.B of this AGREEMENT.

VII. GRAND ROUNDS HISTORIC DISTRICT

- A. GRHD: Kenilworth Lagoon Noise Mitigation. The COUNCIL shall, with the assistance of the MnDOT CRU, design and construct noise mitigation to mitigate the adverse noise effect on the GRHD: Kenilworth Lagoon. The noise mitigation will consist of a parapet wall and rail damper on the LRT-bridge over the waterway, and extending beyond its ends. The final design of the wall will be determined as PROJECT designs are finalized, but it must mitigate the noise impact to a level of no residual noise impact. The design of the noise mitigation shall be reviewed in accordance with Stipulation II of this AGREEMENT.
- B. Additional Design Consultation. Prior to completing the 100% Plans, FTA, the COUNCIL, and MnDOT CRU will continue consultation with MnHPO and the concurring parties, as appropriate, on the design of the PROJECT elements within and in the vicinity of the Grand Rounds Historic District, as identified in Stipulation I.B of this AGREEMENT.
- C. GRHD: Kenilworth Lagoon WPA Rustic Style Retaining Walls. The COUNCIL shall rehabilitate / reconstruct the retaining walls identified on Attachment D to minimize and mitigate the adverse effect on this property. The work shall be done in accordance with the *SOI's Standards for the Treatment of Historic Properties* (36 CFR § 68), and the National Park Service's (NPS) Preservation Brief 2: *Repointing Mortar Joints in Historic Masonry Buildings* and Preservation Tech Notes: *Masonry 4: Non-destructive Evaluation Techniques for Masonry Construction*.
 - i. Treatments. The portions of the walls shown in orange on Attachment D shall be documented, deconstructed, with the stone salvaged, and reconstructed; the portions shown in green shall be rehabilitated. Stone that has fallen off the walls into the waterway shall be reclaimed and used to complete the work. The reconstruction/rehabilitation work shall be a single construction effort that will occur with construction work in the Kenilworth Lagoon and finished before PROJECT construction is completed.

ii. Construction Plans. The COUNCIL shall prepare construction plans that include documentation of the existing walls; specifications on how to dismantle the section shown in orange on Attachment D; and construction plans and specifications for the reconstruction / rehabilitation work. The team preparing the plans shall include an architect who meets the *SOI's Professional Qualifications Standards* (36 CFR § 61) for historic architect and a civil engineer with at least five (5) years of experience working with historic structures. The COUNCIL shall submit the draft plans to MnHPO and MPRB for review. MnHPO and MPRB shall have thirty (30) calendar days to provide comments. As feasible, the final plan shall incorporate any recommendations made by MnHPO and MPRB. If any of the recommendations are not feasible to incorporate into the final plan, the COUNCIL shall provide an explanation to MnHPO and MPRB. The COUNCIL shall obtain MnHPO concurrence on the final plans before initiating PROJECT construction within the Kenilworth Lagoon. If agreement cannot be reached on the plans, the COUNCIL shall notify FTA and FTA shall consult with the MnHPO and MPRB as per the terms of Stipulation XIII of this AGREEMENT.

D. Plans for Grand Rounds Historic District: Canal System. The COUNCIL, with assistance from MnDOT CRU, shall collaborate with MnHPO and MPRB to prepare guidance for future preservation activities within the portion of the GRHD: Canal System, including adjacent parkland, extending from the north end of Lake Calhoun to the east end of Cedar Lake, and including the entirety of the Lake of the Isles Park and Kenilworth Lagoon elements (Attachment E). The plans shall be prepared in accordance with the *SOI's Standards for the Treatment of Historic Properties* (36 CFR § 68); the *SOI's Standards for Preservation Planning*; the NPS's *Guidelines for the Treatment of Cultural Landscapes*, Preservation Briefs and Tech Notes.

i. Preservation Plan. The preservation plan shall include an overall vision for historic preservation of this portion of the historic district, strategies to guide historic preservation efforts to achieve the overall vision, and objectives for implementing each strategy. The team preparing the plan shall include a planner with a master's degree in planning and at least five years of experience planning for historic properties, preferably a member of the American Institute of Certified Planners, a historian and/or architectural historian who meets the *SOI's Professional Qualifications Standards* (36 CFR § 61) for history and architectural history, an architect who meets the *SOI's Professional Qualifications Standards* (36 CFR § 61) for historic architect, and a landscape architect who has a combination of education and experience in landscape architecture equivalent to the *SOI's Professional Qualifications Standards* (36 CFR § 61) for historic architect.

a. A scope shall be prepared that defines the goals of the plan, the extent of community engagement that will be completed during its preparation, and the process for its approval. The public participation process shall meet the requirements of 36 CFR § 800 and MPRB's community engagement ordinance (PB § 11 [Attachment F]). The COUNCIL shall obtain MnHPO concurrence on the final scope prior to preparing the plan.

- ii. Treatment Plans/Standards/Guidelines (Treatments Plan). Treatments shall be prepared to guide preservation activities for up to twelve (12) different historic features, or feature types within the planning area. Features may include, but not be limited to, retaining walls, shorelines (land-water interfaces), lighting, signage, circulation dividers, circulation systems (e.g. parkway paving), bridges, and site furnishings. The team preparing the plan shall include an architect who meets the *SOI's Professional Qualifications Standards* (36 CFR § 61) for historic architect, a landscape architect who has education and experience in landscape architecture comparable to the requirements the *SOI's Professional Qualifications Standards* (36 CFR § 61) require for a historic architect, and a civil engineer with at least five years of experience working with historic structures.
 - a. A scope shall be prepared that identifies the features/feature types for which treatments will be prepared, the type and level of documentation to be prepared for each feature, and a process for implementing and approving the plan. The COUNCIL shall obtain MnHPO concurrence on the final scope prior to preparing the plan.

E. Review of Plans. The COUNCIL shall submit the plans to MnHPO and MPRB for review in accordance with the processes defined in the final scope for each plan. The COUNCIL shall obtain MnHPO concurrence on the final plans before commencing revenue service operations of the PROJECT. The COUNCIL shall also seek MPRB Board of Commissioners approval of the final plans; however, MPRB Board of Commissioners approval of the plans shall not be required for fulfillment of this Stipulation. If the COUNCIL, MnHPO, and MPRB cannot agree on scopes for the plans, or if MnHPO does not concur with the final plans, the COUNCIL shall notify FTA and FTA shall consult with MnHPO and MPRB as per the terms of Stipulation XIII of this AGREEMENT.

VIII. HOPKINS COMMERCIAL HISTORIC DISTRICT

A. National Register of Historic Places Nomination

- i. The COUNCIL, with the assistance of MnDOT CRU and in consultation with MnHPO, shall have a qualified consultant prepare a NRHP nomination form, in conformance with the guidelines of the NPS, for the Hopkins Commercial Historic District. The nomination shall be prepared by a historian and/or architectural historian who meets the *SOI's Professional Qualifications Standards* (36 CFR § 61) for history and/or architectural history, and who has successfully completed previous NRHP nominations for historic districts.
 - a. The COUNCIL, with the assistance of MnDOT CRU, shall prepare the draft NRHP nomination form and submit it to MnHPO for review. MnHPO shall have sixty (60) calendar days to provide comments. The final NRHP nomination form shall incorporate any recommendations made by MnHPO. As needed, multiple drafts may be required and MnHPO shall have thirty (30) calendar days to provide comments on each subsequent draft. The COUNCIL shall initiate work on the NRHP nomination within six (6) months of execution of this AGREEMENT and shall complete the final NRHP nomination form

and supporting documentation, and receive MnHPO concurrence, before the PROJECT commences revenue service operations.

- b. Actual nomination of the historic district to the NRHP will be at the discretion of MnHPO and will follow the established procedures of the NPS (36 CFR § 60). In accordance with 36 CFR § 60.6(g), property owners will be given the opportunity to object to listing their property in the NRHP.

B. Public Education

- i. Prior to initiating revenue service operations of the PROJECT, the COUNCIL shall provide the City of Hopkins, owners of historic properties in the Hopkins Commercial Historic District, and MnHPO with copies of the NRHP nomination for the district and information on financial incentives for historic preservation that are available to owners of NRHP listed properties.
 - a. In the quarterly report required by Stipulation X of this AGREEMENT and immediately following the conclusion of the public education effort, the COUNCIL shall provide a brief summary of the public education effort and a list of historic properties identified.

IX. STANDARDS

- A. All work carried out pursuant to this AGREEMENT will meet the *SOI's Standards for Archaeology and Historic Preservation* (48 FR 44716). In instances where it is not feasible to reach a PROJECT design that meets these standards, mitigation measures will be developed and implemented pursuant to Stipulation XIII of this AGREEMENT.
- B. FTA shall ensure that all activities carried out pursuant to this AGREEMENT will be done by, or under the direct supervision of, historic preservation professionals who meet the *SOI's Professional Qualifications Standards* (36 CFR § 61) in the appropriate field. The professionally qualified staff in MnDOT CRU shall help FTA and the COUNCIL with oversight of the work. FTA and the COUNCIL shall ensure that consultants it retains for services pursuant to implementation of this AGREEMENT meet these standards.

X. MONITORING AND REPORTING

- A. Every three (3) months following the execution of this AGREEMENT until it expires or is terminated, the COUNCIL, with the assistance of MnDOT CRU, shall provide all signatories and concurring parties to this AGREEMENT a summary report detailing work undertaken pursuant to its terms. Each report shall include an itemized listing of all actions required to be taken to implement the terms of the AGREEMENT, identify what actions the COUNCIL has taken during the reporting period to implement those actions, identify any problems or unexpected issues encountered during that time, any scheduling changes proposed, any disputes and objections submitted or resolved in FTA's efforts to carry out the terms of this AGREEMENT, and any

changes recommended in implementation of the AGREEMENT. Each report shall also include a timetable of activities proposed for implementation within the following reporting period.

- B.** Signatories and concurring parties to this AGREEMENT shall review the quarterly reports and provide any comments to FTA and the COUNCIL within thirty (30) calendar days of receipt of the report.
- C.** The COUNCIL shall notify the public via the PROJECT website about the publication of the quarterly reports and that the reports are available for inspection and review upon request.
- D.** The COUNCIL shall share any comments received from concurring parties and the public with the signatories and concurring parties to this AGREEMENT.
- E.** At its own discretion, or at the request of any signatory to this AGREEMENT, FTA shall convene a meeting to facilitate review and comment on the reports, and to resolve any questions about its content and/or to resolve objections or concerns.

XI. COORDINATION WITH OTHER FEDERAL REVIEWS

In the event any other federal agency provides funding, permits, licenses, or other assistance to the COUNCIL for the PROJECT as it was planned at the time of the execution of this AGREEMENT, such funding or approving agency may comply with Section 106 by agreeing in writing to the terms of this AGREEMENT and so notifying and concurring with FTA. FTA will provide copies of all requests of this type to MnHPO.

XII. REVIEW PROCESS DURING CONSTRUCTION

This stipulation covers the discoveries of additional historic properties, PROJECT modifications, and changes of effect to known historic properties identified during PROJECT construction and not specifically addressed by other stipulations of this AGREEMENT.

- A.** Prior to initiating PROJECT construction, as defined in Stipulation IV of this AGREEMENT, the COUNCIL shall prepare as part of the CPP required by Stipulations IV and IV.D of this AGREEMENT a plan for the unexpected discovery of historic properties.
- B.** PROJECT Modifications. If, after the completion of 100% Plans, the COUNCIL makes modifications to the PROJECT design during construction, MnDOT CRU shall review the modifications to determine if there are any substantive changes in the PROJECT's design that that would result in new and/or additional adverse effects on historic properties or a revision in the PROJECT's APE. If there are substantive changes that would result in a new and/or additional adverse effect and/or requiring a revision to the PROJECT's APE, FTA shall consult with MnHPO and the concurring parties in accordance with Stipulations III of this AGREEMENT.

C. Historic Properties Discovered or Unexpectedly Affected as a Result of PROJECT Construction. If previously unidentified historic properties, including human remains, are discovered unexpectedly during construction of the PROJECT, or previously known historic properties are affected, or have been affected in an unanticipated adverse manner, all ground-disturbing activities will cease in the area of the property, as well as within one hundred (100) feet of it, to avoid and/or minimize harm to the property. The contractor will immediately notify the COUNCIL of the discovery and implement interim measures in accordance with the unexpected discoveries plan required by Stipulation IV.D of this AGREEMENT to protect the discovery from damage, looting, and vandalism. Measures shall include, but not be limited to protective fencing and covering of the discovery with appropriate materials. The COUNCIL will inform MnDOT CRU and concurring parties with jurisdiction over, or a demonstrated interest in, the property. If reasonably convenient and appropriate, the contractor, COUNCIL, MnDOT CRU, and any concurring parties with jurisdiction over, or a demonstrated interest in the property, will confer at the site in a timely manner to assess the property, determine the likely PROJECT impacts to the property, and to determine the most appropriate avoidance measures for the property. Any artifacts found as part of an unexpected discovery during construction that are part of sites determined not eligible for the NRHP in accordance with Stipulation XII.D of this AGREEMENT will be offered to local historical societies for their collections if desired.

i. Non-Human Remains.

a. The COUNCIL, with assistance from MnDOT CRU, will contract with a qualified archaeologist, historian and/or architectural historian, as appropriate, who meets the *SOI's Professional Qualifications Standards* (36 CFR § 61) for their respective field to record, document, and provide a recommendation on the NRHP eligibility of the discovery to FTA within seventy-two (72) hours of receipt of notification. FTA shall inform MnHPO, any Indian tribes that may attach religious and cultural significance to the property, and concurring parties with jurisdiction over, or a demonstrated interest in the property, of the discovery.

ii. Human Remains.

a. Since there are no federal lands within the construction limits for the PROJECT, if any human remains are encountered, the PROJECT shall follow the treatment of human remains as per Minnesota Statute 307.08. The COUNCIL shall immediately notify local law enforcement and the Office of the State Archaeologist (OSA). The COUNCIL shall also immediately notify the FTA, MnHPO, MnDOT CRU, concurring parties and appropriate Tribes within twenty-four (24) hours via email, fax, or telephone. The OSA shall coordinate with the Minnesota Indian Affairs Council (MIAC) if the remains are thought to be Native American, in accordance with Minnesota Statute (M.S.) 307.08. OSA will have the final authority in determining if the remains are human. The COUNCIL, with assistance from MnDOT CRU, will also contract with a qualified archaeologist to provide a recommendation on the NRHP eligibility of the discovery, including the human remains, to FTA within seventy-two (72) hours of receipt of

notification. FTA will inform MnHPO and any Indian tribes that may attach religious and cultural significance to the property, of the discovery.

- b.** If it is determined that the identified bones are human remains covered under M.S. 307.08, the OSA shall have jurisdiction to ensure that the appropriate procedures in accordance with Minnesota statutes are fulfilled. OSA is the lead state agency for authentication of burial sites on non-federal lands as per M.S. 307.08. The COUNCIL, with the assistance of MnDOT CRU, shall work with OSA, MnHPO, the Tribes, MIAC, and other parties to develop and implement a reburial plan, if that is the preferred approach by the parties. Avoidance and preservation in place is the preferred option for the treatment of human remains. If FTA also determines that the burial site is eligible for the NRHP, FTA and MnHPO shall work with OSA and MIAC on determining appropriate treatment and mitigation.

- D.** If a historic property is identified during PROJECT construction, the FTA will issue a determination of eligibility for the property within ten (10) calendar days following notification from the COUNCIL and submittal of recommendations from the COUNCIL's consultant provided in accordance with Subparagraphs A and C of this stipulation. MnHPO shall have ten (10) calendar days to provide concurrence or comments on the eligibility determination. Alternately, FTA may assume the newly discovered property is eligible for the NRHP for the purposes of 54 U.S.C. § 306108 pursuant to 36 CFR § 800.13(c).
 - i.** If FTA determines that the site does not meet National Register criteria and is not a historic property, and the MnHPO concurs, FTA will have no further obligations in regards to the property, and construction activities can resume.
 - ii.** For all properties determined eligible for the NRHP, FTA will make a finding of effect.
 - a.** If the finding is of no adverse effect and MnHPO concurs, construction activities can resume, pending implementation of any conditions on which the finding is based, if any.
 - b.** If FTA finds that the historic property will be adversely affected and MnHPO concurs, FTA, with the assistance of MnDOT CRU, will issue new findings of effect for the new adverse effect. MnHPO and the consulting parties shall have ten (10) calendar days to provide comments on FTA's finding. FTA will consult with MnHPO and other concurring parties to this AGREEMENT to develop a mitigation plan appropriate to the historic property and the nature and scale of the effect. If the mitigation is data recovery, construction activities may not resume until after the completion of the field work for the data recovery.

- E.** The COUNCIL shall include provisions in its construction contracts to ensure that Subparagraphs A through D of this stipulation, are carried out by the construction contractor(s).

XIII. DISPUTE RESOLUTION

- A.** Should any party to this AGREEMENT object at any time to any actions proposed or the manner in which the terms of the AGREEMENT are implemented, FTA will consult with the objecting party (or parties) to resolve the objection and will request ACHP involvement. If ACHP is not able to resolve the objection(s), FTA will follow 36 CFR § 800.7. All other actions subject to the terms of this AGREEMENT that are not subjects of the dispute remain unchanged pending resolution.
- B.** If the FTA determines that such objection cannot be resolved, FTA will forward all documentation relevant to the dispute, including FTA's proposed resolution, to the ACHP. The ACHP will provide FTA with its advice on the resolution of the objection within thirty (30) calendar days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FTA will prepare a written response that takes into account any timely advice or comment regarding the dispute from ACHP, signatories, invited signatories and concurring parties, and provide the parties with a copy of the written response. FTA will then proceed according to its final decision.

XIV. DURATION, AMENDMENTS, AND TERMINATION

- A.** This AGREEMENT will remain in effect from the date of execution for a period not to exceed ten (10) years. If the FTA anticipates that the terms of the AGREEMENT will not be completed within this timeframe, it will notify the signatories, invited signatories, and concurring parties in writing at least thirty (30) calendar days prior to the AGREEMENT'S expiration date. The AGREEMENT may be extended by the written concurrence of the signatories and invited signatories. If the AGREEMENT expires and the FTA elects to continue with the undertaking, the FTA will reinitiate review of the undertaking in accordance with 36 CFR § 800.
- B.** If any signatory or invited signatory to the AGREEMENT determines that the terms of the AGREEMENT cannot be fulfilled, or that an amendment to the terms of the AGREEMENT must be made, the signatories or invited signatories will consult to seek an amendment to its terms using the same consultation process as that exercised in creating the original AGREEMENT. The FTA shall file any amendments with the ACHP upon execution as per 36 CFR § 800.6(c)(7).
- C.** Any signatory or invited signatory to this AGREEMENT may terminate the AGREEMENT by providing thirty (30) calendar days written notice to the other signatories and invited signatories, provided the signatories or invited signatories consult during the period prior to termination to agree on amendments or other actions that would avoid termination. If the AGREEMENT is terminated and the FTA elects to continue with the undertaking, the FTA will reinitiate review of the undertaking in accordance with 36 CFR § 800.

XV. IMPLEMENTATION

- A.** This AGREEMENT may be implemented in counterparts, with a separate page for each signatory or party. This AGREEMENT will become effective on the date of the final signature by the signatories and invited signatories. The refusal of any party invited to concur in the AGREEMENT does not invalidate the AGREEMENT. FTA will ensure each party is provided with a fully executed copy of the AGREEMENT and that the final AGREEMENT, updates to appendices, and any amendments are filed with the ACHP.

- B.** Execution of this AGREEMENT by FTA, MnHPO, and ACHP and implementation of its terms is evidence that the FTA has taken into account the effects of its undertaking on historic properties and has afforded the ACHP opportunity to comment pursuant to Section 106 of the National Historic Preservation Act.

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

SIGNATORY

FEDERAL TRANSIT ADMINISTRATION

By: 
Marisol Simón, Region V Administrator

Date: 6/17/2016

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

SIGNATORY

MINNESOTA HISTORIC PRESERVATION OFFICE

By: Andrea H. Kajer
Andrea Kajer, Deputy State Historic Preservation Officer

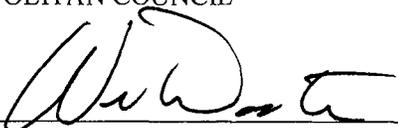
Date: 6-21-16

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

INVITED SIGNATORY

METROPOLITAN COUNCIL

By: 
Wes Kooistra, Regional Administrator

Date: 07/13/2014

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

INVITED SIGNATORY

MINNESOTA DEPARTMENT OF TRANSPORTATION

By: 
Charles A. Zelle, Commissioner

Date: June 20, 2016

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

HENNEPIN COUNTY

By:  _____ Date: 6/22/16
Kevin Dockry, Director, Community Works and HCRRA, Hennepin County Public Works

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

CITY OF EDEN PRAIRIE

By: 
Rick Getschow, City Manager

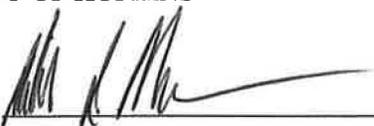
Date: 6/21/16

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

CITY OF HOPKINS

By: 

Mike Mornson, City Manager

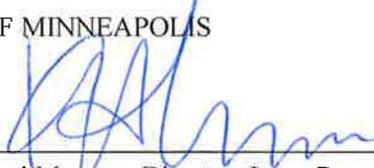
Date: 6/20/16

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

CITY OF MINNEAPOLIS

By: 
Kjersti Monson, Director, Long Range Planning

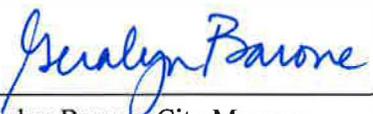
Date: 6/29/2016

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

CITY OF MINNETONKA

By: 
Geralyn Barone, City Manager

Date: 6/22/16

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

CITY OF ST. LOUIS PARK

By:  _____
Tom Harmening, City Manager

Date: 6/29/16

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

EDEN PRAIRIE HERITAGE PRESERVATION COMMISSION

By: 
Steve Olson, Chair

Date: 6/20/2016

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING**

**THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

MINNEAPOLIS HERITAGE PRESERVATION COMMISSION

By: 

Laura Faucher, Chair

Date: 6/28/16

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

MINNEAPOLIS PARK AND RECREATION BOARD

By: _____
Liz Wielinski, President

Date: _____

And

By: _____
Jennifer Ringold, Secretary to the Board of Commissioners

Date: _____

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

THREE RIVERS PARK DISTRICT

By: 
Boe Carlson, Superintendent of the Park District

Date: 6/30/16

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

ST. LOUIS PARK HISTORICAL SOCIETY

By: Ted Ekkers
Ted Ekkers, President

Date: 6/28/16

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

CEDAR-ISLES-DEAN NEIGHBORHOOD ASSOCIATION

By: _____
Craig Westgate, Chair

Date: _____

SIGNATURE PAGE

**MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL TRANSIT ADMINISTRATION
AND
THE MINNESOTA HISTORIC PRESERVATION OFFICE
REGARDING
THE SOUTHWEST LIGHT RAIL TRANSIT (METRO GREEN LINE EXTENSION) PROJECT
HENNEPIN COUNTY, MINNESOTA**

CONCURRING PARTY

KENWOOD ISLES AREA ASSOCIATION

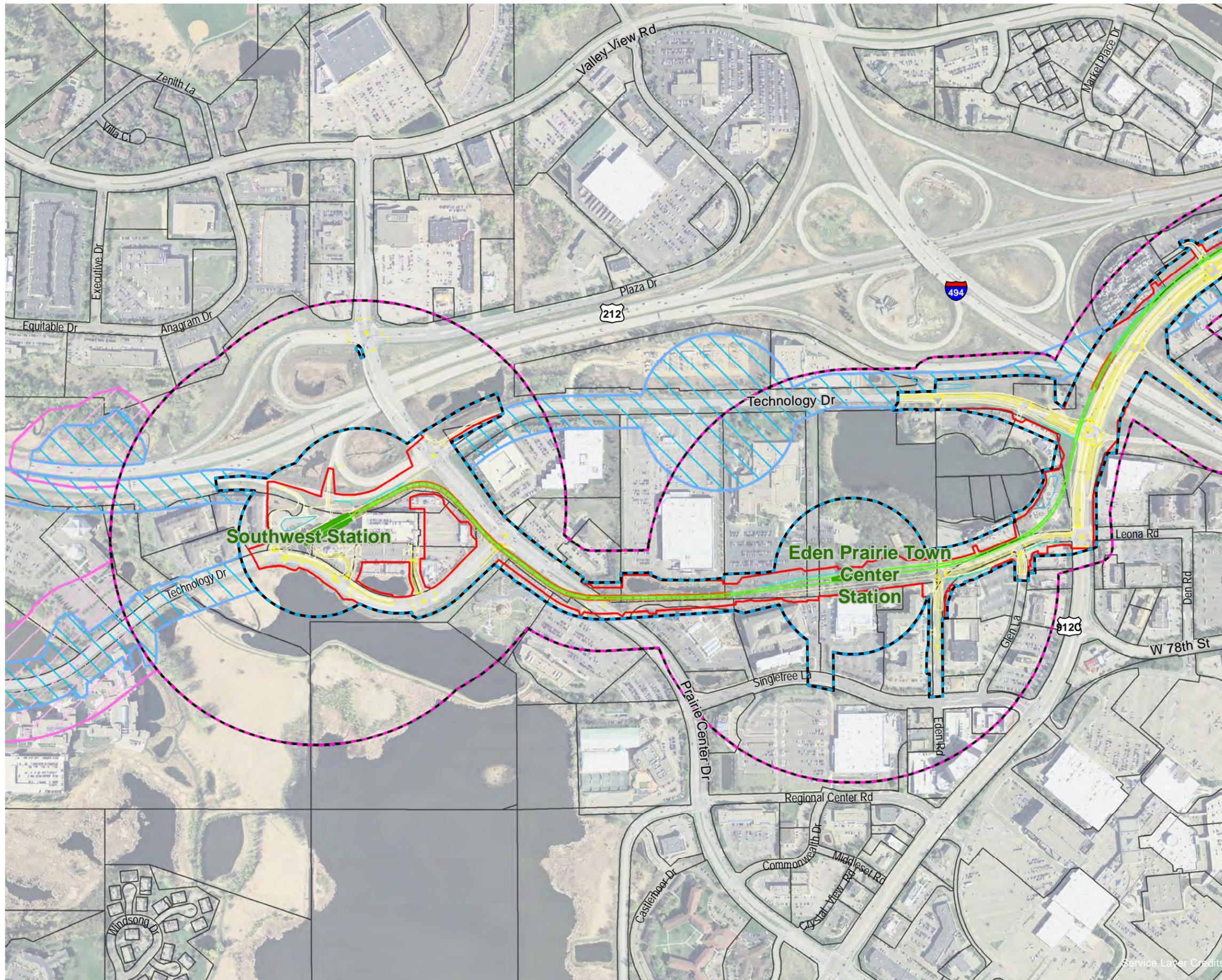
By: _____
Jeanette Colby, Chair

Date: _____

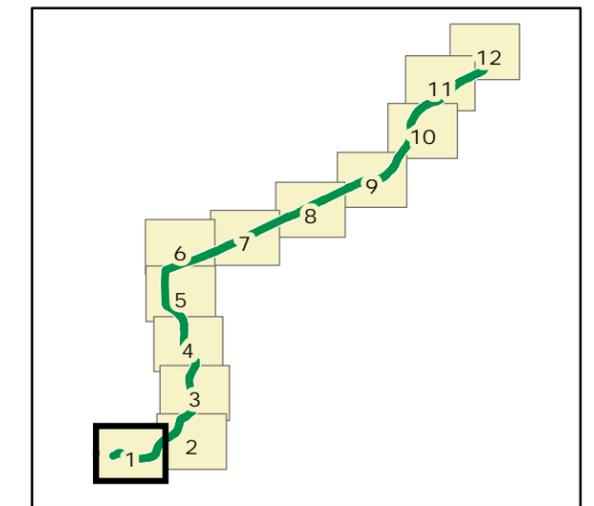
ATTACHMENT A

Area of Potential Effect

Southwest LRT Final EIS
 Hennepin County, Minnesota



-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance



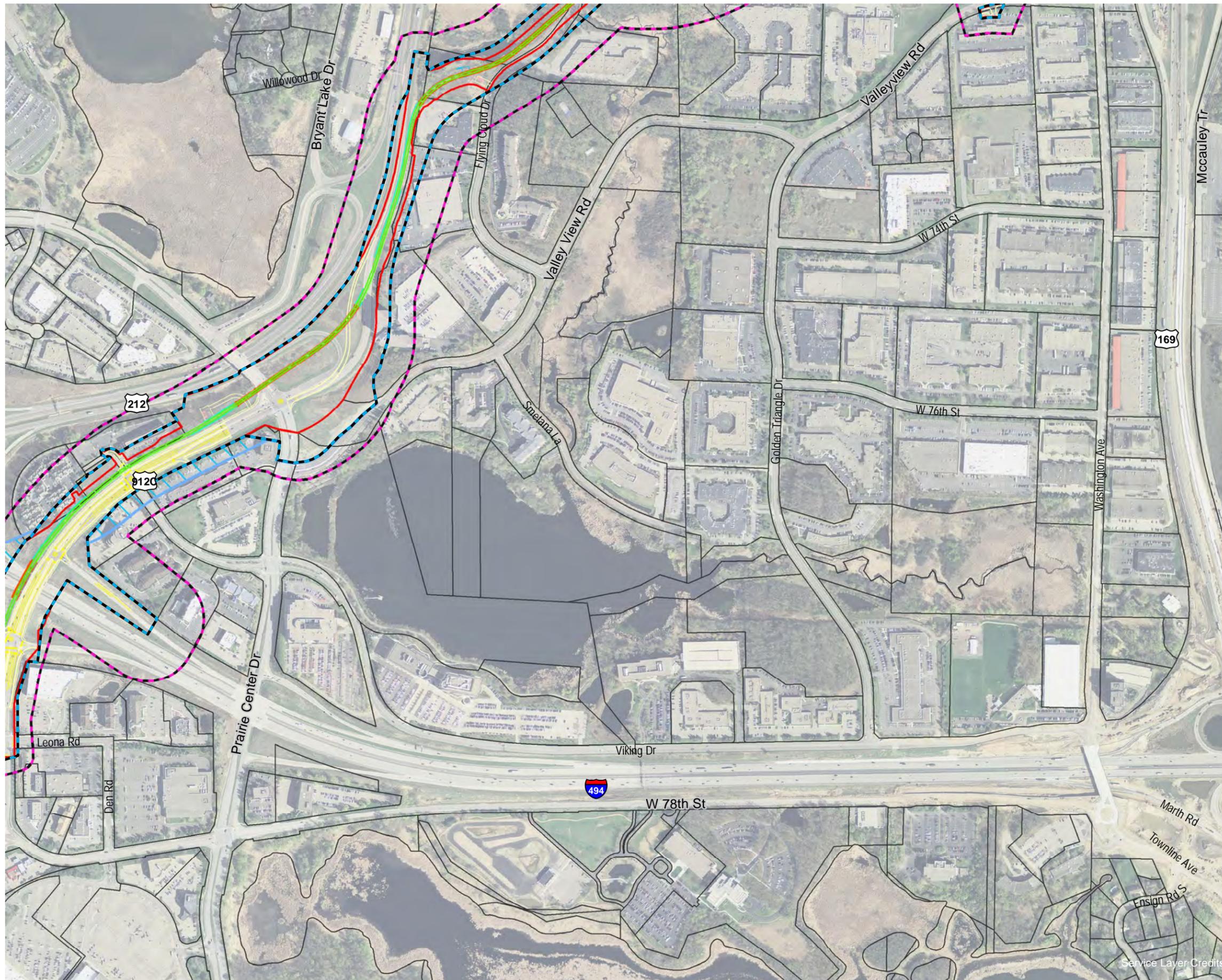
0 140 Meters
 0 500 Feet
 1:7,500



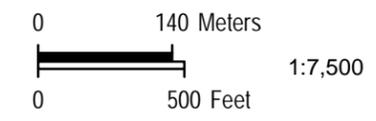
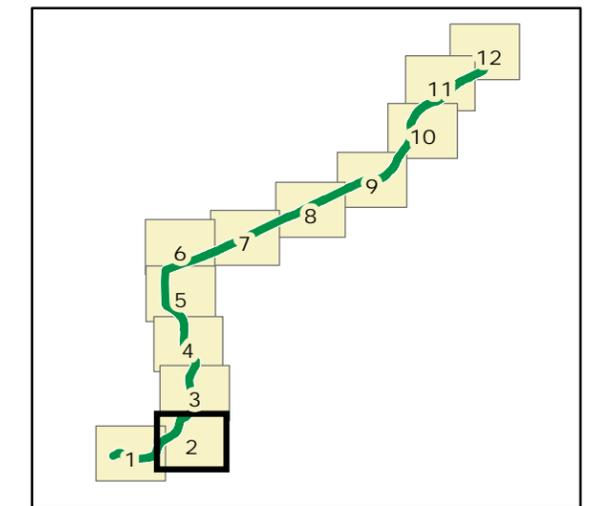
APE:
 Archaeological & Architecture/History

Figure 1

Southwest LRT Final EIS
 Hennepin County, Minnesota



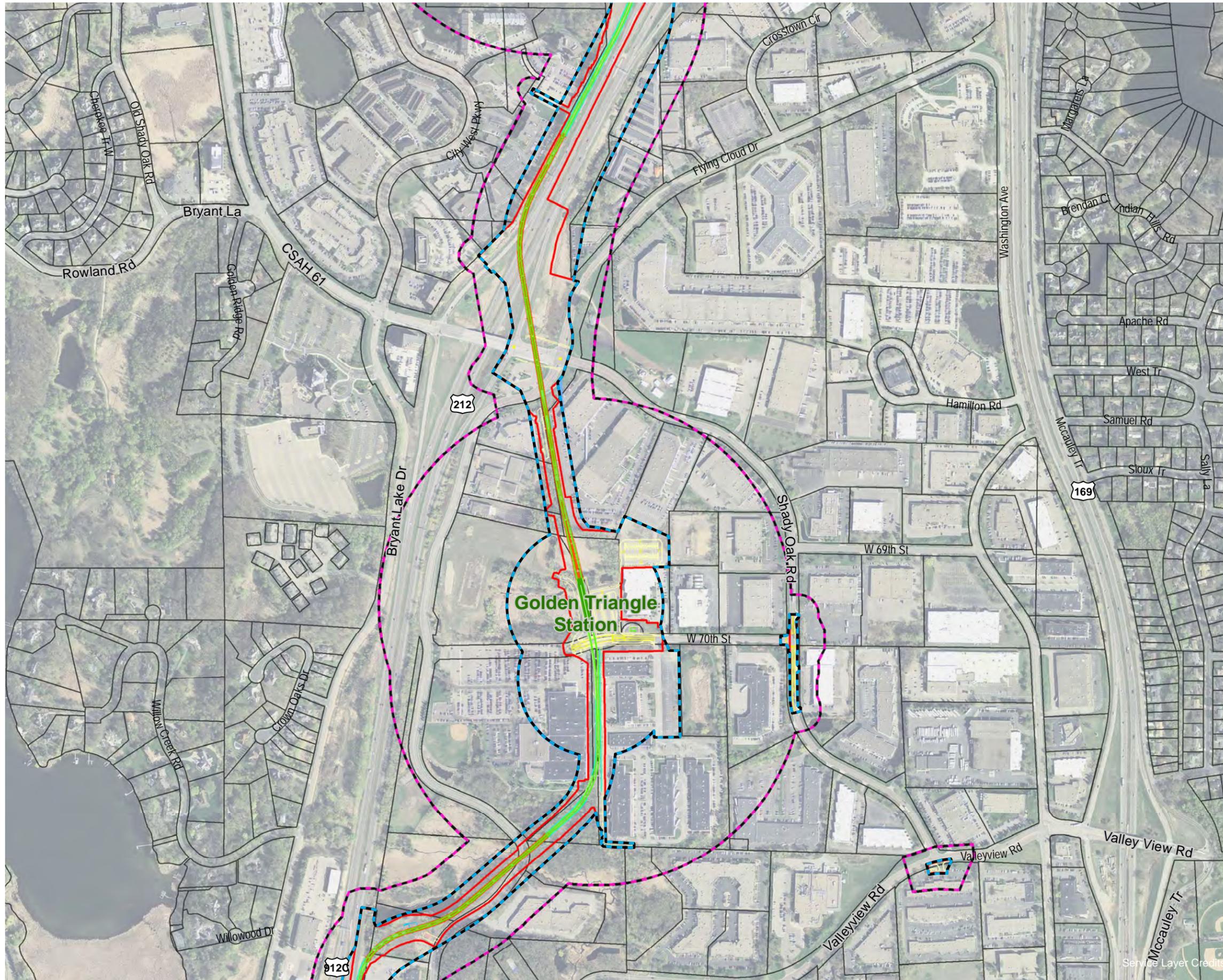
-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance



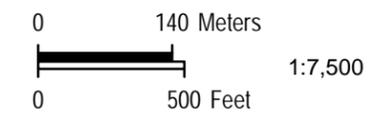
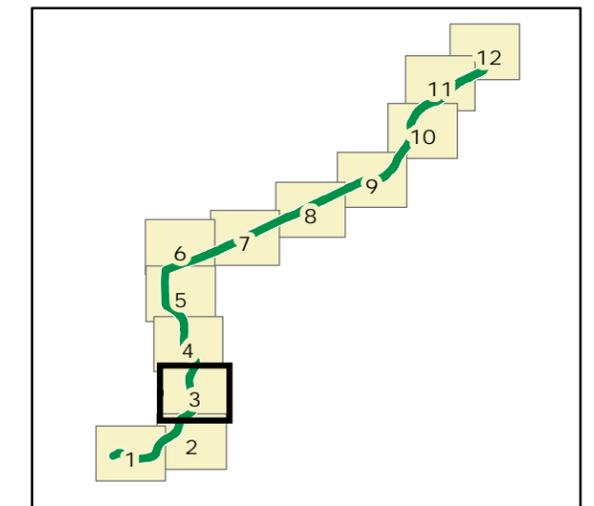
APE:
 Archaeological & Architecture/History

Figure 2

Southwest LRT Final EIS
Hennepin County, Minnesota



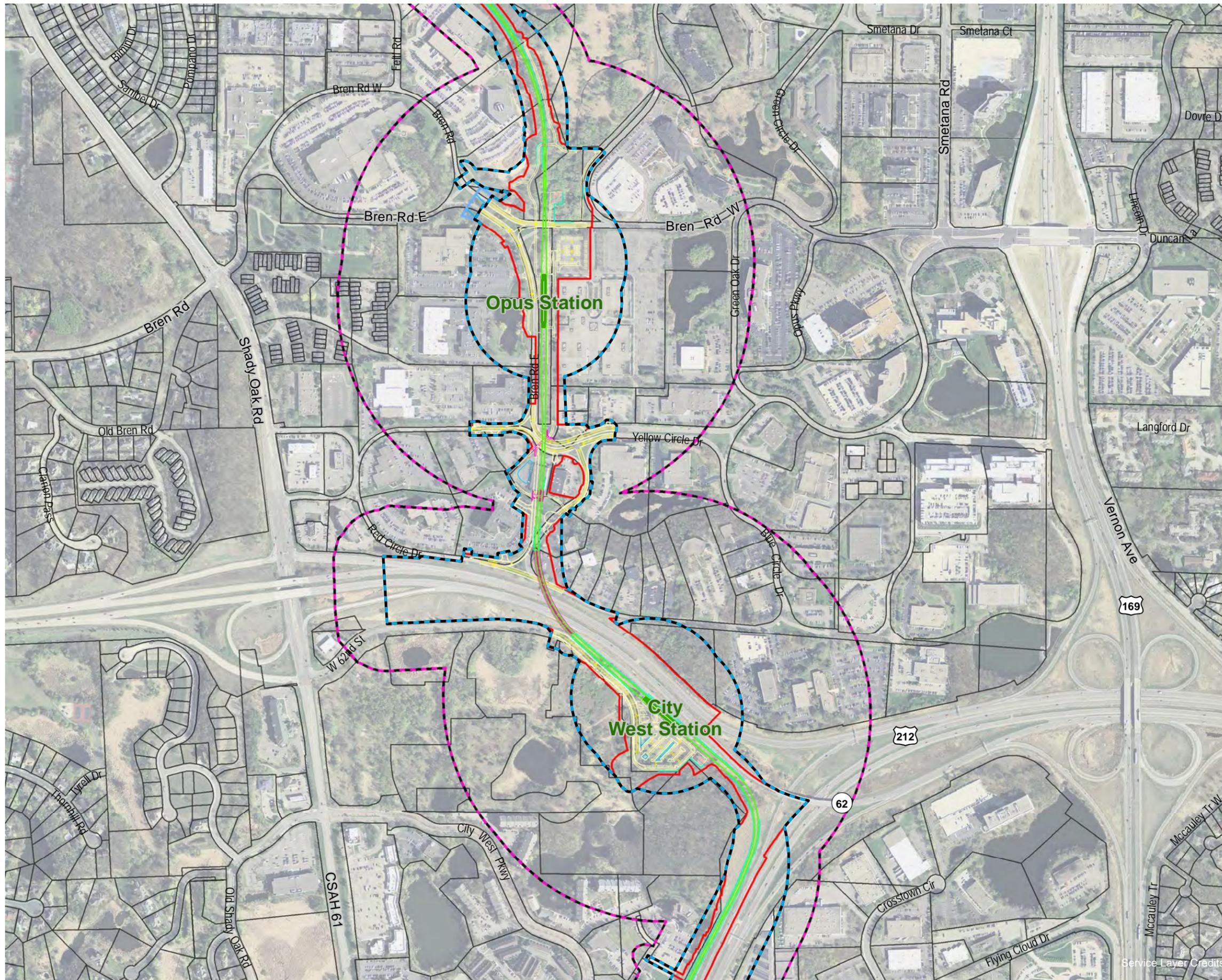
-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance



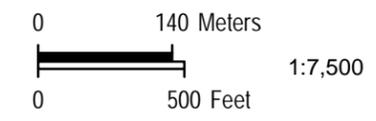
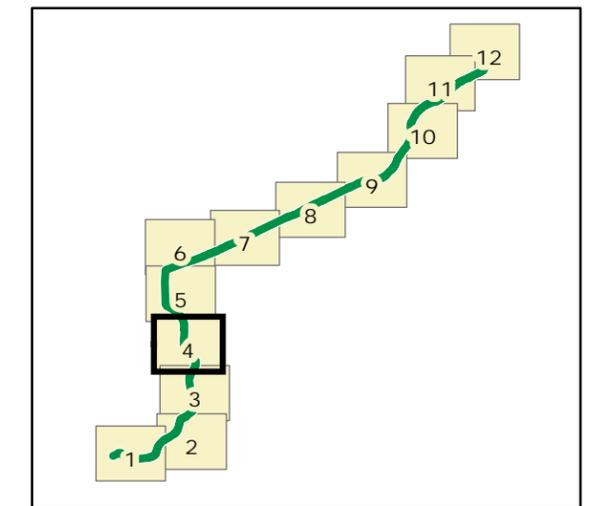
APE:
Archaeological & Architecture/History

Figure 3

Southwest LRT Final EIS
 Hennepin County, Minnesota



-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance



APE:
 Archaeological & Architecture/History

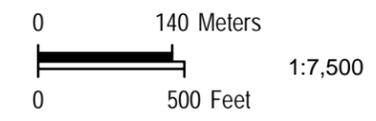
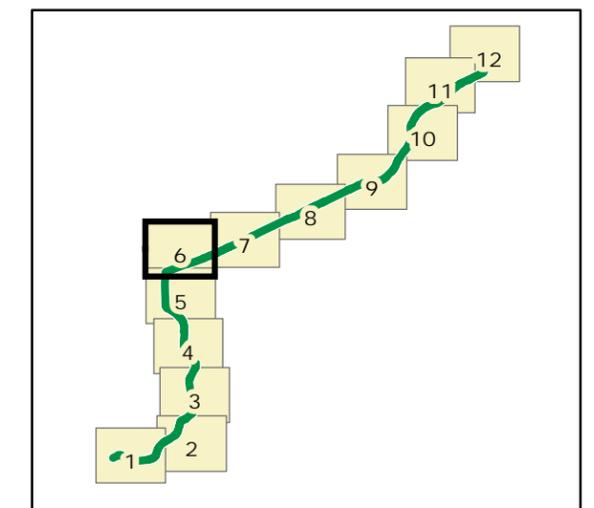
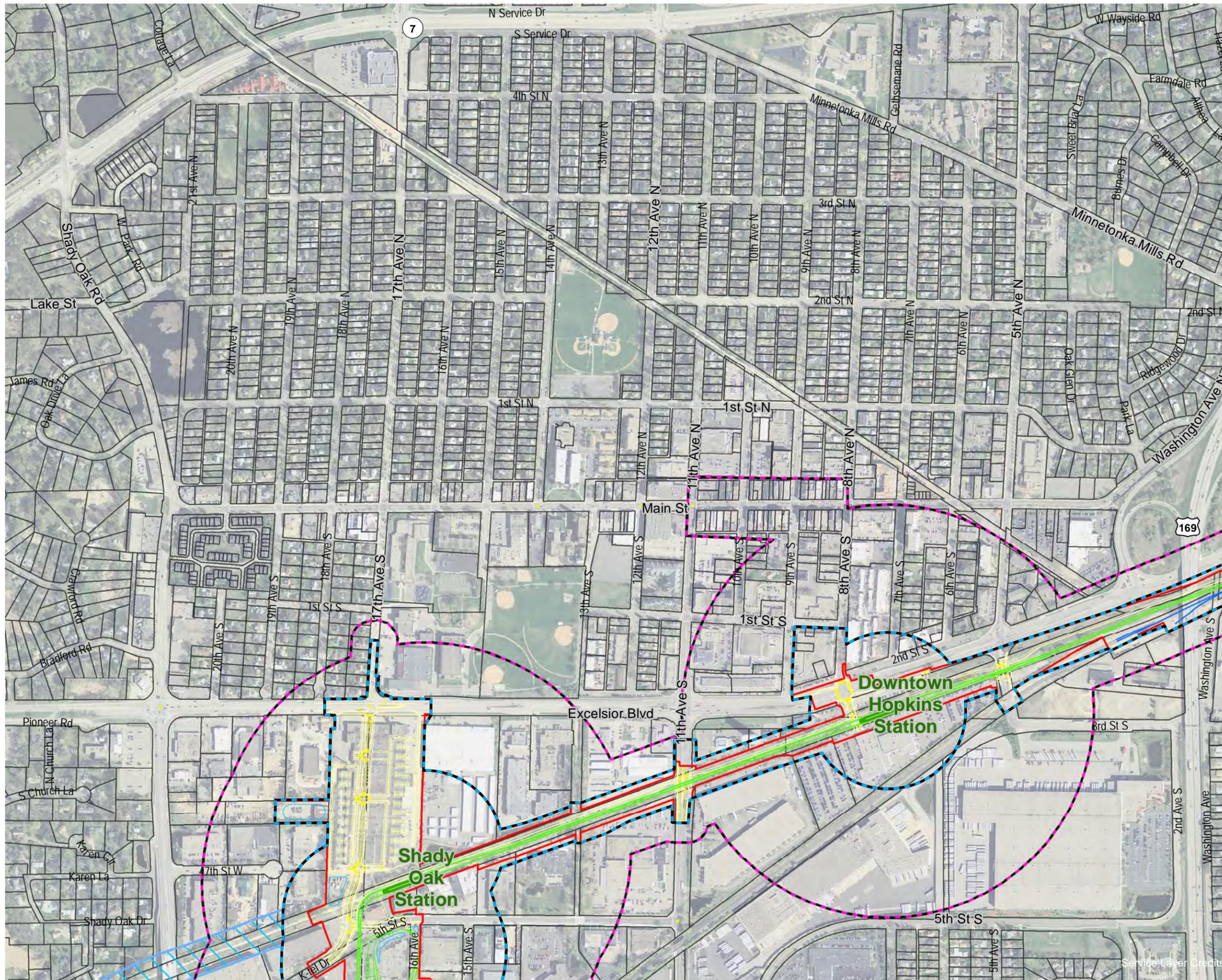
Source: Anderson Engineering; CH2M Hill; 106 Group

Map Produced by 106 Group; Map Modified by Metropolitan Council 3/18/2016

Figure 4

Southwest LRT Final EIS
 Hennepin County, Minnesota

-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance



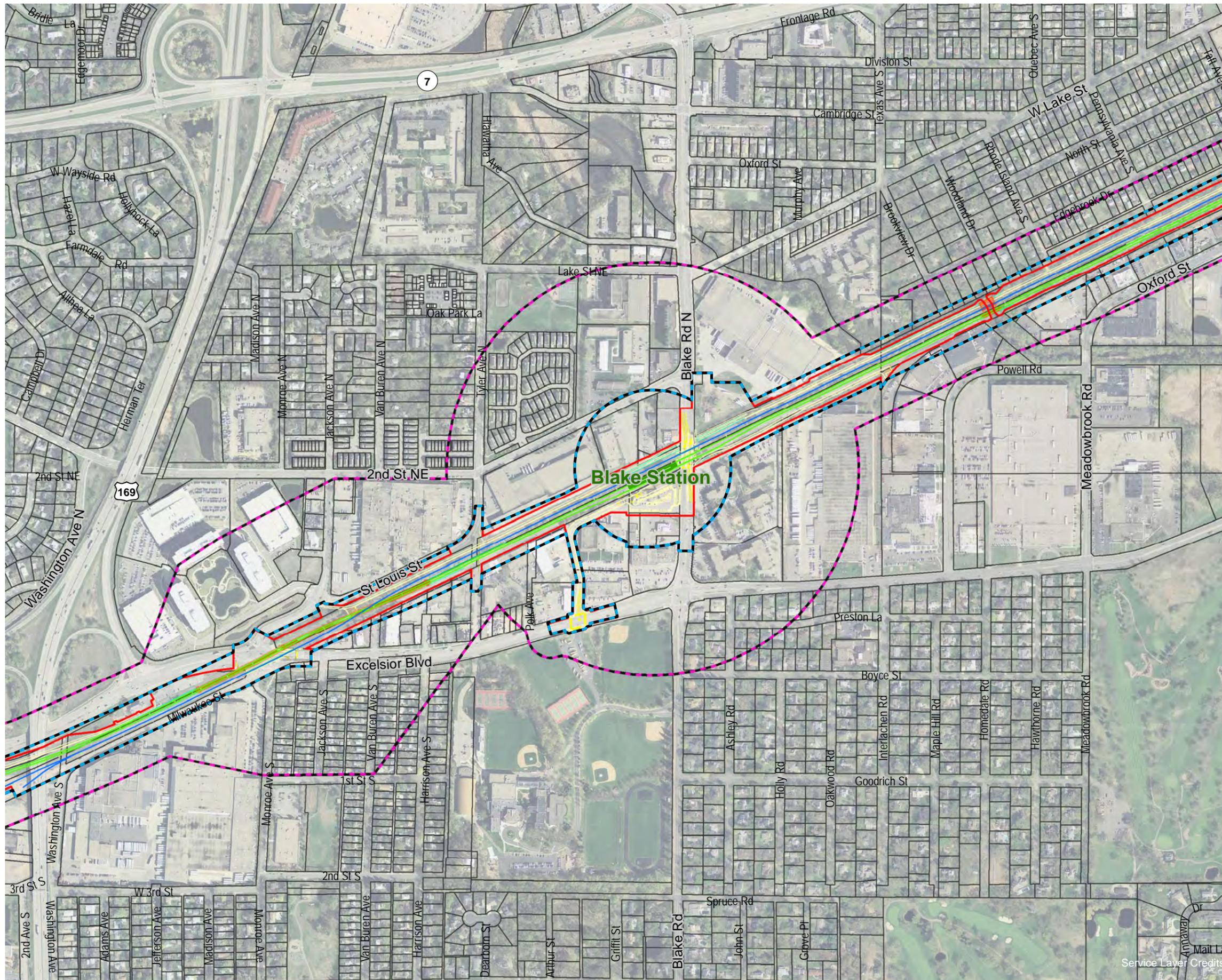
APE:
 Archaeological & Architecture/History

Source: Anderson Engineering; CH2M Hill; 106 Group

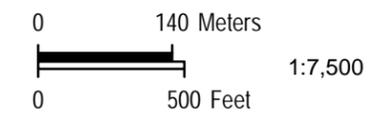
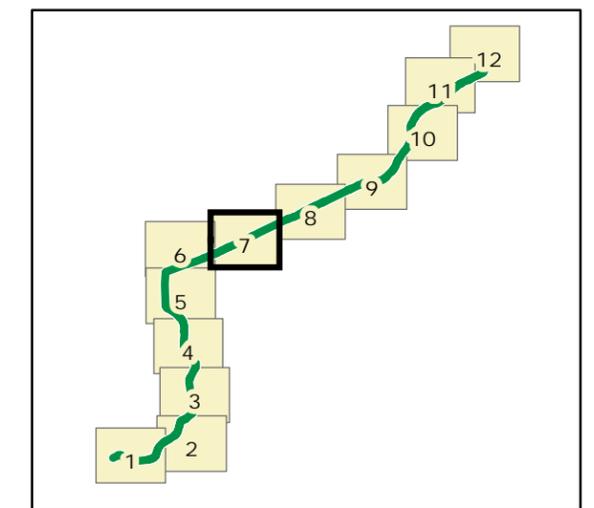
Map Produced by 106 Group; Map Modified by Metropolitan Council 3/18/2016

Figure 6

Southwest LRT Final EIS
 Hennepin County, Minnesota



-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance

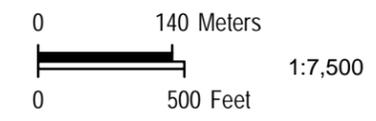
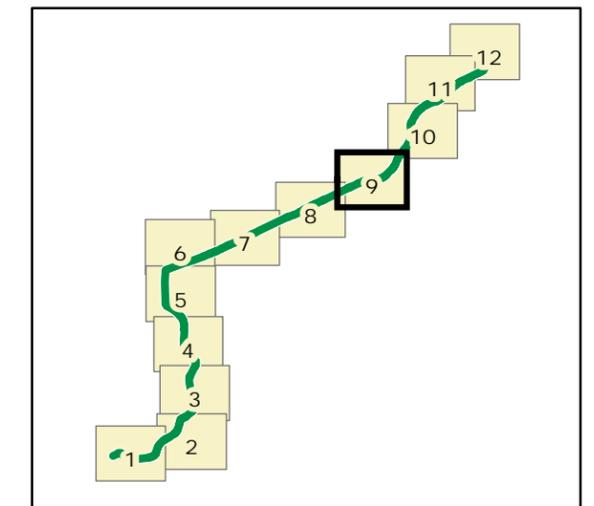
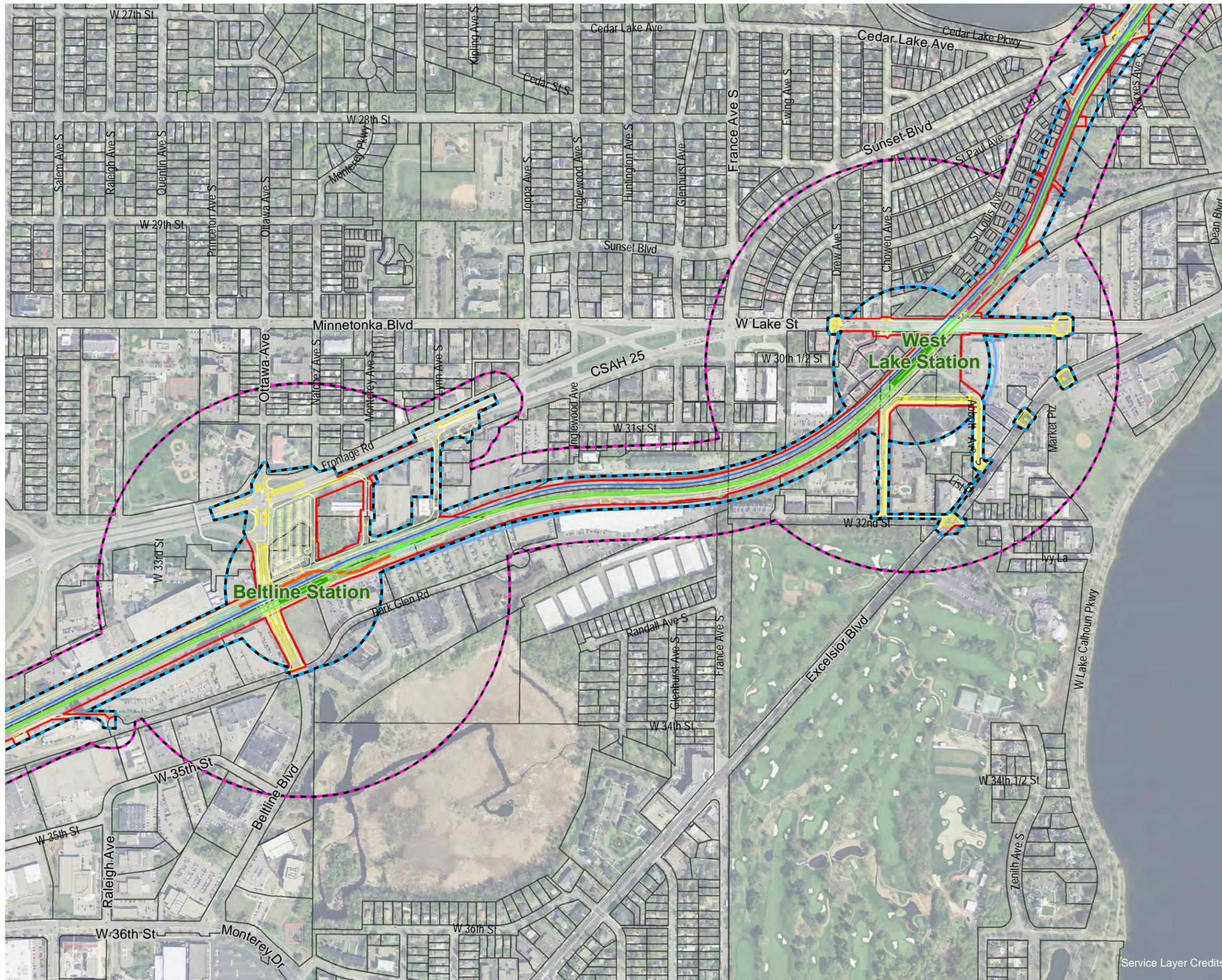


APE:
 Archaeological & Architecture/History

Figure 7

Southwest LRT Final EIS
 Hennepin County, Minnesota

-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance



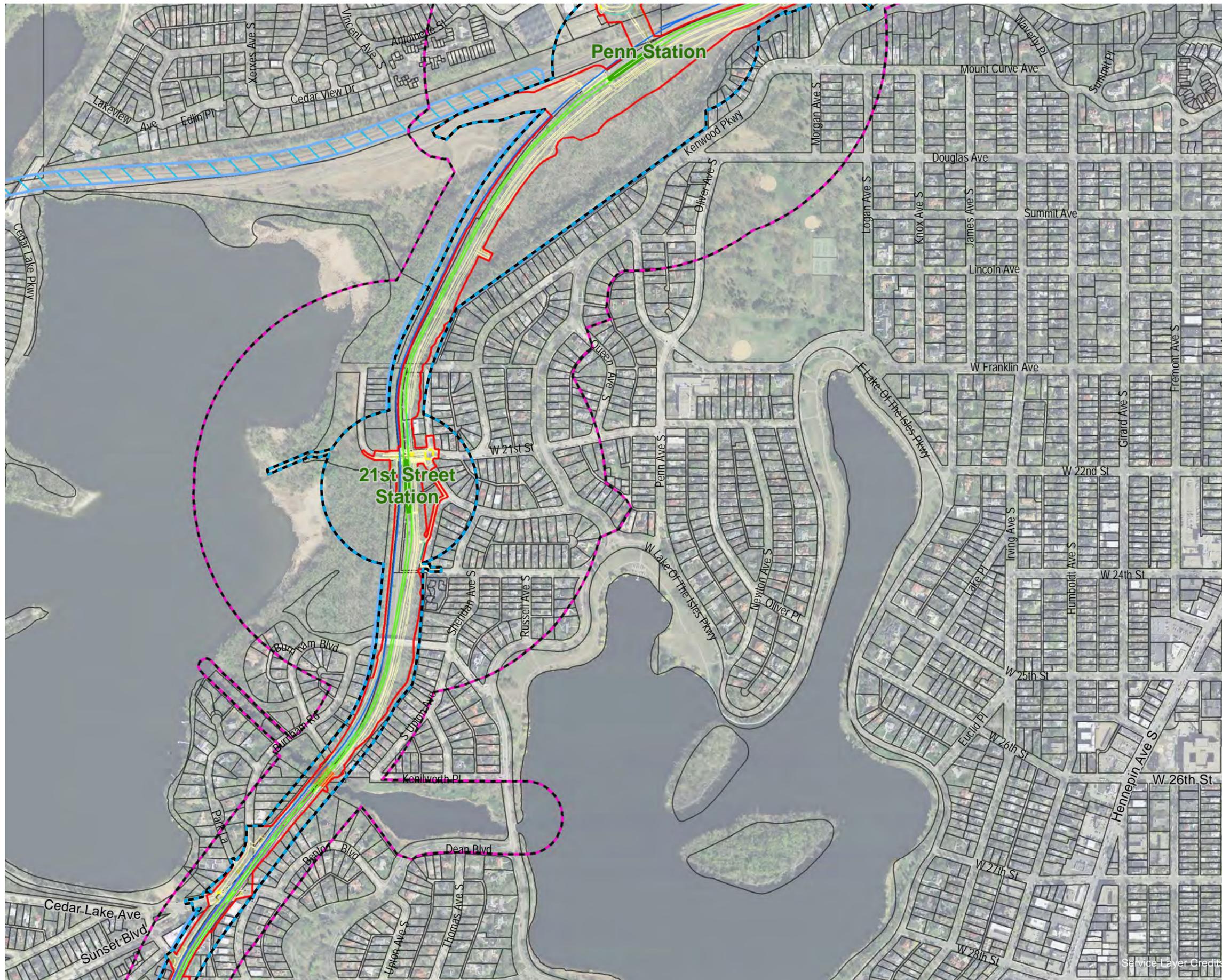
APE:
 Archaeological & Architecture/History

Source: Anderson Engineering; CH2M Hill; 106 Group

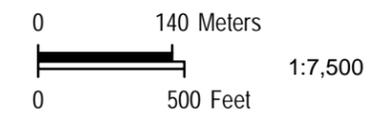
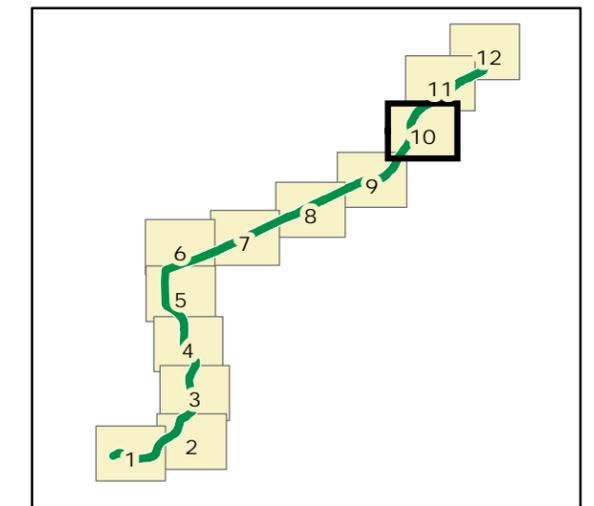
Map Produced by 106 Group; Map Modified by Metropolitan Council 3/18/2016

Figure 9

Southwest LRT Final EIS
 Hennepin County, Minnesota



-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance

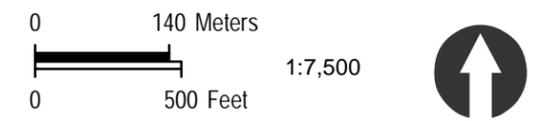
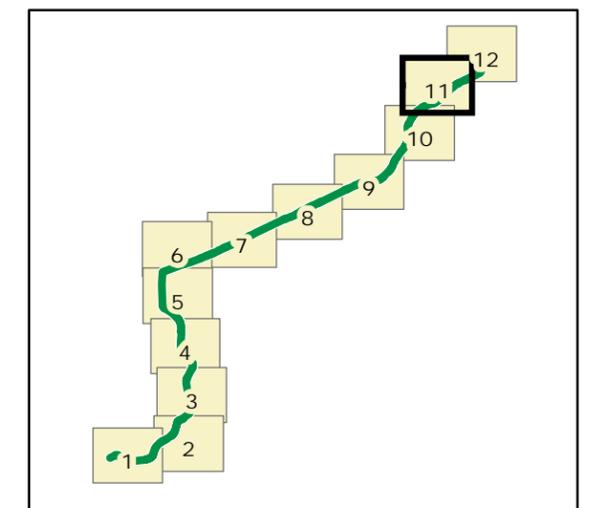
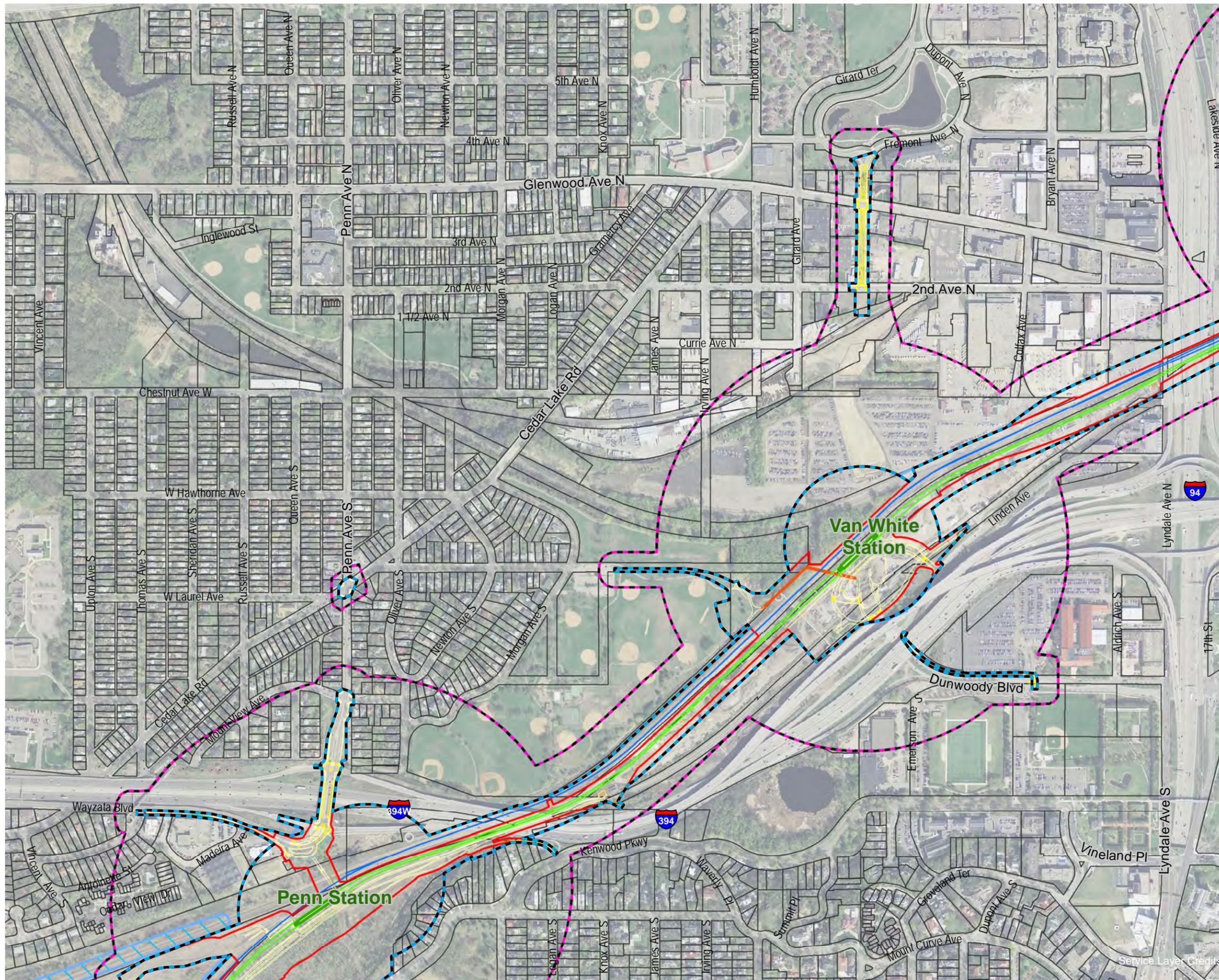


APE:
 Archaeological & Architecture/History

Figure 10

Southwest LRT Final EIS
 Hennepin County, Minnesota

-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance



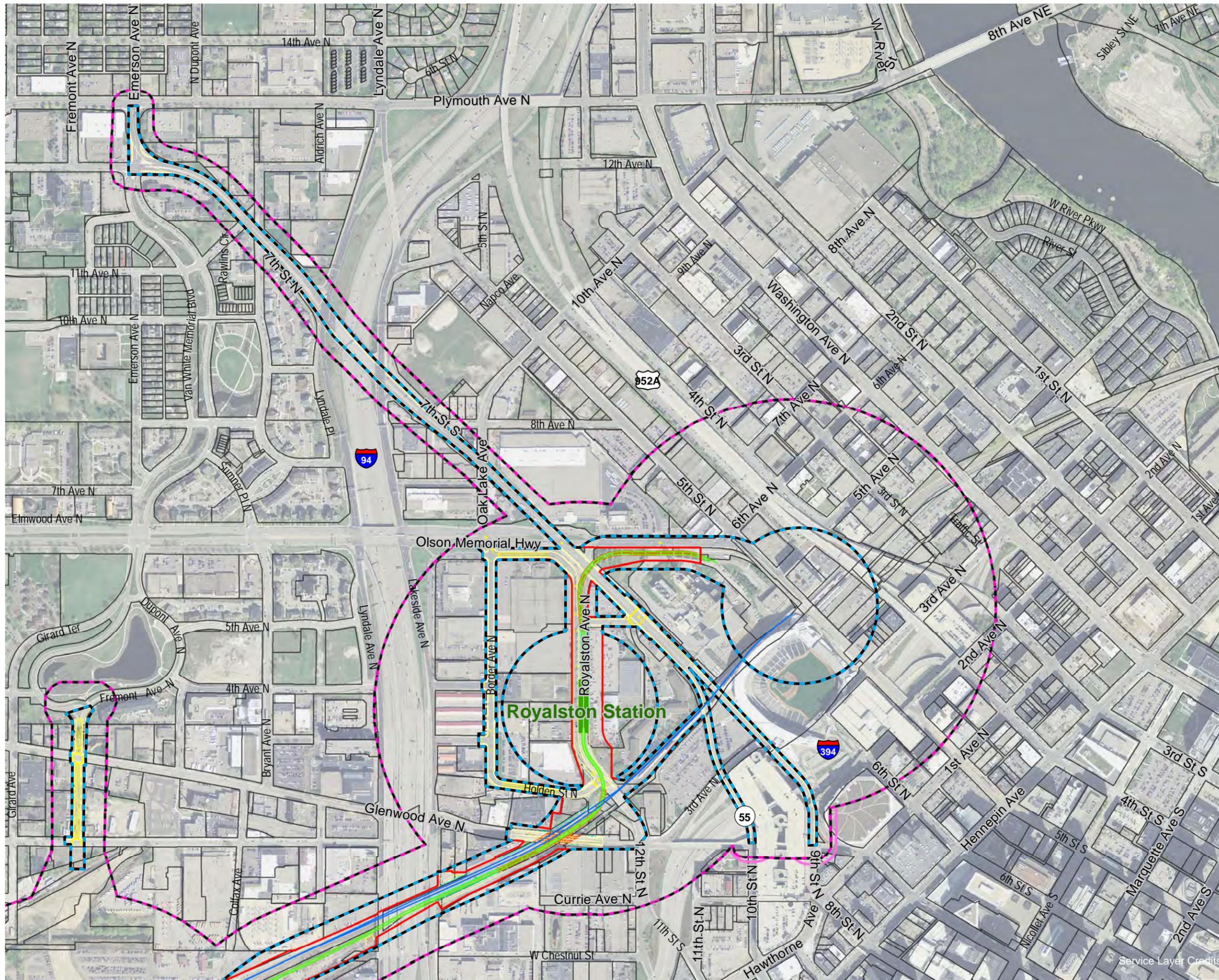
APE:
 Archaeological & Architecture/History

Source: Anderson Engineering; CH2M Hill; 106 Group

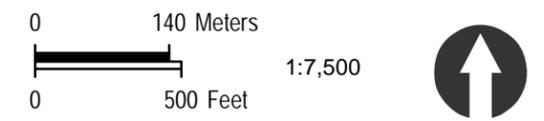
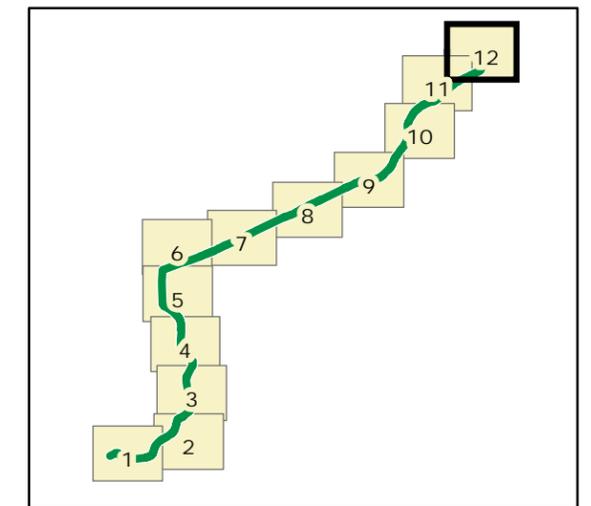
Map Produced by 106 Group; Map Modified by Metropolitan Council 3/18/2016

Figure 11

Southwest LRT Final EIS
Hennepin County, Minnesota



-  Final Archaeological APE (September 2015)
-  Other Previously Reviewed Archaeological Survey Area
-  Final Architecture/History APE (September 2015)
-  Other Previously Reviewed Architecture/History Survey Area
-  Limits of Disturbance



APE:
Archaeological & Architecture/History

Source: Anderson Engineering; CH2M Hill; 106 Group

Map Produced by 106 Group; Map Modified by Metropolitan Council 3/18/2016

Figure 12

ATTACHMENT B

Properties Listed in and Determined Eligible for Listing in the National Register of Historic Places

Properties Listed in and Determined Eligible for Listing in the National Register of Historic Places

Inventory No.	Property Name	Address	City	NRHP Status	
				Indiv.	Hist. Dist. ¹
	<i>National Historic Landmarks</i>				
HE-SLC-009	Peavey-Haglin Experimental Concrete Grain Elevator	Hwys. 100 and 7	St. Louis Park	Listed	—
	<i>Historic Districts</i>				
HE-HOC-027	Hopkins Commercial Historic District	800-1000 blocks of Mainstreet	Hopkins	—	Eligible
XX-PRK-001	Grand Rounds Historic District (GRHD)	—	Minneapolis	—	Eligible
HE-MPC-0441	Minneapolis Warehouse Historic District	Vicinity of 1 st Ave. N., N. 1 st St., 10 th Ave. N., and N. 6 th St.	Minneapolis	—	Listed
HE-MPC-9860	Lake of the Isles Residential Historic District (LIRHD)	Vicinity of E. / W. Lake of the Isles Pkwy.	Minneapolis	—	Eligible
HE-MPC-16387	St.P.M.&M. R.R. / G.N. Rwy. Historic District	—	Minneapolis	—	Eligible
XX-RRD-010 HE-MPC-16389	Osseo Branch of the St.P.M.&M. R.R. / G.N. Rwy. Historic District	—	Minneapolis	—	Eligible
HE-MPC-18059	Kenwood Parkway Residential Historic District (KPRHD)	1805-2216 Kenwood Pkwy.	Minneapolis	—	Eligible
	<i>Individual Resources</i>				
HE-HOC-014	M.&St.L. Rwy. Depot	9451 Excelsior Blvd.	Hopkins	Eligible	—
HE-HOC-026	Hopkins City Hall	1010 1 st St. S.	Hopkins	Eligible	—
HE-SLC-008	C.M.St.P.&P. R.R. Depot	6210 W. 37 th St.	St. Louis Park	Listed	—
HE-SLC-055	Hoffman Callan Building	3907 Hwy. 7	St. Louis Park	Eligible	—
HE-MPC-1796	Kenwood Parkway (GRHD and KPRHD element)	—	Minneapolis	—	Eligible GRHD:c KPRHD:c
HE-MPC-1797	Kenwood Park (GRHD element)	—	Minneapolis	—	Eligible GRHD:c
HE-MPC-1811	Lake Calhoun (GRHD element)	—	Minneapolis	—	Eligible GRHD:c
HE-MPC-1820	Cedar Lake (GRHD element)	—	Minneapolis	—	Eligible GRHD:c
HE-MPC-1822	Kenilworth Lagoon (GRHD and LIRHD element)	—	Minneapolis	—	Eligible GRHD:c LIRHD:c
HE-MPC-1824	Lake of the Isles (GRHD and LIRHD element)	—	Minneapolis	—	Eligible GRHD:c LIRHD:c
HE-MPC-1825	Lake of the Isles Parkway (GRHD and LIRHD element)	—	Minneapolis	—	Eligible GRHD:c LIRHD:c

¹ Within the *Individual Resources* section, “c” means the property is contributing to the identified historic district.

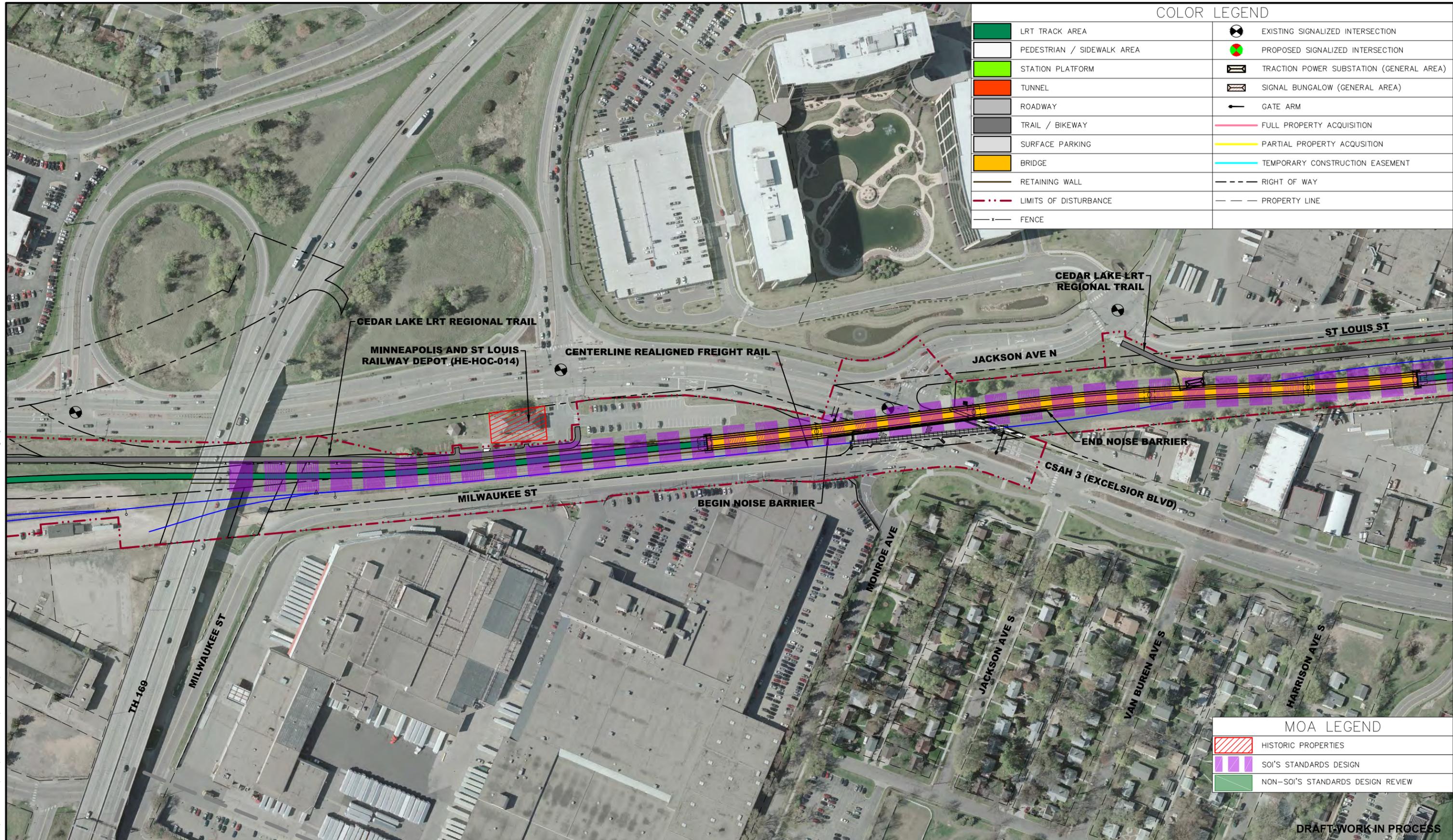
Inventory No.	Property Name	Address	City	NRHP Status	
				Indiv.	Hist. Dist. ¹
HE-MPC-1833	Cedar Lake Parkway (GRHD element)	—	Minneapolis	—	Eligible GRHD:c
HE-MPC-6068	Frieda and Henry J. Neils House	2801 Burnham Blvd.	Minneapolis	Listed	—
HE-MPC-6475	Kenwood Water Tower (Individually eligible and also a GRHD element)	1724 Kenwood Pkwy.	Minneapolis	Eligible	Eligible GRHD:c
HE-MPC-6603	Frank W. and Julia C. Shaw House	2036 Queen Ave. S.	Minneapolis	Eligible	—
HE-MPC-6641	William Hood Dunwoody Institute	818 Dunwoody Blvd.	Minneapolis	Eligible	—
HE-MPC-6766	Mahalia and Zachariah Saveland House	2405 W. 22 nd St.	Minneapolis	Eligible	—
HE-MPC-6901	Park Board Bridge No. 4 / Bridge L5729 (Individually eligible and also a GRHD and LIRHD element)	—	Minneapolis	Eligible	Eligible GRHD:c LIRHD:c
HE-MPC-8763	Mac and Helen Martin House	1828 Mt. Curve Ave.	Minneapolis	Eligible	—
HE-MPC-17102	Minikahda Club	3205 Excelsior Blvd.	Minneapolis	Eligible	—
21HE0409	—	—	Minneapolis	Eligible	—
21HE0436	—	—	Minneapolis	Eligible	—
21HE0437	—	—	Minneapolis	Eligible	—

ATTACHMENT C

Project Design Development Review Areas

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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		



MOA LEGEND

	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW

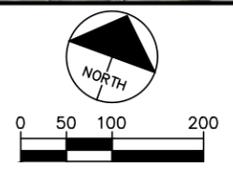
DRAFT WORK IN PROCESS

Mar 11 2016 09:06 am V:\3400_ADC\CAD\SEGMENT E1\EXHIBITS\ROLL PLOTS\EXHIBITS\E1-ROLL PLOT-11x17-FEIS-HISTORIC.dwg By: V-MatterEK



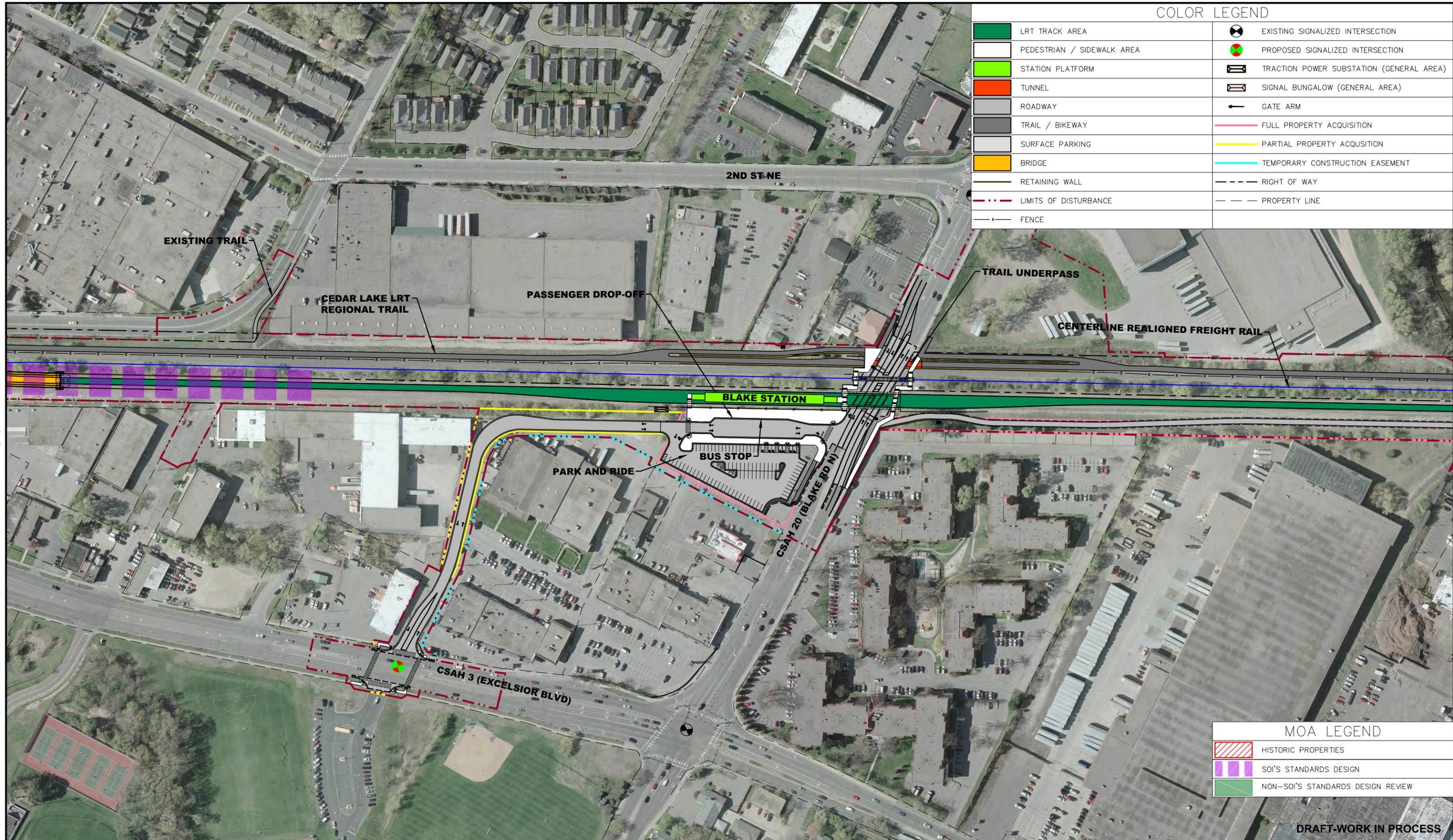
SOUTHWEST LIGHT RAIL
 MINNEAPOLIS & ST. LOUIS RAILWAY DEPOT AND ENVIRONS
 PROJECT ELEMENTS TO BE DESIGNED TO SOI'S STANDARDS
 ATTACHMENT C

Rev 0
03/10/2016



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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		



MOA LEGEND

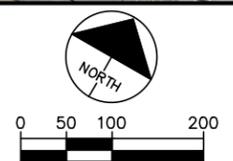
	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW

DRAFT-WORK IN PROCESS



SOUTHWEST LIGHT RAIL
 MINNEAPOLIS & ST. LOUIS RAILWAY DEPOT AND ENVIRONS
 PROJECT ELEMENTS TO BE DESIGNED TO SOI'S STANDARDS
 ATTACHMENT C

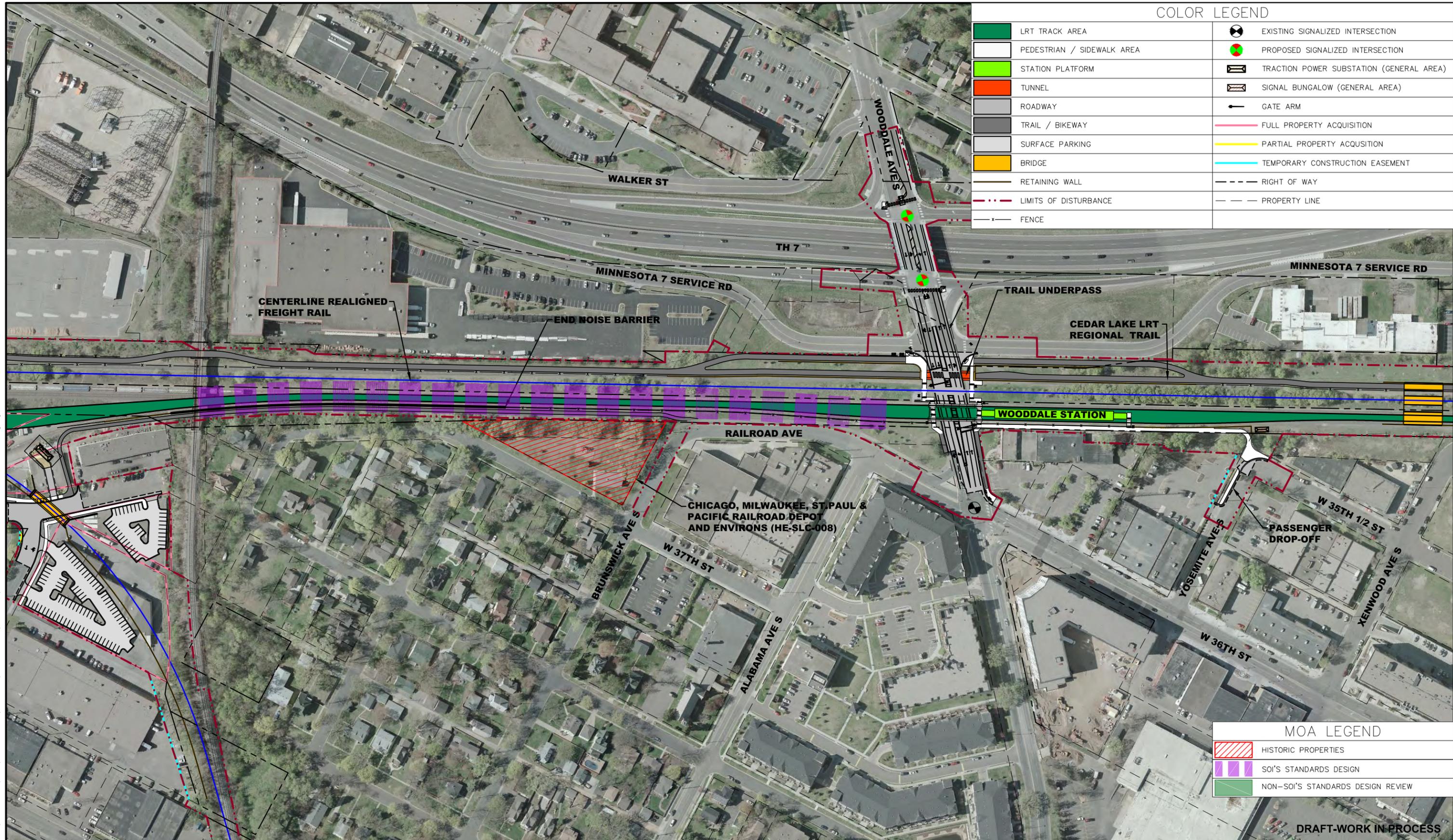
Rev 0
 03/10/2016



Mar, 11 2016 09:07 am V:\3400_ADC\CAD\SEGMENT E1\EXHIBITS\ROLL PLOTS\EXHIBITS\E1-ROLL PLOT-11x17-FEIS-HISTORIC.dwg By: V-MatterEK

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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		



MOA LEGEND

	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW

DRAFT-WORK IN PROCESS

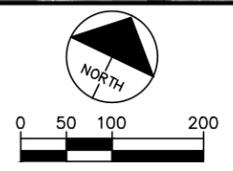
Mar, 11 2016 09:29 am V:\3400_ADC\CAD\SEGMENT E2\EXHIBITS\ROLL PLOTS\EXHIBITS\E2-ROLL_PLOT-11x17-FEIS-HISTORIC-17.dwg By: V-MatterEK



SOUTHWEST LIGHT RAIL

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC RAILROAD DEPOT AND ENVIRONS
PROJECT ELEMENTS TO BE DESIGNED TO SOI'S STANDARDS
ATTACHMENT C

Rev 0
03/10/2016



Mar, 11 2016 09:39 am V:\3400_ADC\CAD\SEGMENT E3\EXHIBITS\ROLL PLOTS\EXHIBITS\E3-ROLL PLOT-11x17-FEIS-HISTORIC-20-21.dwg By: V-MatterEK



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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		

MOA LEGEND

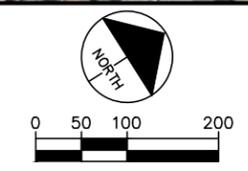
	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW
	HISTORIC DISTRICT GRAND ROUNDS

DRAFT-WORK IN PROCESS



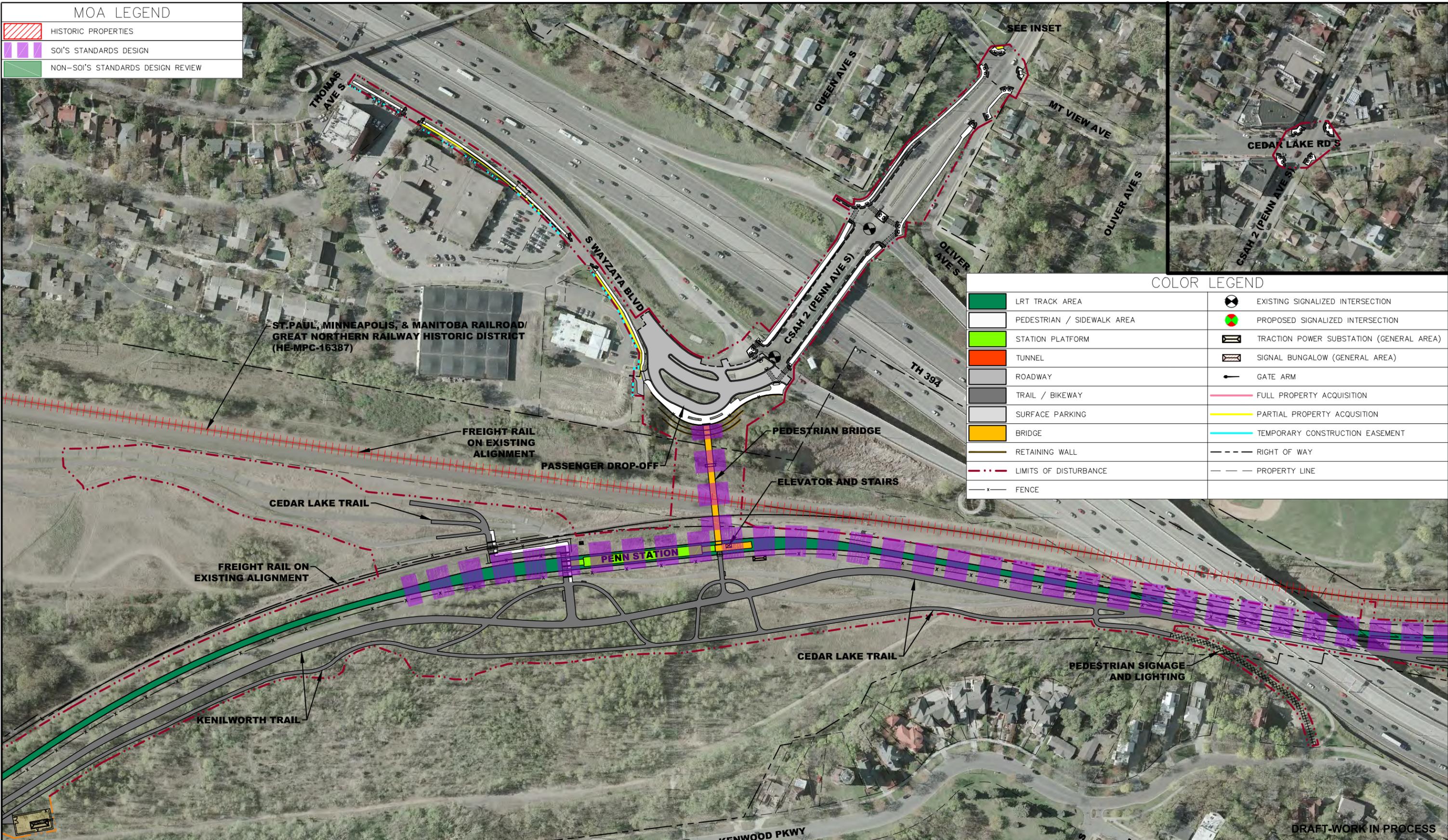
SOUTHWEST LIGHT RAIL
 CHAIN OF LAKES SEGMENT, AND ENVIRONS
 PROJECT ELEMENTS TO BE DESIGNED TO SOI'S STANDARDS
 ATTACHMENT C

Rev 0
03/10/2016



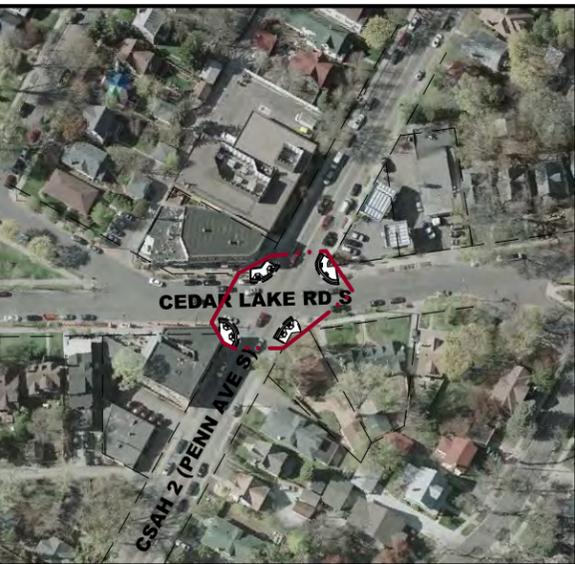
MOA LEGEND

	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW

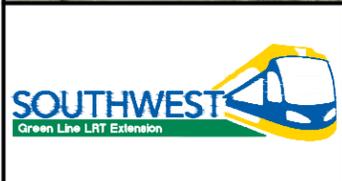


COLOR LEGEND

	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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		

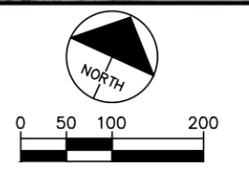


Mar, 11 2016 09:53 am V:\3400_ADC\CAD\SEGMENT E4\EXHIBITS\ROLL PLOTS\EXHIBITS E4-ROLL PLOT-11x17-FEIS-HISTORIC-23&26.dwg By: V-MatterEK



SOUTHWEST LIGHT RAIL
 ST. PAUL, MINNEAPOLIS, & MANITOBA RAILROAD/GREAT NORTHERN RAILWAY
 HISTORIC DISTRICT, AND ENVIRONS
 PROJECT ELEMENTS TO BE DESIGNED TO SOI'S STANDARDS
 ATTACHMENT C

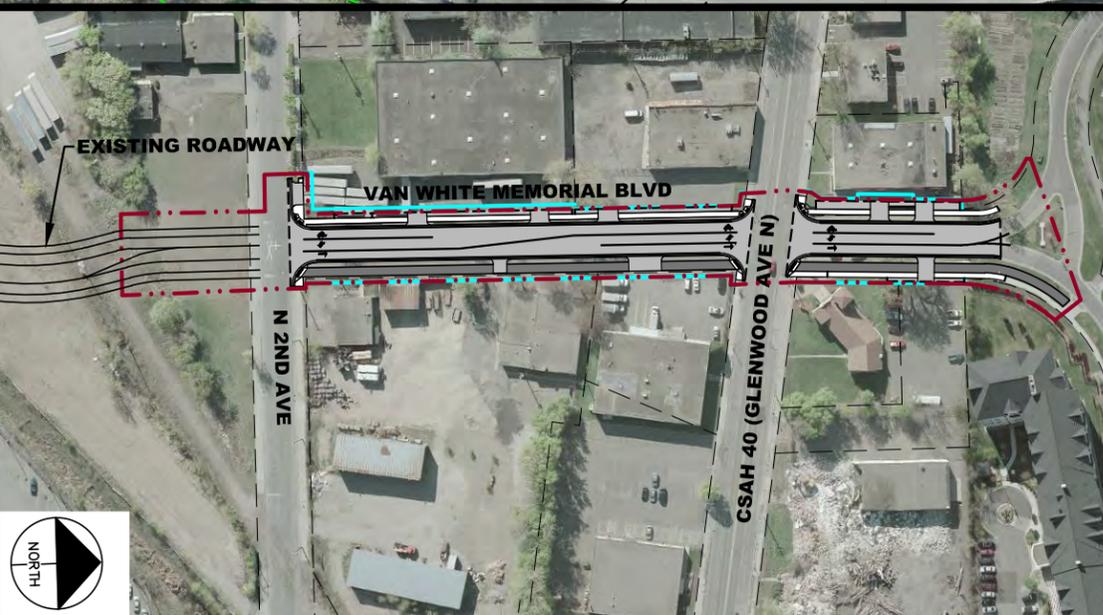
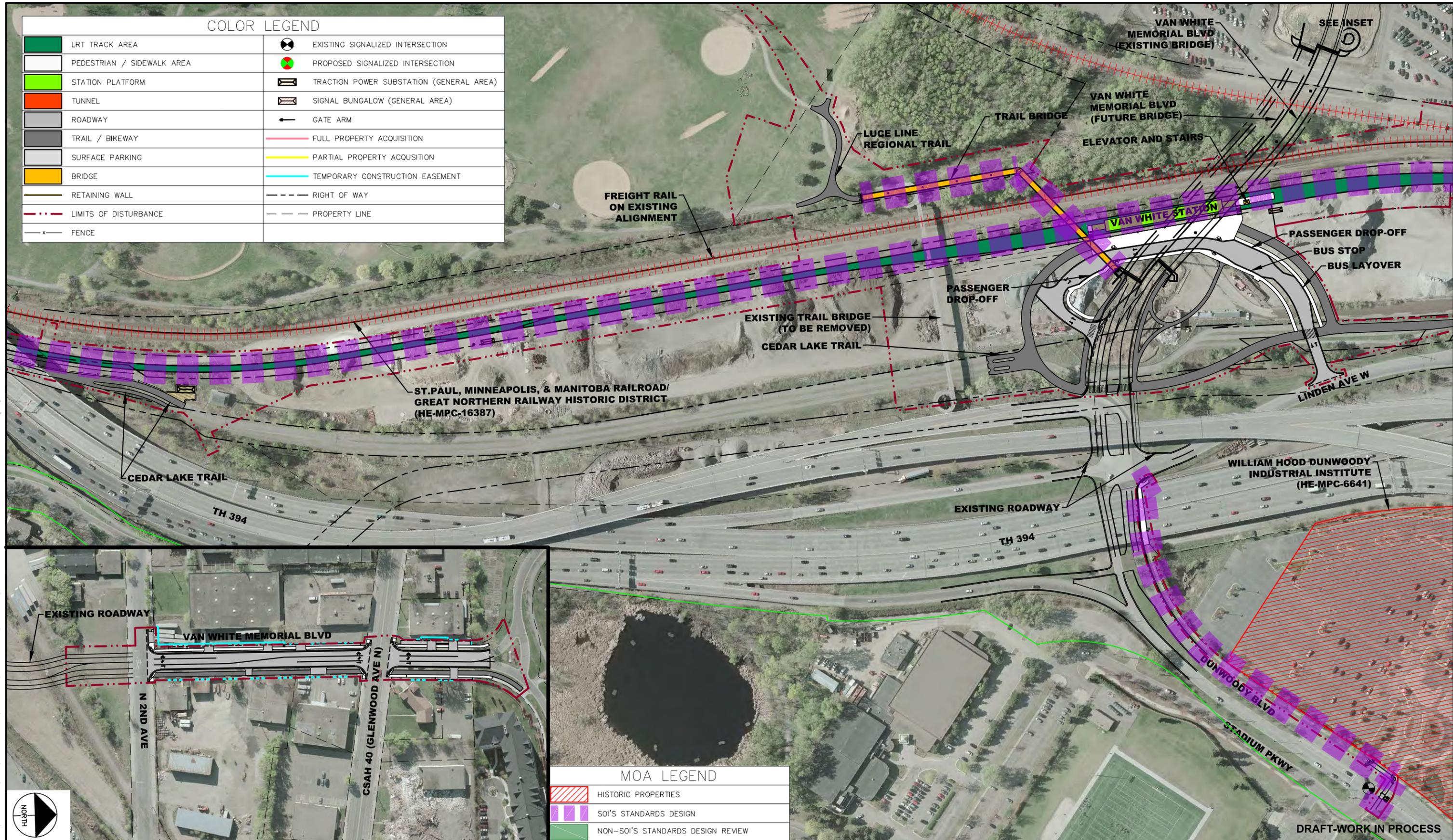
Rev 0
03/10/2016



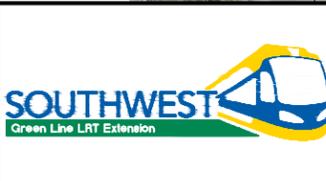
DRAFT-WORK IN PROCESS

Mar, 11 2016 10:03 am V:\3400_ADC\CAD\SEGMENT E4\EXHIBITS\ROLL PLOTS\EXHIBITS\E4-ROLL PLOT-11x17-FEIS-HISTORIC-24-25.dwg By: V-MatterEK

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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		

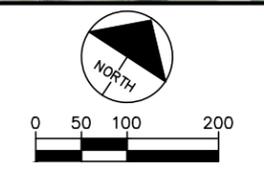


MOA LEGEND	
	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW



SOUTHWEST LIGHT RAIL
 ST. PAUL, MINNEAPOLIS, & MANITOBA RAILROAD/GREAT NORTHERN RAILWAY
 HISTORIC DISTRICT, AND WILLIAM HOOD DUNWOODY INDUSTRIAL INSTITUTE, AND ENVIRONS
 PROJECT ELEMENTS TO BE DESIGNED TO SOI'S STANDARDS
 ATTACHMENT C

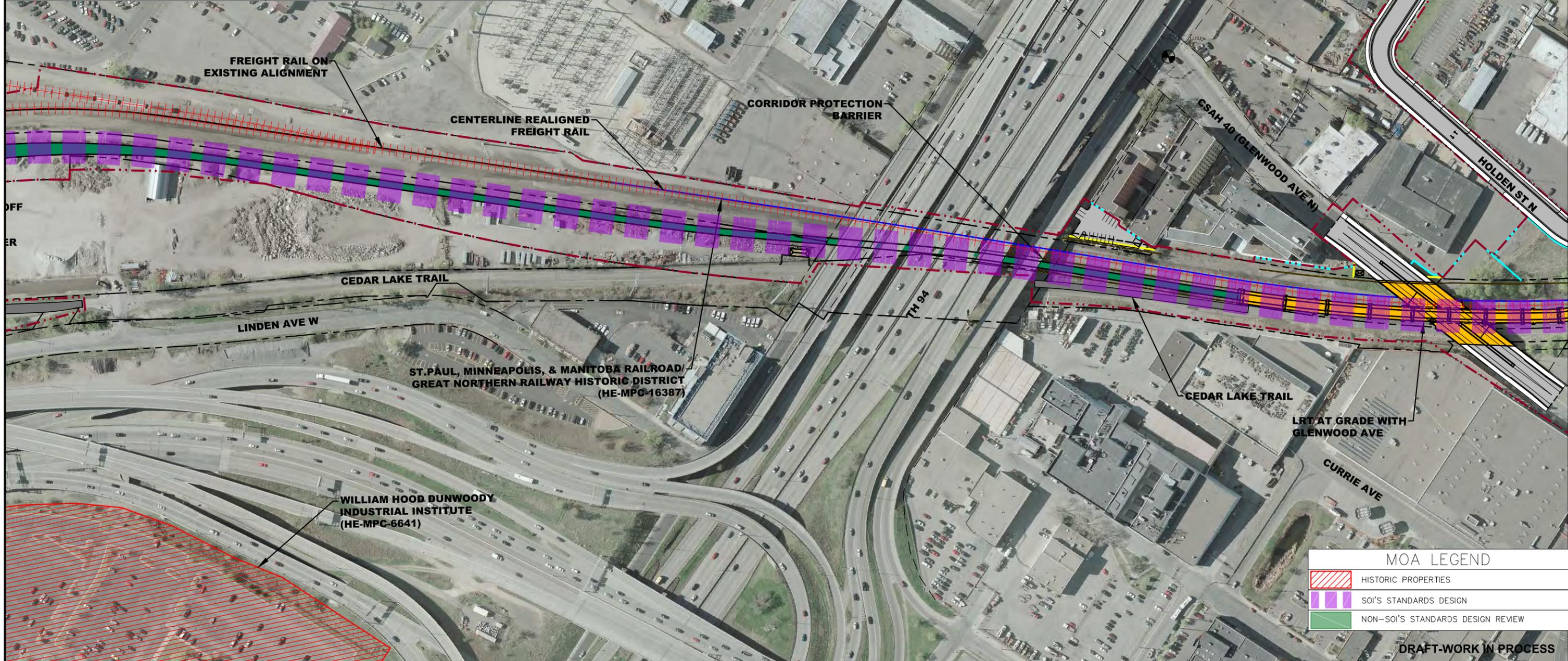
Rev 0
03/10/2016



DRAFT-WORK IN PROCESS

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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		



MOA LEGEND

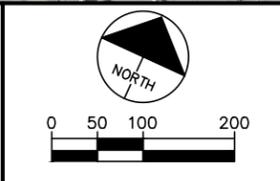
	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW

DRAFT-WORK IN PROCESS



SOUTHWEST LIGHT RAIL
 ST. PAUL, MINNEAPOLIS, & MANITOBA RAILROAD/GREAT NORTHERN RAILWAY HISTORIC DISTRICT, AND WILLIAM HOOD DUNWOODY INDUSTRIAL INSTITUTE, AND ENVIRONS
 PROJECT ELEMENTS TO BE DESIGNED TO SOI'S STANDARDS
 ATTACHMENT C

Rev 0
 03/10/2016



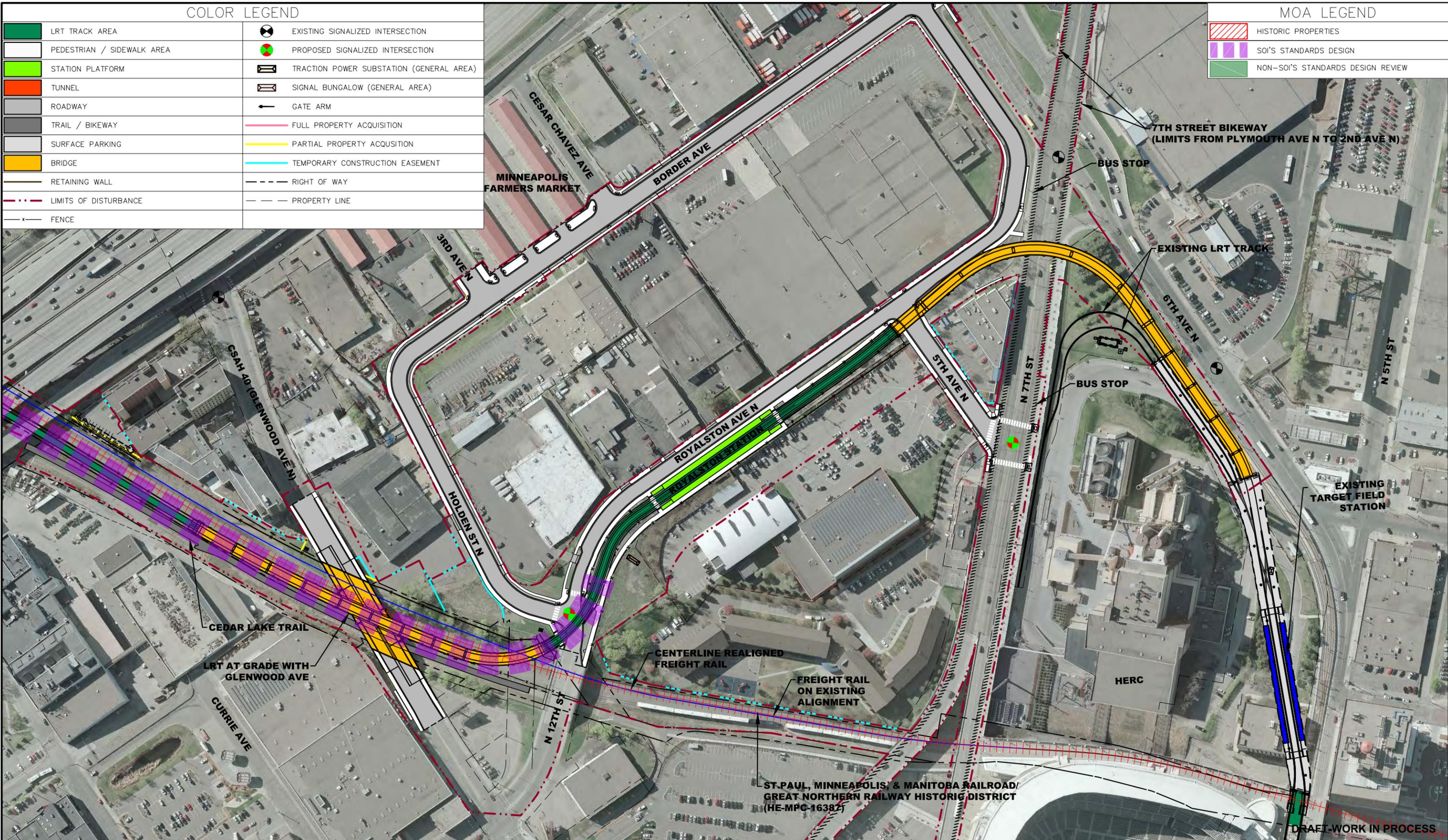
Mar, 11 2016 10:02 am V:\3400_ADC\CAD\SEGMENT E4\EXHIBITS\ROLL PLOTS\EXHIBITS\E4-ROLL PLOT-11x17-FEIS-HISTORIC-24-25.dwg By: V-MatterEK

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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		

MOA LEGEND

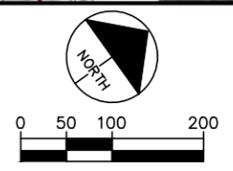
	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW



SOUTHWEST LIGHT RAIL

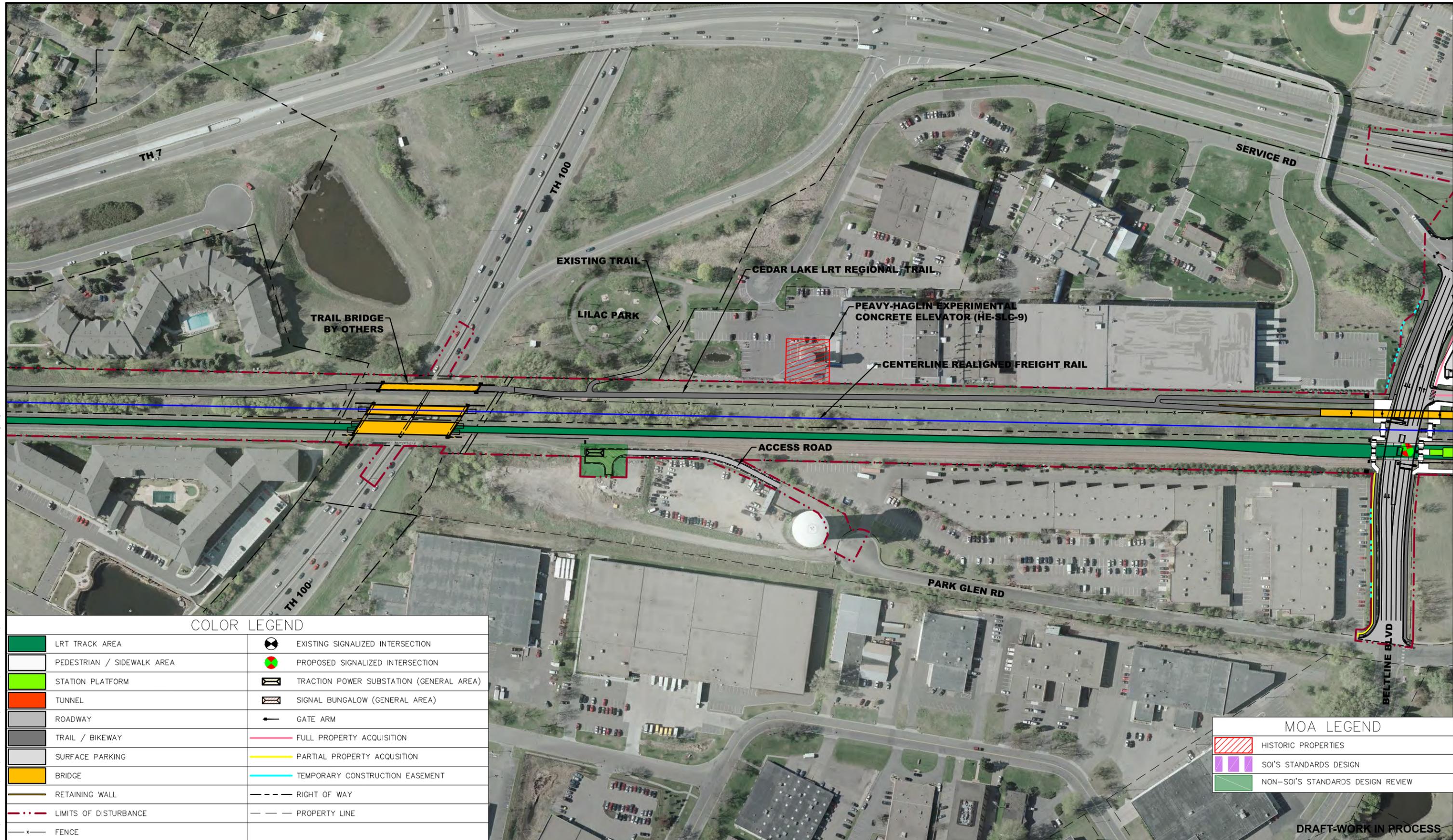
ST. PAUL, MINNEAPOLIS, & MANITOBA RAILROAD/GREAT NORTHERN RAILWAY
 HISTORIC DISTRICT, AND ENVIRONS
 PROJECT ELEMENTS TO BE DESIGNED TO SOI'S STANDARDS
 ATTACHMENT C

Rev 0
 03/10/2016



Mar, 11 2016 09:54 am V:\3400_ADC\CAD\SEGMENT E4\EXHIBITS\ROLL PLOTS\EXHIBITS\E4-ROLL PLOT-11x17-FEIS-HISTORIC-23&26.dwg By: V-MatterEK

Mar, 11 2016 09:22 am V:\3400_ADC\CAD\SEGMENT E2\EXHIBITS\ROLL PLOTS\EXHIBITS\E2-ROLL PLOT-11x17-FEIS-HISTORIC-18.dwg By: V-MatterEK



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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		

MOA LEGEND

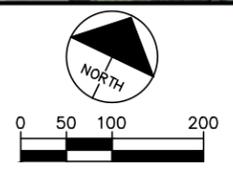
	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW

DRAFT-WORK IN PROCESS



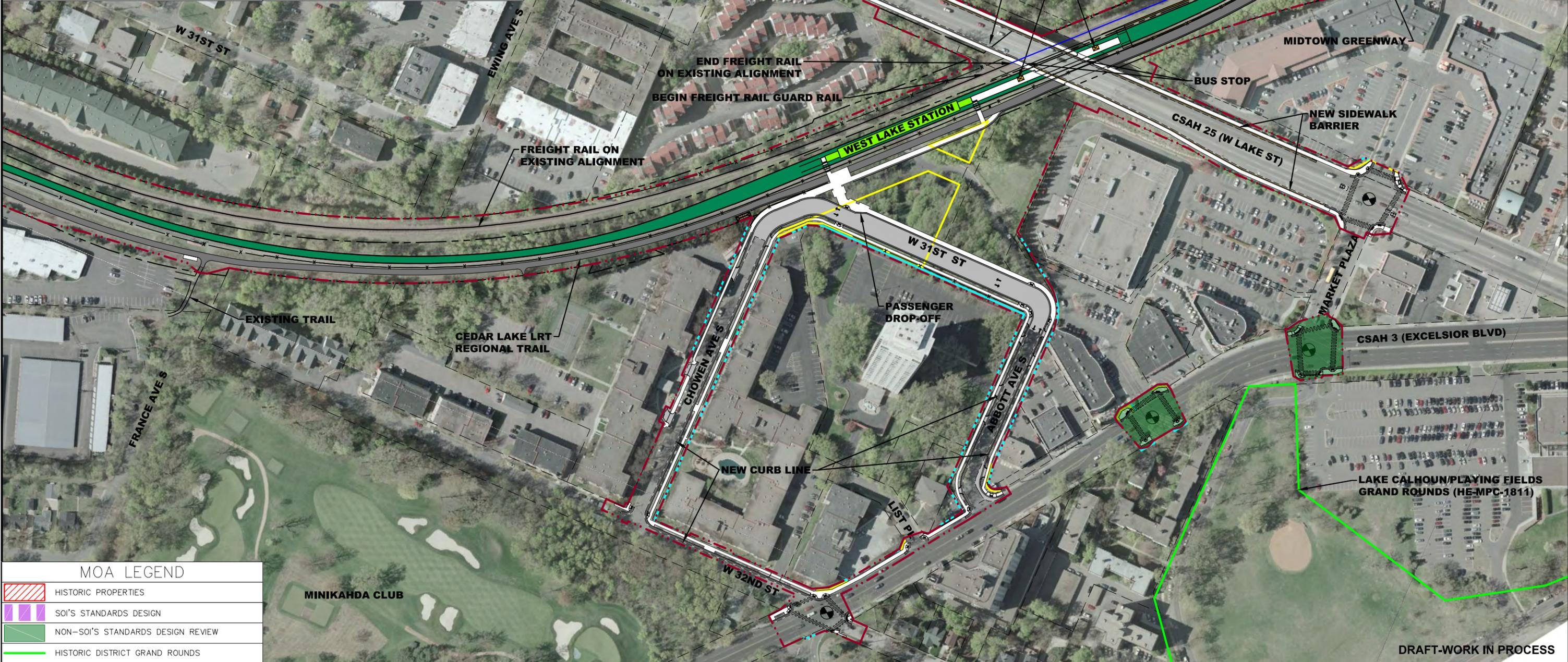
SOUTHWEST LIGHT RAIL
 PEAVY-HAGLIN EXPERIMENTAL CONCRETE ELEVATOR
 NON-SOI'S STANDARDS DESIGN REVIEW
 CITY OF ST. LOUIS PARK - TPSS SW314
 ATTACHMENT C

Rev 0
03/10/2016



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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		



MOA LEGEND

	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW
	HISTORIC DISTRICT GRAND ROUNDS

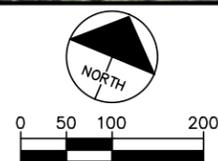
DRAFT-WORK IN PROCESS



SOUTHWEST LIGHT RAIL

LAKE CALHOUN PLAYING FIELDS
NON-SOI'S STANDARDS DESIGN REVIEW
EXCELSIOR BLVD INTERSECTIONS
ATTACHMENT C

Rev 0
03/10/2016



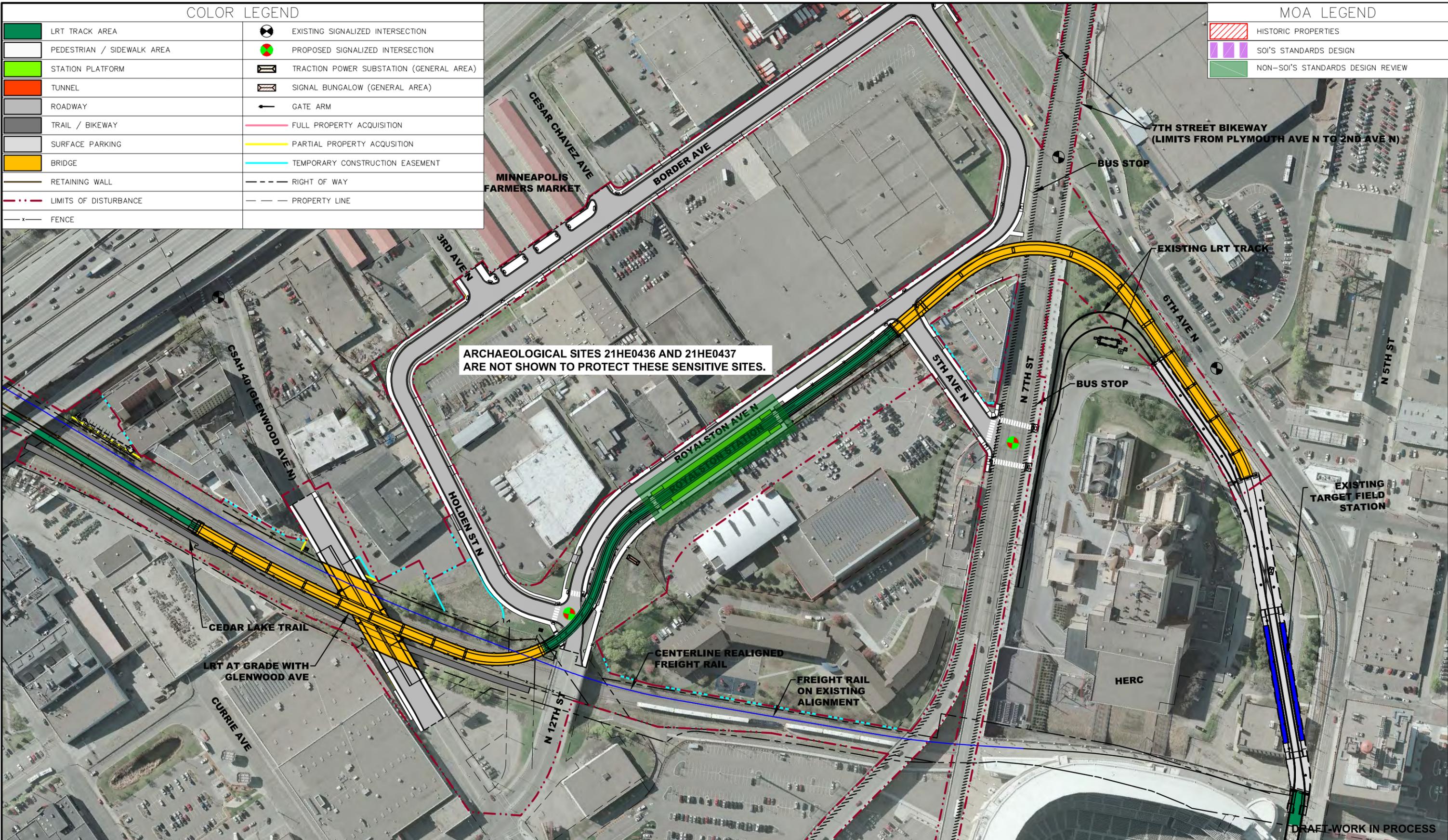
Mar, 11 2016 09:31 am V:\3400_ADC\CAD\SEGMENT E3\EXHIBITS\ROLL PLOTS\EXHIBITS\E3-ROLL PLOT-11x17-FEIS-HISTORIC-20-21.dwg By: V-MatterEK

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		GATE ARM
	TRAIL / BIKEWAY		FULL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		TEMPORARY CONSTRUCTION EASEMENT
	RETAINING WALL		RIGHT OF WAY
	LIMITS OF DISTURBANCE		PROPERTY LINE
	FENCE		

MOA LEGEND

	HISTORIC PROPERTIES
	SOI'S STANDARDS DESIGN
	NON-SOI'S STANDARDS DESIGN REVIEW

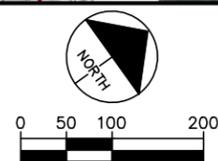


DRAFT-WORK IN PROCESS

SOUTHWEST LIGHT RAIL

ARCHAEOLOGICAL SITES
 NON-SOI'S STANDARDS DESIGN REVIEW
 CITY OF MINNEAPOLIS - ROYALSTON STATION
 ATTACHMENT C

Rev 0
 03/10/2016

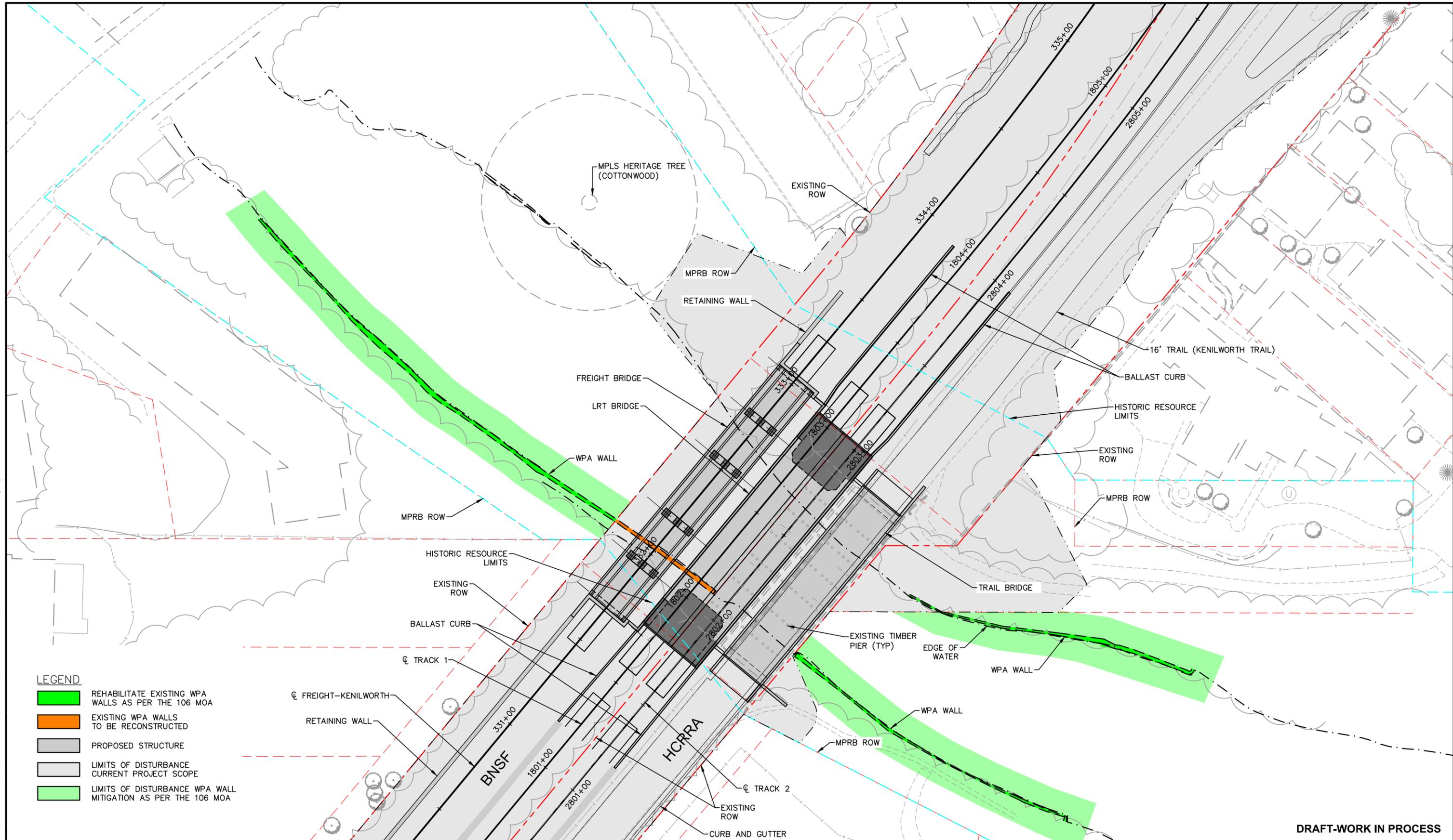


Mar. 15 2016 10:49 am V:\3400_ADC\CAD\SEGMENT E4\EXHIBITS\ROLL PLOTS\EXHIBITS\E4-ROLL_PLOT-11x17-FEIS-HISTORIC-23&26.dwg By: V-MatterEK

ATTACHMENT D

Kenilworth Lagoon WPA Rustic Style Retaining Wall Reconstruction and Rehabilitation Limits

Mar, 11 2016 08:35 am V:\3400_ADC\CAD\SEGMENT E3\EXHIBITS\CHANNEL BRIDGE\E3-CIV-BRIDGE_WPA WALLS.dwg By: V-MozzettiBR



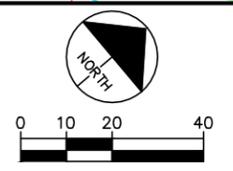
- LEGEND**
- REHABILITATE EXISTING WPA WALLS AS PER THE 106 MOA
 - EXISTING WPA WALLS TO BE RECONSTRUCTED
 - PROPOSED STRUCTURE
 - LIMITS OF DISTURBANCE CURRENT PROJECT SCOPE
 - LIMITS OF DISTURBANCE WPA WALL MITIGATION AS PER THE 106 MOA

DRAFT-WORK IN PROCESS



SOUTHWEST LIGHT RAIL
LAGOON/CHANNEL BRIDGE - WPA WALLS
ATTACHMENT D

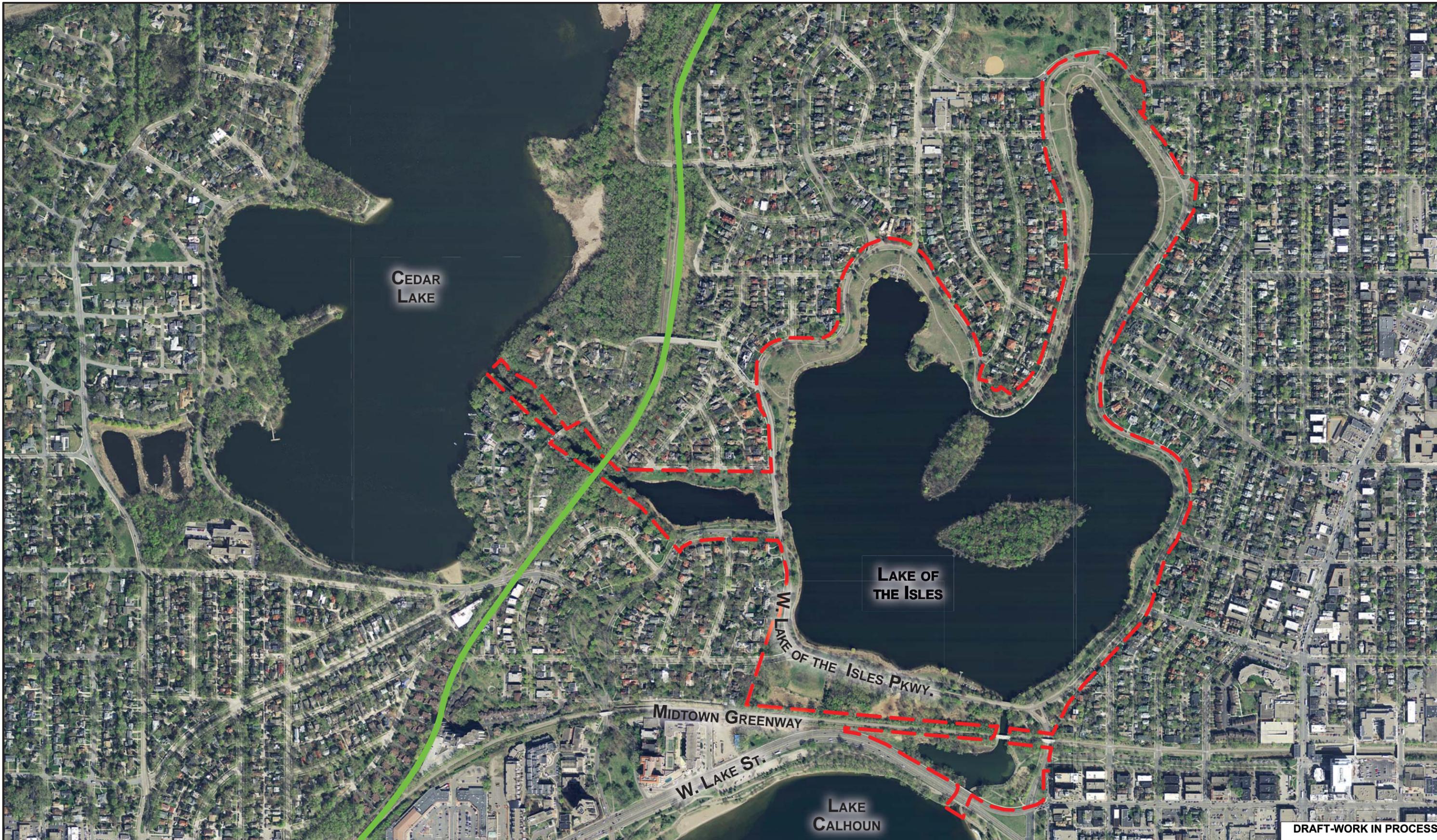
Rev 0
02/23/2016



ATTACHMENT E

Grand Rounds Historic District Canal System Plans Study Area Limits

Mar. 11 2016 08:27 am V:\3400_ADC\CAD\SEGMENT E3\EXHIBITS\E3-LAN-BRIDGE-INVENTORY.dwg By: V-MozzeBR

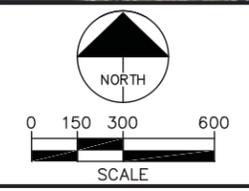


DRAFT-WORK IN PROCESS



SOUTHWEST LIGHT RAIL
 KENILWORTH LAGOON / GRAND ROUNDS HISTORIC DISTRICT
 ADVERSE EFFECT MITIGATION
 ATTACHMENT E

Rev 0
 01/20/2016



ATTACHMENT F

Minneapolis Park and Recreation Board Code of Ordinances, Chapter 11

Chapter 11 - PARK FACILITY CONSTRUCTION AND REDEVELOPMENT - COMMUNITY ENGAGEMENT^[13]

Footnotes:

--- (13) ---

Editor's note—Pk. Bd. Ord. No. 2011-103, § 1, adopted November 9, 2011, amended the title of Ch. 11 to read as herein set out. Prior to inclusion of said ordinance, Ch. 11 was titled, "Park Facility Construction and Redevelopment Public Participation."

PB11-1. - Definitions.

As used in this chapter the following terms shall mean:

Community Engagement: The opportunity for stakeholders to influence decisions that shape the park system, including the intentional effort to create public understanding of MPRB project, programs, and services, and to make certain the MPRB is aware of and responsive to stakeholder needs, concerns and industry trends. Interchangeable terms include: public participation, community involvement, and citizen participation.

Park facility construction and redevelopment: The development of new or redevelopment of existing facilities as approved and budgeted in a Capital Improvement Program for the Minneapolis Park and Recreation Board, including construction and redevelopment of facilities approved and budgeted through third party agreement. (Pk. Bd. Ord. No. 99-1010, § 1, 9-15-99; Pk. Bd. Ord. No. 2011-103, § 1, 11-9-11)

PB11-2. - Community Engagement Policy.

The Minneapolis Park and Recreation Board shall create, maintain, and regularly evaluate a community engagement policy that requires all park facility construction and redevelopment projects to have a community engagement plan. (Pk. Bd. Ord. No. 99-1010, § 1, 9-15-99; Pk. Bd. Ord. No. 2011-103, § 1, 11-9-11)

PB11-3. - Community Engagement Plan.

All park facility construction and redevelopment projects require a community engagement plan. The community engagement plan shall be developed in consultation with established neighborhood organizations. When possible, other representative community groups and under-represented groups shall be involved in the development of the plan. (Pk. Bd. Ord. No. 99-1010, § 1, 9-15-99; Pk. Bd. Ord. No. 2011-103, § 1, 11-9-11)

PB11-4. - Community Advisory Committee—Creation and Authority.

The Minneapolis Park and Recreation Board shall cause a community advisory committee to be created when recommended within a community engagement plan. The community advisory committee shall be balanced and representative of the interests impacted by the proposed park facility construction or redevelopment project. The community advisory committee shall have the authority to make recommendations to the designated Committee of the Board on the proposed park facility construction and redevelopment project. The Board of Commissioners shall have the authority to cause the creation

and approve the charge and composition of a community advisory committee for topics of its choosing. (Pk. Bd. Ord. No. 99-1010, § 1, 9-15-99; Pk. Bd. Ord. No. 2011-103, § 1, 11-9-11)

PB11-5. - Community Advisory Committee—Meetings and Recommendation.

All meetings shall be open to the public. Any person may appear and speak at a meeting either in person or by a duly appointed representative. Upon conclusion of public input, the community advisory committee shall announce its recommendation or shall lay the proposal over to a subsequent meeting. Records shall be kept on file at the Park Board office of attendance, meetings, agendas, handouts and committee actions. All recommendations of the community advisory committee shall be presented at the public hearing of the designated Committee of the Board. (Pk. Bd. Ord. No. 99-1010, § 1, 9-15-99; Pk. Bd. Ord. No. 2011-103, § 1, 11-9-11)

PB11-6. - Committee of the Board Public Hearing.

A Committee of the Board shall hold a public hearing on all project that include recommendations of a community advisory committee. The chair or acting chair may set the parameters of testimony to be received from interested parties. Any person may appear and testify at a hearing either in person or by a duly appointed representative. After reviewing the community advisory committee's recommendations and after the conclusion of public testimony, the Committee of the Board shall announce its decision or shall lay the matter over to a subsequent meeting. The Committee of the Board shall keep records of its public hearing and official actions. Decisions of the Committee of the Board shall be dated and forwarded to the full Board. (Pk. Bd. Ord. No. 99-1010, § 1, 9-15-99; Pk. Bd. Ord. No. 2011-103, § 1, 11-9-11)

PB11-7. - Community Advisory Committee Meeting and Public Hearing Notice.

The Minneapolis Park and Recreation Board shall create and maintain a notification process that addresses all community advisory committee meetings and public hearings for a project. This process shall require a ten (10) day notice of the first meeting in a newspaper of general circulation, of park councils and registered neighborhood groups and all owners of records of property located in whole or in part within three (3) city blocks of the project area. The notice shall comply with all other notice requirements of Minnesota's Open Meeting Law. Failure to give mailed notice to all affected parties, or defects in the notice, shall not invalidate the process or proceedings. (Pk. Bd. Ord. No. 99-1010, § 1, 9-15-99 ; Pk. Bd. Ord. No. 2011-103, § 1, 11-9-11)

PB11-8, PB11-9. - Reserved.

Editor's note— Pk. Bd. Ord. No. 2011-103, § 1, adopted November 9, 2011, repealed §§ PB11-8, PB11-9, which pertained to Full Park Board Hearing Notice and Public Hearing of Appeal. See also the Park Board Comparative Table.

Attachment C – Comments Received on the Final EIS

ATTACHMENT C

Guide to Attachment C

Attachment C contains the comments received on the Southwest LRT (METRO Green Line Extension) Final Environmental Impact Statement (EIS) during the written public comment period from May 13, 2016 through June 13, 2016. All written comments received on the Final EIS were reviewed, responded to, and incorporated into the Record of Decision, as appropriate. Attachment C is divided into two sections:

Section C.1: Index of Comments Received on the Final EIS

This section contains a table with each of the comments received on the Final EIS. The table includes:

- *ID Number.* A unique comment identification number assigned to each comment
- *Source.* The method the comment was received (e.g., postal mail, email)
- *Commenter.* The name of the individual submitting the comment, if provided
- *Commenter Organization.* The name of the organization, business or group providing the comment, if provided
- *Original Comment Page Number.* The page number where the comment begins, as found in Section C.2, Comments Received on the Final EIS
- *Response Page Number.* The page number where the response begins, as found in Attachment D, Responses to Comments Received on the Final EIS

Section C.2: Comments Received on the Final EIS

This section includes a copy of each of the comments received on the Final EIS during the written comment period. Refer to Section C.1 for an index of comments received on the Final EIS, and Attachment D for responses to each comment.

Section C.1: Index of Comments Received on the Final EIS

ID No.^a	Source	Commenter	Commenter Organization	Comment Page Number (C.2 of Attachment C)	Response Page Number (Attachment D)
1	Email	Dianne Desrosiers	Tribal Historic Preservation Officer, Sisseton Wahpeton Oyate	C.1-1	D-3
2	Email	Kim Ramey	Not Provided	C.1-2	D-4
3	Email	Richard Adair	Not Provided	C.1- 3	D-5
4	Email	Karen Lee Rosar	Not Provided	C.1-4	D-6
5	Email	Eric Ecklund	Not Provided	C.1-5	D-7
6	Email	Doug Ellingson	Not Provided	C.1-6	D-8
7	Email	Bill Weber	Not Provided	C.1-7	D-9
8	Email	Bill Weber	Not Provided	C.1-8	D-10
9	Email	Karen Kromar	Minnesota Pollution Control Agency	C.1-9	D-11
10	Email	Steve Smith	Not Provided	C.1-10	D-12
11	Email	Arthur Higinbotham	Not Provided	C.1-11	D-13

SOUTHWEST LRT (METRO GREEN LINE EXTENSION)

ID No.^a	Source	Commenter	Commenter Organization	Comment Page Number (C.2 of Attachment C)	Response Page Number (Attachment D)
12	Email	Scott Dibble / Frank Hornstein	Minnesota State Senate, Minnesota House of Representatives	C.1-19	D-14
13	Email	Jami LaPray	Safety in the Park	C.1-20	D-18
14	Email	Stuart Nolan / Lisa Moe	StuartCo	C.1-22	D-19
15	Email	Richard Weiblen	Liberty Property Trust	C.1-28	D-39
16	Email	Kenneth Westlake	United States Environmental Protection Agency	C.1-42	D-42
17	Email	Shawn Smith	Kenwood Isles Area Association (KIAA)	C.1-45	D-43
18	Email	John	Not Provided	C.1-54	D-51
19	Email	Tom Goodrum	Westwood Professional Services	C.1-55	D-52
20	Email	Mark Wegner	Twin Cities & Western Railroad Company	C.1-72	D-56
21	Email	Peter K. Beck	Beck Law Office	C.1-79	D-57
22	Email	Christopher S. Hayhoe	Calhoun-Isles Condominium Association - Felhaber Larson	C.1-82	D-58

ID No.^a	Source	Commenter	Commenter Organization	Comment Page Number (C.2 of Attachment C)	Response Page Number (Attachment D)
23	Email	Carol Braegelmann	United States Department of the Interior	C.1-104	D-61
24	Email	Judy Meath	LRT-Done Right	C.1-107	D-62
25	Email	Mark Wegner	Twin Cities & Western Railroad Company	C.1-128	D-73
26	Email	Liz Wielinski	Minneapolis Park and Recreation Board	C.1-135	D-75
27	Email	Scott Dibble / Frank Hornstein	Minnesota State Senate, Minnesota House of Representatives	C.1-141	D-78
28	Email	Joan Vanhala	Alliance for Metropolitan Stability	C.1-145	D-79
29	Email	Rob Stefonowicz	EVINE - Larkin Hoffman	C.1-149	D-82
30	Email	Cathy Deikman	LRT-Done Right	C.1-152	D-85
31	Email	Bob Strandquist	Not Provided	C.1-153	D-86
32	Email	Nance Duffy	Not Provided	C.1-154	D-87
33	Email	Karen Kromar	Minnesota Pollution Control Agency	C.1-155	D-88

SOUTHWEST LRT (METRO GREEN LINE EXTENSION)

ID No.^a	Source	Commenter	Commenter Organization	Comment Page Number (C.2 of Attachment C)	Response Page Number (Attachment D)
34	Email	Claire Ruebeck	Citizens Acting for Rail Safety - Twin Cities	C.1-157	D-89
35	Email	Scott Dibble / Frank Hornstein	Minnesota State Senate, Minnesota House of Representatives	C.1-164	D-93
36	Postal Mail	Stuart Nolan / Lisa Moe	StuartCo	C.1-168	D-96
37	Postal Mail	Craig Oberlander	Redstone American Grill, Inc.	C.1-174	D-97
38	Postal Mail	Christopher S. Hayhoe	Calhoun-Isles Condominium Association - Felhaber Larson	C.1-191	D-98
39	Postal Mail	Shawn Smith	Kenwood Isles Area Association (KIAA)	C.1-213	D-99
40	Postal Mail	Judy Meath	LRT-Done Right	C.1-221	D-100
41	Postal Mail	Richard Weiblen	Liberty Property Trust	C.1-242	D-101
42	Other	Arlene Fried		C.1-256	D-102
43	Other	Anonymous		C.1-257	D-103
44	Email	Shawn Smith	Kenwood Isles Area Association (KIAA)	C.1-258	D-104

ID No.^a	Source	Commenter	Commenter Organization	Comment Page Number (C.2 of Attachment C)	Response Page Number (Attachment D)
45	Email	Richard Weicher	BNSF Railway	C.1-260	D-105
46	Postal Mail	Scott Dibble / Frank Hornstein	Minnesota State Senate, Minnesota House of Representatives	C.1-263	D-107
47	Postal Mail	Richard Weicher	BNSF Railway	C.1-267	D-108
48	Postal Mail	Karen Kromar	Minnesota Pollution Control Agency	C.1-270	D-109
49	Email	Paul Miller	City of Minneapolis	C.1-272	D-110
50	Postal Mail	Dale Bachman	Bachman's	C.1-287	D-112

^a Note that the ID numbers are used as a point of reference for comments and responses in Attachments C and D

Section C.2: Comments Received on the Final EIS

From: [Dianne Desrosiers](#)
To: [swlrt](#)
Subject: Good afternoon,
Date: Thursday, May 12, 2016 3:10:39 PM

Ms. Nani Jacobson,

My name is Dianne Desrosiers and I am the Tribal Historic Preservation Officer for the Sisseton Wahpeton Oyate. I am requesting information regarding the Southwest Light Rail Transit (LRT) (METRO Green Line Extension) Project.

We are requesting additional information such as the project maps and cultural resource surveys. Once we have had opportunity to review the project information we will contact you. Thank you for your attention in this matter.

Dianne Desrosiers
Tribal Historic Preservation Officer
Sisseton Wahpeton Oyate
PO Box 907
Sisseton, SD 57262
(605) 698-3584 office

"Every part of this Earth is sacred to my people. We are part of the earth and it is part of us".-Chief Seattle, 1854

From: [KIM and KENNY](#)
To: [swlrt](#)
Subject: EIS
Date: Friday, May 13, 2016 12:27:31 PM

Project Title: Final Environmental Impact Statement (FEIS) for the Southwest Light Rail Transit (LRT) (METRO Green Line Extension) Project

Please mail me a hard copy of this project.

Thank you

Kim Ramey

2007 Ewing Ave. South

Minneapolis, MN. 55416

From: [Richard Adair](#)
To: [swlrt](#)
Subject: comments on FEIS
Date: Saturday, May 14, 2016 12:28:00 PM

May 13, 2016

Ms. 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:

I would like to comment on sections 3.5, 3.6, and 3.11 of the FEIS.

3.5 (Cultural) and 3.6 (Park and Rec):

I am a frequent user of the parkland near the Kenilworth Lagoon. I bike and walk over the Kenilworth Trail bridge, and ski and paddle underneath it.

I think the new bridges will be a major IMPROVEMENT over the current rail bridge, for several reasons: 1) the multiple log pilings in the center of the lagoon cause thin ice for skiers, such as participants in the City of Lakes Loppet, whereas the proposed new concrete bridge supports will be to the side, allowing thicker ice to form in the center of the channel; 2) the smell of creosote and the thought that it may be leaching into the city lakes is off-putting for those of us with an environmental mind-set; 3) this area is in no way wilderness, but rather an urban park where one paddles or skis under the nearby Burnham Rd bridge, under the rail and trail bridges, sees the beautiful nearby homes and the city skyline across Lake of the Isles, and enjoys an opportunity to exercise in the city. An upgrade to a modern bridge architecture would be entirely in keeping with this ambience. Cities change and adapt; this is expected and welcome.

3.11 (Air quality and Greenhouse Gases)

The statements about reduction in greenhouse gas emissions in this section are general and not quantitative. 11 million trips are predicted on this line by 2040 (estimated from 34,000 trips per weekday), resulting in a major reduction in automobile greenhouse gas emissions. I think this section understates the strongly positive impact this line will have in changing human behavior in the fight against global warming.

Richard Adair
200 Upton Av S
Mpls 55405

From: [Karen Lee Rosar](#)
To: [swlrt](#)
Subject: SWLRT: Comment on the Final EIS
Date: Monday, May 16, 2016 9:49:49 AM

Greetings

I support the SWLRT Final EIS. I fully support the project and request that you proceed to build the Green Line Extension without any further delay.

Thank you,

Karen Lee Rosar

111 4th Ave N #103
Minneapolis, MN 55401
612-220-5390
karen.rosar@comcast.net

From: [Eric Ecklund](#)
To: [swlr](#)
Subject: State funding
Date: Thursday, May 19, 2016 10:24:12 AM

With the state's share of \$135 million for Southwest Light Rail funding becoming less likely as the legislative session nears an end, is there a plan to achieve this funding from other sources in order to get the federal government's share of the funding for this project? I am concerned, but not surprised, by the lack of progress in our state government to fund transportation projects including the Southwest Light Rail.

From: [Doug Ellingson](#)
To: [swlrt](#)
Cc: ski2thegoddess@aol.com
Subject: Funding SWLRT
Date: Thursday, May 19, 2016 2:53:41 PM

Comment #6

The Koch brothers/ALEC obstruction campaign is waging its usual war against rail transit and it continues to win through having control of the Minnesota House. We cannot allow the SWLRT transit project to fail because of the Koch brothers. Certificates of Participation funding worked in Denver and it will probably be necessary for us.

Doug Ellingson
6029 Dupont Ave South
Minneapolis, MN 55419

From: [Bill Weber](#)
To: [swlrt](#)
Cc: ["Ryan Norman"](#)
Subject: Wooddale Station
Date: Thursday, May 19, 2016 3:26:58 PM

I want to verify that going North on Wooddale Avenue, there is not a way to turn East (left) onto the Minnesota 7 Service Road?

Thanks,

Bill Weber

From: [Bill Weber](#)
To: [swlrt](#)
Cc: ["Ryan Norman"](#)
Subject: Wooddale Station
Date: Thursday, May 19, 2016 3:40:23 PM

I want to verify that going North on Wooddale Avenue, there is not a way to turn West (left) onto the Minnesota 7 Service Road?

Thanks,

Bill Weber

From: [Kromar, Karen \(MPCA\)](#)
To: [swlrt](#)
Subject: SWLRT Final EIS
Date: Tuesday, May 24, 2016 1:15:57 PM

Will you be sending CDs or hard copies to EQB mailing list? MPCA has received neither to date.

Thanks,

Karen

Karen Kromar
Planner Principal
MPCA – Environmental Review
651-757-2508

From: [Steve Smith](#)
To: [swlrt](#)
Subject: LRT Environmental impact statement
Date: Wednesday, May 25, 2016 10:35:27 AM

As a resident of Eden Prairie I am against the SWLRT.

There is not need to build a train over our lakes, wetlands and neighborhoods.

Please save the 2 billion dollars and save our clean water.

Steve Smith

6824 Jeremy Court
Eden Prairie, MN 55346

612-991-3518

From: Jacobson, Nani
To: swlrt
Subject: FW: Notice of Availability - Southwest LRT Final Environmental Impact Statement
Date: Friday, May 27, 2016 2:15:10 PM

-----Original Message-----

From: Fuhrmann, Mark
Sent: Wednesday, May 18, 2016 12:05 PM
To: Jacobson, Nani <Nani.Jacobson@metrotransit.org>
Cc: Alexander, Jim <Jim.Alexander@metrotransit.org>
Subject: FW: Notice of Availability - Southwest LRT Final Environmental Impact Statement
FYI

-----Original Message-----

From: arthur higinbotham [mailto:ahiginbotham@msn.com]
Sent: Wednesday, May 18, 2016 11:44 AM
To: Fuhrmann, Mark <Mark.Fuhrmann@metrotransit.org>
Cc: Catherine M. Walker <catherine.walker@hennepin.us>; stuart@chazingroup.com
Subject: FW: Notice of Availability - Southwest LRT Final Environmental Impact Statement

Please be sure to disclose the e-mails between Katie Walker and her consultant on the ridership basis for the SWLRT. In a meeting with her before the locally preferred alternative was chosen, she made available figures on ridership which she then withdrew under questioning. Thanks.

> From: ahiginbotham@msn.com
> To: peter.mclaughlin@co.hennepin.mn.us
> Subject: FW: Notice of Availability - Southwest LRT Final
> Environmental Impact Statement
> Date: Tue, 17 May 2016 22:56:46 +0000

>
> Why don't you let this project go to sleep?

>
> -----

>> From: ahiginbotham@msn.com
>> To: metc@public.govdelivery.com

>> CC: rep.kurt.daudt@house.mn

>> Subject: RE: Notice of Availability - Southwest LRT Final

>> Environmental Impact Statement

>> Date: Tue, 17 May 2016 22:31:35 +0000

>>

>> The Lakes and Parks Alliance has been granted a judge's order to make the Met Council's procedural information available within 15 days.

>>

>>

>> It is important that the Met Council comply because detail on environmental, ridership, safety and cost concerns are obscured by the generalities in the final EIS. Revelation of the detail will show that the SW alternatives analysis was distorted by the intentional campaign of misinformation provided to the public. The Legislature should take this lack of integrity into account when considering state funding for the most expensive and environmentally destructive project.

>>

>> _____

>>> Subject: Notice of Availability - Southwest LRT Final Environmental

>>> Impact Statement

>>> Date: Fri, 13 May 2016 08:02:25 -0500

>>> To: ahiginbotham@msn.com

>>> From: METC@public.govdelivery.com

>>>

>>> The Metropolitan Council (Council) and the Federal Transit

>>> Administration (FTA) issued a Final Environmental Impact Statement

>>> (Final EIS) [SWLRT header Blank] Southwest LRT Final Environmental

>>> Impact Statement – Notice of Availability

>>>

>>> Project Title: Final Environmental Impact Statement (FEIS) for the

>>> Southwest Light Rail Transit (LRT) (METRO Green Line Extension)

>>> Project

>>>

>>> Description: The Metropolitan Council (Council) and the Federal

>>> Transit Administration (FTA) issued a Final Environmental Impact

>>> Statement (Final EIS), Final Section 4(f) Evaluation, and Section

>>> 106 Memorandum of Agreement for the Southwest LRT Project (METRO
>>> Green Line Extension). The Southwest LRT Project is approximately
>>> 14.5 miles of new double-track proposed as an extension of the METRO
>>> Green Line (Central Corridor LRT). It will operate from downtown >>> Minneapolis through the communities of St.
Louis Park, Hopkins, >>> Minnetonka, and Eden Prairie, passing in close proximity to Edina.

>>> Based on findings from the Project's Alternatives Analysis and input >>> received from the public and agencies , the
Council identified the

>>> Project's Locally Preferred Alternative (LPA) on May 26, 2010. The >>> LPA was incorporated within two of the seven
alternatives evaluated >>> in the Draft EIS published on October 12, 2012: LRT 3A (relocation)

>>> and LRT 3A-1 (co-location).

>>>

>>> After publication of the Draft EIS, the Council undertook a process
>>> to develop and evaluate potential adjustments to LRT 3A and LRT 3A-1
>>> based on comments received on the Draft EIS. FTA and the Council
>>> determined that some of the design adjustments in the cities of Eden Prairie, St.
>>> Louis Park, and Minneapolis; and the proposed operations and
>>> maintenance facility in Hopkins had the potential to result in new
>>> adverse impacts. Those design adjustments were evaluated in a
>>> Supplemental Draft Environmental Impact Statement (SDEIS) and Draft
>>> Section 4(f) Evaluation Update, published on May 22, 2015.

>>>

>>> The Final EIS documents the following:

>>>

>>> * purpose and need for the Project;

>>> * alternatives considered;

>>> * anticipated impacts that will result from implementing the
>>> Project, including avoidance, minimization, and mitigation measures;

>>> * description of the Project's public involvement and agency
>>> coordination;

>>> * Project's proposed finance plan;

>>> * comments received during the Draft EIS, Supplemental Draft EIS,
>>> and Amended Draft Section 4(f) Evaluation public comment periods;

>>> and,

>>> * responses to comments.

>>>

>>> Comments on the adequacy of the Final EIS may be submitted in

>>> writing to Nani Jacobson (contact information below) through June 13, 2016.

>>> Following the review period and consideration of the comments

>>> received on the adequacy of the FEIS, a Federal Record of Decision

>>> and Minnesota State Adequacy Determination are anticipated. The

>>> Record of Decision and Adequacy Determination will document the

>>> Council's and FTA's final decision regarding the environmental phase of the Project.

>>>

>>> Document Availability: The Final EIS; including the Section 4(f)

>>> Evaluation, Section 106 Memorandum of Agreement, and all appendices;

>>> is available online at

>>> www.metrocouncil.org/swlrt/feis<<http://links.govdelivery.com:80/track?type=click&enid=ZWFzPTEmbWFpbGluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREltUFJELUJVTCoYMDE2MDUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0MzZmXmVtYWlsaWQ9YWhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmkPWFOaWdpbmJvdGhhbUBtc24uY29tJmZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&100&&&http://www.metrocouncil.org/swlrt/feis>>.

>>>

>>> The Final EIS is available at the locations listed below.

>>>

>>> * Eden Prairie City Hall: 8080 Mitchell Road, Eden Prairie, MN 55344 >>> * Eden Prairie Public Library: 565 Prairie Center Drive, Eden

>>> Prairie, MN 55344

>>> * Minnetonka City Hall: 14600 Minnetonka Blvd., Minnetonka, MN 55345 >>> * Minnetonka Public Library: 17524 Excelsior Blvd., Minnetonka, MN >>> 55345

>>> * Hopkins City Hall: 1010 First Street South, Hopkins, MN 55343

>>> * Hopkins Public Library: 22 Eleventh Avenue North, Hopkins, MN

>>> 55343

>>> * Edina City Hall: 4801 West 50th Street, Edina, MN 55424

>>> * St. Louis Park City Hall: 5005 Minnetonka Blvd., St. Louis Park,

>>> MN 55416

>>> * St. Louis Park Public Library: 3240 Library Lane, St. Louis Park,

>>> MN 55426

>>> * Southwest LRT Project Office: 6465 Wayzata Blvd., Suite 500, St. >>> Louis Park, MN 55426

>>> * Minneapolis City Hall: City Engineer's Office, 350 South Fifth

>>> Street, Room 203, Minneapolis, MN 55414

>>> * Minneapolis Central Library: 300 Nicollet Mall, Minneapolis, MN

>>> * Walker Public Library: 2880 Hennepin Avenue, Minneapolis, MN 55408 >>> * Linden Hills Public Library: 2900 West 43rd Street, Minneapolis,

>>> MN 55410

>>> * Sumner Public Library: 611 Van White Memorial Blvd., Minneapolis, >>> MN 55411

>>> * Franklin Public Library: 1314 East Franklin Avenue, Minneapolis,

>>> MN 55404

>>> * Metropolitan Council Library: 390 Robert Street North, St. Paul,

>>> MN 55101

>>> * Minnesota Department of Transportation Library: 395 John Ireland >>> Blvd., St. Paul, MN 55155

>>> * Minnesota Legislative Reference Library: 645 State Office

>>> Building, 100 Rev. Dr. Martin Luther King, Jr. Blvd., St. Paul, MN

>>> 55155

>>>

>>> To request special accommodations, contact Dan Pfeiffer, Southwest >>> LRT Assistant Public Involvement Manager, at 612-373-3897 or

>>> Daniel.pfeiffer@metrotransit.org<mailto:Daniel.pfeiffer@metrotransit >>> .org> at least ten days prior to the end of the comment period.

>>>

>>> Responsible Governmental Unit: Metropolitan Council

>>>

>>> Contact Person:

>>>

>>> Ms. Nani Jacobson, Assistant Director, Environmental and Agreements >>> Metro Transit - Southwest LRT Project Office

>>> 6465 Wayzata Blvd., Suite 500

>>> St. Louis Park, MN 55426

>>> Email: SWLRT@metrotransit.org <mailto:SWLRT@metrotransit.org> >>>

>>> >>> >>>

>>> [SWLRT Footer]

>>>
>>>
>>> [https://public.govdelivery.com/system/images/33707/original/SWemail
>>> -Footer.jpg]
>>>
>>>
>>> STAY CONNECTED: [twitter.com/modnr]
>>> <http://links.govdelivery.com:80/track?type=click&enid=ZWFzPTEmbWFpb
>>> GluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREltUFJELUJVTc0yMDE2M
>>> DUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0MzMxJmVtYWlsa >>>
WQ9YWWhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmkPWFOaWdpbmJvdGhhbUBtc24uY29tJ
>>> mZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&101&&&http://www.twitter.c
>>> om/southwestlrt>
>>> [youtube.com/missouridnr]
>>> <http://links.govdelivery.com:80/track?type=click&enid=ZWFzPTEmbWFpb
>>> GluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREltUFJELUJVTc0yMDE2M
>>> DUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0MzMxJmVtYWlsa >>>
WQ9YWWhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmkPWFOaWdpbmJvdGhhbUBtc24uY29tJ
>>> mZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&102&&&http://www.youtube.c
>>> om/user/MetropolitanCouncil?feature=watch>
>>> [Subscribe for emails]
>>> <http://links.govdelivery.com:80/track?type=click&enid=ZWFzPTEmbWFpb
>>> GluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREltUFJELUJVTc0yMDE2M
>>> DUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0MzMxJmVtYWlsa >>>
WQ9YWWhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmkPWFOaWdpbmJvdGhhbUBtc24uY29tJ
>>> mZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&103&&&http://public.govdel
>>> ivery.com/accounts/MNORGMETC/subscriber/new>
>>>
>>> For general questions or comments: Contact
>>> Us<http://links.govdelivery.com:80/track?type=click&enid=ZWFzPTEmbWF
>>> pbGluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREltUFJELUJVTc0yMDE
>>> 2MDUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0MzMxJmVtYWI >>>
saWQ9YWWhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmkPWFOaWdpbmJvdGhhbUBtc24uY29

>>> tJmZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&104&&&http://www.metroco
>>> uncil.org/Transportation/Projects/Current-Projects/Southwest-LRT/Con
>>> tact-Ur-%28SWLRT%29.aspx>
>>>
>>> SUBSCRIBER SERVICES:
>>> Manage
>>> Subscriptions<http://links.govdelivery.com:80/track?type=click&enid=
>>> ZWFzPTEmbWFpbGluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREItUFJE
>>> LUJVTC0yMDE2MDUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0 >>>
>>> MzMxJmVtYWlsaWQ9YWwhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmkPWFOaWdpbmJvdGhh
>>> bUBtc24uY29tJmZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&105&&&http://
>>> public.govdelivery.com/accounts/MNORGMETC/subscribers/new?preference
>>> s=true> | Unsubscribe
>>> All<http://links.govdelivery.com:80/track?type=click&enid=ZWFzPTEmbW
>>> FpbGluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREItUFJELUJVTC0yMD
>>> E2MDUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0MzMxJmVtYW >>>
>>> lsaWQ9YWwhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmkPWFOaWdpbmJvdGhhbUBtc24uY2
>>> 9tJmZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&106&&&https://public.go
>>> vdelivery.com/accounts/MNORGMETC/subscriber/one_click_unsubscribe?ve
>>> rification=5.a12725a0094326aa029150f354a67b8f&destination=ahiginboth
>>> am%40msn.com> | Subscriber
>>> Help<http://links.govdelivery.com:80/track?type=click&enid=ZWFzPTEmb
>>> WFpbGluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREItUFJELUJVTC0yM
>>> DE2MDUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0MzMxJmVtY >>>
>>> WlsaWQ9YWwhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmkPWFOaWdpbmJvdGhhbUBtc24uY
>>> 29tJmZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&107&&&https://subscrib
>>> erhelp.govdelivery.com/>
>>> >>> >>>
>>> _____
>>> This email was sent to ahiginbotham@msn.com using GovDelivery, on
>>> behalf of: Metropolitan Council · 390 Robert St. North · Saint Paul,
>>> MN
>>> 55101-1805 · 651-602-1000 [Powered by GovDelivery]

>>> <http://links.govdelivery.com:80/track?type=click&enid=ZWFzPTEmbWFpb

>>> GluZ2lkPTlwMTYwNTEzLjU4OTkwNjgxJm1lc3NhZ2VpZD1NREltUFJELUJVTCoYMD2M

>>> DUxMy41ODk5MDY4MSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDU0MzMxJmVtYWlsa >>>
WQ9YWhpZ2luYm90aGFtQG1zbi5jb20mdXNlcmlkPWFOaWdpbmJvdGhhbUBtc24uY29tJ

>>> mZsPSZleHRyYT1NdWx0aXZhcmlhdGVJZD0mJiY=&&&108&&&http://www.govdelive

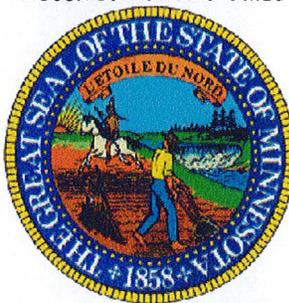
>>> ry.com/portals/powered-by>

>>> >>> >>> >>> >>>

Metropolitan Council

MAY 31 2016

Received Chair's Office



Minnesota Senate

Senator D. Scott Dibble
651-296-4191
85 University Ave W
Saint Paul, Minnesota 55155
tinyurl.com/SenatorDibbleEmail

Minnesota House
Of Representatives

Representative Frank Hornstein
651-296-9281
100 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155
rep.frank.hornstein@senate.mn

May 20, 2016

Adam Duininck, Chair
Metropolitan Council
390 N Robert St.
St. Paul MN 55101-1805

Carolyn Flowers, Administrator
Federal Transit Administration
1200 New Jersey Ave. SE
Washington DC 20590

Dear Chair Duininck and Administrator Flowers:

We are writing to request that the Federal Transit Administration and the Metropolitan Council extend the comment period on the Final Environmental Impact Statement for Southwest Light Rail Transit to 90 days from the current 30 days.

The FEIS runs about 17,000 pages, much of which is highly technical analysis. Many stakeholders with varying levels of expertise are interested in looking closely at the document and providing feedback.

It is important that this process be as fair and as transparent as possible to everyone who would like to provide input on this near final document. The FEIS will inform key decisions about this major infrastructure investment.

Thank you for your consideration.

Very truly yours,

D. Scott Dibble
State Senator, District 61

Frank Hornstein
State Representative, District 61 A

From: [Safety In the Park](#)
To: [swlrt](#)
Subject: FEIS comment
Date: Tuesday, June 07, 2016 7:02:29 AM
Attachments: [Comment to the Final Environmental Impact Statement.docx](#)

Please include the attached document for review to the SWLRT-FEIS.

Thank you,

Jami LaPray, Chair - Safety in the Park

--

safetyinthepark@gmail.com
Facebook-Safety in the Park!
www.safetyinthepark.com

Comment to the Final Environmental Impact Statement (FEIS) for the Southwest Light Rail Transit (SWLRT) project from the St. Louis Park group, Safety in the Park.

Safety in the Park is a St. Louis Park, Minnesota grass roots, volunteer, non-partisan, non-profit neighborhood organization. We are politically unaffiliated and do not endorse any candidates for political office. Safety in the Park welcomes the addition of light rail to St. Louis Park and supports its implementation.

Members of Safety in the Park began working with State, County and City officials in the late 1990's to create an alternative solution for the proposed rerouting of freight rail traffic in St. Louis Park. In 2010, Safety in the Park was formed to accomplish one mission. We respectfully demanded that the Hennepin County Railroad Authority and Met Council compare all re-routing options on a ***fair and equal basis for safety and feasibility***.

We applaud the efforts of the Met Council and its engineers for their thoroughness and professionalism in determining the realistic freight route conclusion presented in the Final Environmental Impact Statement for the Southwest Light Rail Transit project. We agree with their findings and look forward to the implementation of the project.

Jami LaPray – Chair, Safety in the Park
June 4, 2016

From: [Lisa Moe](#)
To: [swlrt](#)
Cc: [Roston, Howard](#)
Subject: Comments to FEIS for the SW LRT
Date: Friday, June 10, 2016 1:33:17 PM
Attachments: [SKM_C454e16061012020.pdf](#)

Ms. Jacobson

Please find an email copy of our comments to the FEIS – we have also mailed a hard copy of this attachment that you will receive today.

Thank you.

Lisa Moe

Lisa Moe
President and Chief Executive Officer

P: 952-948-9506

F: 952-346-7006

lmoe@stuartco.com



1000 West 80th Street
Minneapolis, MN 55420

June 8, 2016



Nani Jacobson
Assistant Director, Environment & Agreements
Metro Transit – SWLRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426

VIA US MAIL AND E-MAIL

Re: FEIS: Comments of Stuart Companies Regarding SWLRT FEIS

Dear Ms. Jacobson:

Stuart Companies appreciates the opportunity to comment on the FEIS. We have previously expressed our concern that the earlier EIS studies failed to adequately consider and describe the impacts of the SWLRT project. Unfortunately, the recent FEIS fails to address, or addresses incompletely, numerous matters that may have a significant and adverse impact on the more than 1,000 residents of Greenfield Apartments, Deer Ridge and Raspberry Woods. We will refer to these dwellings collectively as the StuartCo Properties because they are all residential properties and are tied together as one community.

1. **Noise.** The investigation of noise on the StuartCo Properties done in the DEIS and the SDEIS was obviously inadequate and it appears that the FEIS recognized this obvious inadequacy. While recognizing the failure of the DEIS and SDEIS to seriously investigate the noise issues impacting StuartCo residents, it is also apparent that the FEIS has done nothing further to actually investigate those impacts. For example, as best as we can tell from the FEIS, there has been no on-site noise testing by the Council that we are aware of. If such testing has been done, we would like to see the full testing protocol, identification of times, test locations, raw data, conditions, and all results. We would also like to see any calculations and calculated adjustments used by the so-called “modeling” done in the FEIS’s consideration of noise impacts.

Additionally, it appears that in evaluating noise impacts the FEIS used standards other than those stated in the FTA Guidance Manual. Please identify other noise standards that were used in the FEIS noise analysis and provide copies of those standards.

Also, it appears that noise mitigation has been provided for the nearby Claremont property. Please explain why no mitigation is provided for the StuartCo Properties?

Corporate Headquarters

1000 West 80th Street
Minneapolis, MN 55420
☎ (952) 948-9500
☎ (952) 948-9570

www.stuartco.com

With regard to the radius curve on the south part of the property, it is well-known that such curves produce piercing wheel squeal, a severe and adverse noise impact. This is of particular concern because this curve in the tracks is so close to the residences. We would like to see the full analysis of noise impacts considered on this curve, including an analysis showing at what speed wheel squeal can be fully avoided and at what speed wheel squeal appears. We are aware that on LRT installations elsewhere, wheel squeal has required construction of enclosures to protect nearby residential properties. What analysis has been done to determine the need for such structures here?

The projected speed for the LRT as it passes through the property is as much as 55 mph according to the FEIS. This is a significantly greater speed than indicated in the DEIS. What analysis has been done to analyze the noise and vibration impacts of a 55 mph train on elevated structures? This information needs to be provided so that impacts can be evaluated.

There will be significant noise generated by trains on the service tracks at the OMF. The service tracks appear to include numerous tight radius curves which are likely to produce wheel squeal. Please identify all residences within 1,000 feet of the OMF tracks (not measured from the center of the property but from the noise source) and the anticipated noise level from operations on these tracks.

The FEIS noise analysis for the OMF departs from the FTA Manual principle that noise is to be evaluated critically in favor of impacted residents. What is the basis for this departure?

2. **Environmental Releases and Project Impacts.** The FEIS does not identify potential impacts to the closed Hopkins landfill adjacent to the StuartCo Properties of pile driving, sheet driving, vibratory compaction and other heavy construction activities during construction and for continued maintenance and operation of the LRT. Please describe anticipated impacts, worst case impacts, containment plans, and identify who will be responsible for any environmental releases that may be caused by either (a) the construction of the LRT project; or (b) the operation of the LRT itself.

3. **Visual Aesthetics.**

a. **Destruction of Existing Woodlands and Wetlands.** Wetlands and woodlands are an important asset to the Property and its residents. Based on the 90% plans it appears that large area of woods, ponds and wetlands will be clear-cut, bulldozed and/or filled. These are important visual and aesthetic resources for residents of the StuartCo Properties. What will be done to repair this aesthetic loss? What wetland restoration is planned on the property? What woodlands restoration is planned?

b. **Restoration of Destroyed and Compacted Lands.** Use of heavy construction equipment and construction fills will likely make it impossible for any significant vegetative growth or planting following completion of the project. What will be done to restore the site to a condition that will support desirable vegetative growth? What soil restoration will be done?

4. **Light Impacts.**

a. **Direct Impacts from the Train.** How will residents be protected against the powerful headlight beams of elevated trains shining onto residential properties during twilight and evening hours? Or light from moving trains as a continuing nuisance to residents?

b. **Sunlight Reflecting Off the Glass.** How will residents be protected against intense morning sunlight reflecting off the glass surfaces of elevated trains? What plans have been made to address this problem?

5. **Public Safety.** The LRT bridges and supporting structures located within a residential development not exposed to public and police observation may be an attractive nuisance attracting graffiti artists, and children. What steps will be taken to ensure that the track and supporting structures are not misused or covered with graffiti? Who will be responsible for removal of graffiti and at whose cost? What parts of the track and structures will be fenced as they cross the StuartCo Properties for the protection of the public?

6. **Construction Impacts.** We could find no detailed description of how the track and its supporting elevated structures will be constructed. Please explain what construction methods will be used to build the project as it traverses the StuartCo Properties. What investigation has been done as to the damages that may result from the project's physical construction? Is pile-driving anticipated? To what depth? At what location and to what depth will vibratory piling equipment be used? Will de-watering be done either on the site or in the vicinity of the StuartCo Properties? If so, how will StuartCo structures be protected? Will there be winter construction? What will be the daily hours of construction? How will StuartCo structures be protected?

7. **Groundwater Plan.** Construction of the LRT route across the StuartCo Properties appears likely to interfere with ordinary groundwater flow and, if so, may cause flooding, erosion or other subsurface and drainage problems. What investigation has been done by the Met Council of this concern? Please provide information regarding your investigation, including when this was done and conclusions.

8. **Wildlife, Birds and Flora.** Natural wildlife is an important asset to the Property and its residents. What investigation has been done of damage to wildlife habitat and local flora? The wooded and wetland portions of the StuartCo Properties are habited by numerous species of birds and small animals. Have those been inventoried? What efforts will be made to restore this habitat?

9. **Park and Recreation Areas.** The Property has extensive park and recreation areas used by residents. These areas include interconnected trails, tennis courts, pools, ponds, and outdoor gathering places. What were the considerations in the FEIS relating to interference with use of these park and recreation areas? How has the FEIS addressed the interference with the trail system and walking paths?

10. **Fire Safety and Access.** Current plans identify the source of entrance onto the StuartCo Properties for project construction work as the fire safety entrance. Use of the fire safety entrance in any way that blocks full and immediate access to the StuartCo Properties is unacceptable to StuartCo. and will violate local public safety regulations. In addition, construction traffic is inconsistent with both pedestrian and local traffic. How does SWLRT

intend to access the property without interfering with pedestrians, local traffic and the fire safety entrance?

11. Trespass. The proposed construction boundaries will likely result in construction workers trespassing onto the StuartCo Properties outside of any easements shown by the Council in its 90% drawings. What will the Met Council do to ensure that all workers remaining within construction boundaries? Will the construction area be fenced? Will security be hired to protect the StuartCo Properties? What steps will be taken to ensure that construction workers do not park on the StuartCo Properties? What steps will be taken to ensure that commercial deliveries for the SWLRT project do not use StuartCo Properties?

12. 11th Avenue South. The comments in the FEIS indicate that some attention has now been paid to the 11th Avenue Route. When was this analysis done? What engineering studies were done of this route? What studies have been done on travel times for this alternative route? What studies have been done of ridership and usage for this alternate route? What studies have been done of the cost of the alternative route as the FEIS selected route? If these studies have been done, please identify the date of the studies, their conclusions, and where they are located so we can review them.

StuartCo respectfully requests detailed responses to each of these questions and comments.

StuartCo

By: 
Stuart H. Nolan
Founder and Chairman

By: 
Lisa Moe
President and Chief Executive Officer

58930860_1

From: [Jacobson, Nani](#)
To: [swlrt](#)
Subject: FW: FDEIS Comments - Liberty Properties, Hopkins and Eden Prairie, MN
Date: Friday, June 10, 2016 3:27:19 PM
Attachments: [Letter to Nani Jacobson with Metro Transit dated 6-10-16.pdf](#)

From: Richard Weiblen [mailto:rweiblen@libertyproperty.com]
Sent: Friday, June 10, 2016 2:55 PM
To: Jacobson, Nani <Nani.Jacobson@metrotransit.org>
Subject: FW: FDEIS Comments - Liberty Properties, Hopkins and Eden Prairie, MN

Nani,
Attached is our comment letter to the Southwest LRT FDEIS.
We will be mailing a hard copy as well.
Can you please confirm receipt of this email?
Thanks and hope you have a great weekend.
Rick

Richard Weiblen

VP, Development
Liberty Property Trust
O 952.947.1100 D 952.833.5262 M 952.240.4078
10400 Viking Drive, Suite 130, Eden Prairie, MN 55344
rweiblen@libertyproperty.com

DISCLAIMER

This e-mail message is intended only for the personal use of the above named recipient(s). If you are not the intended recipient, you may not review, copy or forward this e-mail message. If you have received this communication incorrectly, please notify Liberty Property Trust immediately via e-mail or phone and delete the message accordingly.



LIBERTY
PROPERTY
TRUST

June 10, 2016

Ms. Nani Jacobson
Assistant Director, Environmental & Agreements
Metro Transit—SWLRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426

Via Email & U.S. Mail

RE: FDEIS Comments – Liberty Properties, Hopkins and Eden Prairie, MN

Dear Ms. Jacobson;

Liberty Property Trust is the owner of a number of properties which will be impacted by the SWLRT corridor. These Properties include:

1515 Sixth Street South, Hopkins
1600 Fifth Street South, Hopkins
10301 70th Street West, Eden Prairie
10321 70th Street West, Eden Prairie
10333 70th Street West, Eden Prairie
10349 70th Street West, Eden Prairie
6901 Flying Cloud Drive, Eden Prairie
7075 Flying Cloud Drive, Eden Prairie
7246 Flying Cloud Drive, Eden Prairie
7400 Flying Cloud Drive, Eden Prairie

We have previously made comments in response to the DEIS regarding our Eden Prairie and Hopkins sites and in response to the SDEIS regarding the anticipated adverse impacts of the proposed OMF site. For your convenience, these earlier letters are attached.

In review of the FEIS we continue to have significant concerns regarding the issues noted in our previous letters and, in addition, we make the following comments based on information provided by 90% plans and the FEIS.

HOPKINS SITE

OMF Site 9A Selection Evaluation

We continue to have concerns regarding the method used for evaluation of the SDEIS sites. Sixteen environmental resource categories were not considered in the OMF selection criteria. We are specifically concerned regarding visual quality, open areas and noise. We own several properties in this area and we are committed to minimizing adverse impacts to the businesses, employees, and residents in this area. In particular, we are concerned about noise that will be

generated by the OMF and about the possibility of environmental releases from construction near the Hopkins landfill. Can you tell us why these concerns were not addressed?

Total Taking of the Liberty Properties in Hopkins

We need clarification on the taking of our properties at the OMF site. The FEIS notes that our property at 1515 Sixth Street South is a total take, but the 90% plans shows it as a partial take and will become a remnant lot. What is the Council's intent with respect to the remnant lot?

It is evident that relocation of certain tenants in these properties will require extensive planning and cannot be done quickly. It is important that our tenants' business operations not be disrupted by the project. It is also important that the tenants be treated fairly and fully compensated for their relocation costs. How will relocation and relocation compensation be handled for our tenants? What is the expected timing for completing relocation of these tenants?

EDEN PRAIRIE SITES AT THE GOLDEN TRIANGLE STATION

Our DEIS comments were submitted in December of 2012. These earlier issues continue to be of concern. Several new concerns have arisen that must be addressed.

Remnant Parcels

7400 Flying Cloud Drive – The property at 7400 Flying Cloud Drive is being bisected by the final alignment creating two remnant parcels that would become non-conforming to city codes and undevelopable. The alignment shows the tracks being bridged across the site, and the addition of a traction power substation on the site. This alignment will destroy this property for commercial use.

7246 Flying Cloud Drive – The property at 7246 Flying Cloud Drive will lose all of the land on the east side of the site except a few feet of road frontage. The limited road frontage is situated at a curve in the road thus restricting acceptable access. The taking will leave a remnant non-conforming parcel with no opportunity for commercial use.

Liberty Plaza, Outlot A – Outlot A has been changed from a full take to a partial take. The remnant piece to be left or sold back to Liberty Property Trust has no road frontage and constitutes mostly wetland, leaving no effective developable area and no commercial use.

Liberty Plaza, Outlot B – Outlot B will be bisected leaving two remnant parcels, again creating non-conforming undevelopable lots. The LRT alignment in this area calls for extensive grading and retaining walls. The impact of the wall and placement of the tracks in association with the loss of views, additional noise impacts, and vibration impacts of the building tenants needs to be further reviewed.

Partial Takings

10301 70th Street West – The taking of land at 10301 70th Street West may create non-conformance conditions to city setback standards for building and parking lots and impair development opportunities. Please clarify the Council’s investigation of this concern.

7075 Flying Cloud Drive – The taking of land at 7075 Flying Cloud Drive will reduce parking spaces due to the placement of a traction power substation and may create non-conformance to building setback standards at the southwest corner of the building. It will adversely impact use of the property. How will the Council address these impacts?

We have raised our concern regarding the noise and vibration impact of the tracks so close to the southwest corner of the building at 7075 Flying Cloud Drive. As noted above, the taking of land may be creating a setback issue due to the close proximity of the rail. The proximity of the tracks and high levels of noise from train and crossing operations will be disruptive to the office tenants of that building as the part of the building closest to the tracks contains company offices. In particular, the track crossing located directly in front of this property will produce severe noise and vibration impacts. This track crossing should be moved to a different location without development where it will not impact 7075 and other nearby Liberty buildings. Why is it necessary to locate the track crossing at its present location adjacent to an intensive commercial use? Does the Council recognize how noisy this track crossing will be?

Liberty Plaza: Wetland/Road Access

We have been recently informed that in building the Golden Triangle Station SWLRT will be taking the upland adjacent to an existing wetland east of the station. We currently have an access drive in this upland area that will service our approved development project, Liberty Plaza, a major office project. The existing access road was required by the City as a condition of the development approval process. The municipal approvals remain current and in force. However, with the taking of the upland there is no room for the access drive without impacting the adjacent wetland. Why is it necessary to bump Liberty from high land onto wetland? Why doesn’t SWLRT mitigate the wetland loss and either build on the mitigated land or provide mitigated land to Liberty? What guarantees does Liberty have that the road will be permitted in a different location to serve Liberty Plaza? The Project Office informed us that they will not provide a replacement access as part of this project due to wetland impacts. This access is imperative for Liberty to conform to the City’s approvals for the site. Why has no provision been made to provide necessary access to this property?

The proposed LRT alignment may also impact wetland and buffer areas that Liberty has already made long term commitments to manage and maintain. If there is any overlap in responsibility due to the LRT development Liberty would need to be released from their current commitments on any of the wetland or buffer areas.

Traction Power Substation

Since the DEIS the Project Office has located a large traction power substation in the parking lot at 7075 Flying Cloud Drive near a 70th Street entrance. The substation must be placed as not to interfere with visibility of cars or trucks entering or exiting the parking lot and must be designed or landscaped appropriately for the site. We understand that the traction power substation was moved onto our site to avoid locating it on a public trail west of the rail line. Locating the traction station on the 7075 property will adversely impact that property and interfere with its use. We understand that the City of Eden Prairie SDEIS comments also reflect the need to appropriately locate and screen these power stations. Why was no effort made to place the traction station at a location that would not impact Liberty? What screening will be provided?

In addition, it appears that the traction power substations will cause the loss of parking. Please confirm the number of parking spaces that will be lost.

70th Street Impacts and Pedestrian Trail

Liberty Property Trust with the City of Eden Prairie recently improved 70th Street near the station location. This was done at significant expense to Liberty Property Trust in order to complete the city project in coordination with ongoing tenant leasing. The FEIS notes several improvements and changes to 70th Street and an adjacent pedestrian trail. These changes must be done in coordination with Liberty to ensure that they do not negatively impact our tenants or future development. Any such change must take in consideration the truck circulation needs of our sites, the locations of the loading docks and overall circulation patterns.

Vibration

We have notified SWLRT about properties currently tenanted by Savillex, 3M, Bluestem, Best Buy as well as other Liberty tenants. These properties are well suited for high-tech uses. They will be artificially restricted and their value diminished if vibration from the operation of SWLRT is not reduced. As noted above, the presence of a track crossing near these buildings significantly increases the presence of ground carried vibration and will interfere with the operation of clean rooms, computer-assisted machining equipment, and other sensitive high-tech devices. This track crossing should be moved to a location where the noise and vibration it generates will have no impact on use of the Liberty properties. Additionally, we are aware from other LRT projects that more effective protection against vibration is available in the commercial market than is being used for the tracks adjacent to the developed Liberty properties. Why aren't such methods and devices being used for the Liberty properties?

Nani Jacobson
June 10, 2016
Page 5

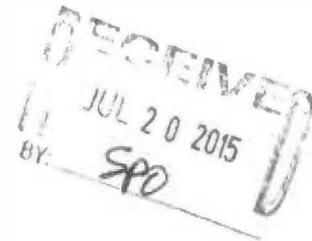
SUMMARY

Liberty is concerned that the FEIS fails to address the full impacts to its properties. Liberty urges SWLRT to (1) take all steps possible to maintain necessary commercial access to its properties, particularly the Liberty Plaza development; (2) remove sources of noise and vibration – in particular the track crossing – that will reduce the utility of its properties; and (3) to use the best available mitigation devices to reduce ground borne vibration and noise that will adversely impact the current and future best use of its properties.

Sincerely,



Richard A. Weiblen
Vice President Development



July 17, 2015

Nani Jacobson
 Assistant Director, Environmental & Agreements
 Metro Transit – SWLRT Project Office
 6465 Wayzata Boulevard, Suite 500
 St. Louis Park, MN 55426

Re: Comments of Liberty Property Trust Regarding OMF to be Located at Site 9A

Dear Ms. Jacobson:

Liberty Property Trust is the owner of the developed industrial properties at 1515 Sixth Street South, and 1600 Fifth Street South, Hopkins Minnesota, which will be taken for the proposed Operations and Maintenance Facility (OMF), Site 9A, Hopkins K-Tel East. As a property owner that will suffer the loss of two important industrial investment properties, we are deeply concerned about how this taking will impact us. We have reviewed the SDEIS and have the following comments on that document.

1. OMF Site 9A Selection Evaluation:

Our review revealed that Site 9A was not part of the original DEIS review and was only added as part of the SDEIS process and not subject to the same site selection evaluation that was done during the DEIS review. We understand that as part of the SDEIS analysis for a preferred OMF site a four step process was conducted that initially identified approximately 30 sites and through each step dismissed potential sites until site 9A was the final selection.

It appears to us that SDEIS failed to fully or properly evaluate the OMF site (identified in the SDEIS as site 9A) against comparable sites that were also being considered. We believe that additional information should be provided that will explain why site 9A was preferred over a number of others.

2. A Total Taking of the Liberty Property for OMF at Site 9A is Required

The SDEIS under Section 3.3.1.2 Acquisitions and Displacement indicates that there will be a full taking of both our industrial properties within the site 9A footprint. Liberty Property Trust concurs that any taking must be a full taking of each property.

The SDEIS notes that land which is acquired for the SW/LRT Project but not fully used for the OMF may be considered a remnant parcel and sold. Liberty Property Trust has no interest in buying back a remnant piece and there should be no expectation that such remnants will have any



LIBERTY
PROPERTY
TRUST

material economic value to Liberty. Liberty has previously conveyed this same information to representatives of the Met Council.

Liberty Property Trust has been an active participant in the public process and planning of the SWLRT. We are supportive of the project but recognize that a number of our properties will be taken if the project goes forward. Our concerns regarding the SDEIS reflect our past comments on the DEIS regarding our properties in Hopkins, Minnetonka and Eden Prairie, adjacent the Golden Triangle Station. Our earlier DEIS comments are attached for your convenience.

Finally, if the project goes forward, it is essential that our industrial tenants are fully compensated for their relocation costs and are given sufficient lead time to plan and execute a complex industrial plant relocation.

Liberty Property Trust

Richard Weiblen
Vice President, Development.

LIBERTY

PROPERTY TRUST

December 7, 2012

Hennepin County
Housing, Community Works & Transit
701 Fourth Avenue South, Suite 400
Minneapolis, MN 55415

**RE: Comments on the Southwest Transitway
Draft Environmental Impact Statement (DEIS)**

To Whom It May Concern:

Liberty Property Limited Partnership (Liberty) owns, leases, and manages multiple properties adjacent to the proposed Southwest Transitway LRT corridor as it passes through Segment 3 in Eden Prairie and Minnetonka. The subject property addresses are:

5400 - 5550 Feltl Road, Minnetonka
10301 – 10399 West 70th Street, Eden Prairie
6901 Flying Cloud Drive, Eden Prairie
7075 Flying Cloud Drive, Eden Prairie
7246 Flying Cloud Drive, Eden Prairie
7400 Flying Cloud Drive, Eden Prairie

Liberty has completed a review of the DEIS and offers the following comments for consideration:

1. Liberty generally supports the alignment option described in Section 2.3.3 Build Alternatives as Alternative 3A. This alternative includes Segment 3 with the proposed LRT alignment adjacent to, or through several of our properties noted above. While there will be impacts to these properties in order to implement transit that will need to be recognized and analyzed, we agree with the City of Eden Prairie that the 3A alignment offers the most potential to overcome transportation deficiencies in the Golden Triangle area.
2. Chapter 2 – Alternatives includes a description of the proposed Golden Triangle Station in Section 2.3.4. The station location adjoins three of the multiple properties listed above, and includes a proposed park and ride facility described as containing 100 surface parking spaces. There are a number of concerns related to this station that are not fully analyzed in the Conceptual Engineering Layout included with Appendix F of the DEIS. Concerns include proposed location, proposed access, proposed grades, and lack of coordination with existing conditions. The document indicates that a number of these issues will be more fully analyzed in the Preliminary Engineering Design Phase leading up to preparation of the Final EIS; we believe that additional detail is essential to avoid unnecessary impacts and project costs as the design evolves.

10400 VIKING DRIVE • SUITE 130 • EDEN PRAIRIE, MN 55344 • (952) 947-1100 • FAX: (952) 947-0800

Enhancing people's lives through extraordinary work environments
www.libertyproperty.com • NYSE: LRY

Florida • Illinois • Maryland • Michigan • Minnesota • New Jersey • North Carolina • Pennsylvania • South Carolina • Texas • Virginia • Wisconsin • United Kingdom

3. Section 3.1.2 discusses Existing and Anticipated Land Use at a Macro, or policy level and misses some conditions along the corridor where prior land use planning and site-specific project approvals further define what landowners expect to occur on their properties. Future plans are addressed partially in Section 9.4 – Reasonably Foreseeable Future Actions, but the descriptions contained there don't include all of the vested development rights that have accrued to our properties at 6901 Flying Cloud Drive and 7075 Flying Cloud Drive which are subject to an approved PUD Development Plan. The future potential of 6901 and 7075 Flying Cloud drive is partially described in Table 9.4-1, but the approvals include more development than is described as an identifiable Future Action. The property at 7075 Flying Cloud Drive currently contains approximately 345,000 SF of office space currently occupied by SuperValu, Inc., and is approved for additional expansion on the site. As part of the same master planning effort, Liberty began construction of a 128,000 SF office building at 6901 Flying Cloud Drive that included several completed or ongoing commitments that could be affected by the LRT alignment and by the proposed Golden Triangle Station and associated Park and Ride Facility. Issues related to the development potential of these properties include:
- Liberty's PUD Master Plan illustrates the extension of West 70th Street from Flying Cloud Drive east to the current terminus of West 70th Street just to the east of the proposed LRT alignment. The configuration of the at-grade crossing and the vertical alignment of the LRT lines need to be coordinated with the proposed alignment of West 70th Street. This is critical to Liberty in order to maintain a major access to structured parking for 6901 Flying Cloud Drive, to maintain the existing parking and service dock area for 7075 Flying Cloud Drive, and to conform to planned wetland impacts and mitigation that have been approved and permitted by the City and by the Nine-Mile-Creek Watershed District (NMCWD).
 - The proposed LRT alignment may impact wetland and buffer areas that Liberty has already made a long-term commitment to manage and maintain. If there is an overlap in responsibility due to LRT development, Liberty would need to be released from their current commitments on any of the wetland or buffer areas subjected to further alterations.
 - As part of providing for the full level of development described above, Liberty funded improvements to a section of Flying Cloud Drive to provide the lane geometry needed to allow for the future intersection at West 70th Street with an intersection that would operate acceptably at full development with forecast background traffic growth. More detailed analysis of access and travel patterns due to the Golden Triangle Station and Park and Ride should be completed to determine possible impacts on potential redevelopment.
 - As part of its PUD master planning Liberty retained an existing surface parking area adjacent to 70th Street that could function as a Park and Ride facility. The area currently contains 102 parking spaces with direct access to West 70th Street. However, this area was not considered in the Conceptual Engineering layout which was the basis for the DEIS. We would like to see this area analyzed as an option to the location for the Park and Ride facility as identified in the Conceptual Layout.

- We agree with the City of Eden Prairie that the size of the facility must be balanced with the parking demand to assure adequate parking supply for Park and Ride users to avoid potential overflow issues that would impact the neighboring properties.

We also believe these issues should be addressed in the forthcoming Preliminary Engineering and any related impacts and mitigation should be analyzed in the Final EIS.

4. The property at 7400 Flying Cloud Drive has an approved parking expansion plan that would allow for greater flexibility of uses for the building. The proposed alignment in Segment 3 crosses this property and impacts areas where expanded parking has been approved, and also has significant impacts on existing parking. Ways to reduce the impact to existing and proposed parking on this parcel should be more fully explored in the Preliminary Engineering and Final EIS.
5. Section 3.3.2 – Methodology describes how the project limits were defined for analysis in the DEIS. As noted elsewhere in our comments, we feel that the actual influence or impact area may expand beyond the project limits depicted in the Conceptual Layout included in Appendix F of the DEIS. As an affected property owner we expect that the layout will be further refined in the Preliminary Engineering stage, and request that the specific issues outlined in our DEIS comments are fully designed and analyzed for the Final EIS.
6. Section 4.2 – Water Resources describes in general terms areas where depth to groundwater and surface water bodies might be impacted by the need for dewatering during construction. The areas near all of the Liberty properties along Flying Cloud Drive contain wetlands that could be affected by construction dewatering or by changes in natural drainage patterns where the LRT alignment passes through undeveloped open space. As described above, Liberty already has long-term commitments to ensure the viability of certain wetlands that is a part of our Development Agreement with the City of Eden Prairie and an obligation of permitting required for necessary wetland alteration. We believe that a more thorough analysis of potential impacts on surface water resources from construction phase dewatering and from permanent changes to existing drainage patterns that are tributary to water bodies on Liberty properties should be included in the Final EIS. Mitigation, if necessary, should include the appropriate assignment of responsibility for impacts that occur in areas where Liberty already has contractual maintenance and conservation obligations.
7. The traffic analysis completed for Chapter 6 went through a scoping process that limited the number of existing intersections for which detailed operational analysis was completed. We note that the intersections near the proposed at-grade crossing of the LRT alignment with Valley View Road in the vicinity of its intersection with Flying Cloud Drive all are forecast to have marginal Levels of Service for the 2018 and 2030 forecast periods. We join the City of Eden Prairie in support of a grade-separated crossing at this location to ensure that there is adequate intersection capacity to feed Flying Cloud Drive from the south end at Valley View Road as well as the north end at Shady Oak Road. As noted earlier, a more wide-spread analysis of travel patterns and potential impacts from the

proposed Golden Triangle Park and Ride facility is warranted to ensure that Liberty's development potential for its Flying Cloud Drive properties is maintained.

8. The intersection of Feltl Road with Smetana Lane at the north end of the Opus II development is proposed to be realigned to coordinate with the crossing of the LRT alignment at Smetana Lane. This intersection was apparently scoped out of detailed analysis by virtue of having daily traffic volumes below 5000 vehicles per day. The intersection is immediately adjacent to our property at 5450 Feltl Road. We would like to see a more detailed operational analysis of this intersection to confirm that the proposed change does not compromise accessibility to the property from Smetana Lane. Also, the realignment of the "T" intersection could require significant grading and tree removal at the north end of the property, which should be further analyzed for the Final EIS.
9. The Technical Memorandum dated March 21, 2012 that is contained in Appendix H describes the traffic analysis completed for the DEIS. In the introduction it states that "*Each station and the impacts on traffic operations and circulation will be analyzed in detail with the Final Environmental Impact Statement (FEIS)*". Liberty wishes to be involved with the Hennepin County design team and the City of Eden Prairie in determining the scope and extent of analysis of traffic impacts from the proposed Golden Triangle Station.
10. Referring to the Conceptual Engineering Layout for Segment 3, Sheet 9 of 15, as illustrated in Appendix F, we offer the following comments on the alignment and grading as it relates to our property at 6901 Flying Cloud Drive:
 - The alignment crosses a wetland at the northwest corner of this property that provides critical storm water detention volume identified in our PUD drainage design. The volume eliminated by filling for the Transitway needs to be provided in a fashion that can be utilized by Liberty.
 - The proposed grade for the alignment across the east end of this property occurs roughly eight feet above existing grade. The embankment required could affect the access to the planned parking ramp supporting the 128,000 square-foot office that is under construction at the site by reducing the space available between the Transitway and wetland and buffer areas already subject to long-term maintenance agreements and conservation easements. This access is critical as there are only two available access locations to serve this office development.
 - The embankment required for the proposed grade of the Transitway also reduces the amount of the existing parking area at the east end of this property that could be utilized as surface parking for the planned Park and Ride component of the Golden Triangle Station. If the Transit-way were at, or close to existing grade, nearly all of the 100 planned Park and Ride spaces could be provided in this existing, paved parking area.
11. Referring to the Conceptual Engineering Layout for Segment 3, Sheets 8 and 9 of 15, as illustrated in Appendix F, we offer the following comments on the alignment and grading as it relates to our properties at 7075 Flying Cloud Drive and 10301 70th Street West:

- The proposed alignment for 70th Street was carefully considered to maximize development area south of the proposed roadway while meeting obligations for wetland protection and buffer requirements to the north of the roadway. The crossing elevation of the transit line at 70th Street as depicted in the Conceptual Engineering requires over ten feet of fill at the crossing point, and assumes grade transitions in the roadway profile that would need to extend several hundred feet in either direction from the crossing point, possibly requiring further loss of wetland and wetland buffer if the road stays within its planned corridor, or resulting in the loss of useable lot area if the roadway needs to shift south so that fill for the roadway can be placed without affecting the wetland or associated buffers.
- Further, ten feet of fill at the crossing point would eliminate existing access to the truck docks, service area, and parking adjacent to the northeast corner of the existing structure occupied by SuperValu, Inc. If this corner of the existing parking becomes essentially a dead-end area by shifting access from 70th Street to the west to accommodate fill for the roadway, then substitute truck circulation requirements will further reduce available parking in this area.
- This area of the site is also indicated as the location for the Golden Triangle Station Park and Ride, which again, is inconsistent with its existing use for truck docks and service support that is critical to the tenant at this property. Even if the area were elevated on a structure to match the proposed profile grades of the rail and station, there may not be sufficient clearance for the required truck use below.
- The proposed track alignment between these two properties has a profile grade that roughly matches the top of a large berm separating the two sites. The berm is roughly ten feet tall relative to 7075 Flying Cloud Drive and roughly 14-16 feet tall relative to the property at 10301 West 70th Street. At the proposed elevation the top of the berm is less than 25 feet in width so additional fill would be required on one or both sides to create enough width for the track separation required by the station, with possible impacts to both properties. The width required could be provided by lowering the profile grade to an elevation that allows an at-grade crossing near the existing grade for 70th Street, and reduced impacts to both properties by excavating the berm and establishing a profile eight to ten feet below that analyzed in the DEIS.
- Liberty would like to see the Preliminary Engineering phase of design analyze a revised profile that would lower the proposed track grade as described above from roughly Station 345+00 to Station 669+00 to determine if the potential for impacts can be reduced.

12. Referring to the Conceptual Engineering Layout for Segment 3, Sheets 7 and 8 of 15, as illustrated in Appendix F, we offer the following comments on the alignment and grading as it relates to our property at 7400 Flying Cloud Drive:

- The proposed alignment across this property has a very large impact on the existing parking supply for this property. We believe a substantial amount of additional parking could be preserved if the alignment could be adjusted to move further to the northwest as it crosses the property. It appears that this could be accomplished by more closely following the edge of

December 3, 2012

Page 6

Highway 212 between Stations 322+00 and 328+00 or 329+00 with tighter radii to move the alignment to the north from 329+00 to 336+00.

- Sufficient proximate and convenient parking is critical to the economic success of this site, so Liberty would like to see additional analysis of the alignment to determine if parking impacts can be reduced.
13. We share the City of Eden Prairie's concerns as expressed in their comment letter regarding the placement and potential impacts from ancillary structures and facilities such as Traction Power Sub-Stations, crossing gates, and traffic signal cabinets. The Preliminary Engineering phase and FEIS should incorporate all of these items into the design so that their effect on all properties along the corridor can be evaluated. Protection of the site's viewsheds and also its visibility from existing roadways is critical to its development.
14. Further, we share the City's concerns with the possible impact on nearby structures from vibration, noise and stray current associated with anticipated rail operations, and request that additional analysis of possible effects of vibration be completed for our properties with existing structures that are close to the proposed rail lines. Impacts on utilities, fiber pathways and existing structures during construction need to be analyzed and mitigated. This analysis is especially important in light of the differing soil conditions found on the site. Detailed analysis should be included for all of our properties to evaluate alternatives and determine solutions for mitigating the design and construction impacts of the project.

Thank you for the opportunity to comment on the DEIS. We look forward to the Preliminary Engineering Design phase of the project to work together to improve the interface of the Southwest Transitway with our affected properties.

Sincerely,

Liberty Property Limited Partnership



Richard A. Weiblen
Vice President Development

From: [Jacobson, Nani](#)
To: [swlrt](#)
Subject: FW: EPA 06/97/2016 letter re: SWLRT FEIS
Date: Wednesday, June 08, 2016 10:28:59 AM
Attachments: [EPA-SWLRT-FEISLtr-06-07-2016.pdf](#)

From: Laszewski, Virginia [mailto:Laszewski.Virginia@epa.gov]
Sent: Tuesday, June 07, 2016 3:46 PM
To: Marisol R. Simon (marisol.simon@dot.gov) <marisol.simon@dot.gov>; Fuhrmann, Mark <Mark.Fuhrmann@metrotransit.org>
Cc: Jacobson, Nani <Nani.Jacobson@metrotransit.org>; chad.konickson@usace.army.mil; peter_fasbender@fws.gov; Maya.Sarna@dot.gov; Reginald.Arkell@dot.gov
Subject: EPA 06/97/2016 letter re: SWLRT FEIS

Good Afternoon-

Please see attached file for a copy of EPA's letter regarding the Final EIS for the Southwest Green Line Light Rail Transit Extension Project. The signed/dated original letters are in the mail.
Thank you.

Virginia Laszewski
OECA, NEPA Implementation Section
USEPA, Region 5
312/886-7501



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 07 2016

REPLY TO THE ATTENTION OF:
E-19J

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

Mark Fuhrmann
Program Director, Rail New Starts
Metropolitan Council
390 Roberts Street North
St. Paul, Minnesota 55101-1805

Re: Final Environmental Impact Statement – Southwest Green Line Light Rail
Transit (LRT) Extension (SWLRT), Hennepin County, Minnesota. CEQ # 20160100

Dear Ms. Simon and Mr. Fuhrmann:

The U.S. Environmental Protection Agency (EPA) reviewed the Federal Transit Administration's (FTA) May 2016, Final Environmental Impact Statement (FEIS) for the Metropolitan Council's (Council) Southwest Green Line Light Rail Transit (LRT) Extension (SWLRT) Project. Our comments are provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The Southwest Light Rail Transit (LRT) (METRO Green Line Extension) Project is a proposed extension of the METRO Green Line (Central Corridor LRT), which would operate from downtown Minneapolis through the communities of St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, passing in close proximity to Edina.

The FEIS identified proposed Project includes both the Locally Preferred Alternative (LPA) (based on LRT 3A-1, co-location) and Locally Requested Capital Investments (LRCIs). The LPA is approximately 14.5 miles of new double track proposed as an extension of the METRO Green Line (Central Corridor LRT) that will allow for the co-location of freight rail and light rail in the Kenilworth Corridor (i.e., LRT 3A-1). The proposed alignment includes 16 new light rail stations (including the Eden Prairie Town Center Station that is deferred for construction at a later date), approximately 2,500 additional park-and-ride spaces, accommodations for passenger drop-off, and bicycle and pedestrian access, as well as new or restructured local bus route connection stations and one Operations & Maintenance Facility (OMF) located in the City of

Hopkins, Minnesota. The LRCIs include proposed projects related to roadway, streetscape/landscape/aesthetic improvements, pedestrian/bicycle improvements, utilities, and guideway profile to be funded by local jurisdictions.

EPA commented on the 2012 Draft EIS (DEIS), the 2015 Supplemental DEIS, and the January 2016 Amended Section 4(f) Evaluation regarding the SWLRT Project in letters dated December 27, 2012, July 16, 2015 and January 28, 2016, respectively. We rated the DEIS and SDEIS as Environmental Concerns – Insufficient Information (EC-2). Our comments and recommendations were to clarify the project purpose and need, and adequately analyze alternative impacts related to the OMF, aquatic resources, wetlands, water quality, wellhead protection, stormwater management, neighborhoods with environmental justice concerns, air quality, and noise. We also recommended undertaking an evaluation of a possible modification to DEIS Alternative LRT-3 to avoid impacts to a major wetland area.

Our review of the FEIS indicates that our earlier comments and recommendations have been satisfactorily addressed. Thank you. EPA has no further comments at this time. EPA requests one hard copy and 2 DVDs of the FTA Record of Decision, when it is available.

If you have any questions regarding this letter, please contact Virginia Laszewski of my staff at 312/886-7501 or at laszewski.virginia@epa.gov.

Sincerely,



Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Cc (email):

Nani Jacobson, Assistant Director, Environmental and Agreements, Metro Transit,
Southwest LRT Project, Nani.Jacobson@metrotransit.org.

Chad Konickson, Chief, Regulatory Branch, U.S. Army Corps of Engineers, St. Paul
District, MN, chad.konickson@usace.army.mil

Peter Fasbender, Field Office Supervisor, U.S Fish and Wildlife Service,
peter_fasbender@fws.gov

Maya Sama, FTA, Washington, DC, Maya.Sarna@dot.gov

Reginald Arkell, FTA, Chicago Office, Reginald.Arkell@dot.gov

From: [Shawn Smith](#)
To: [swlrt](#)
Subject: KIAA SWLRT FEIS Response
Date: Thursday, June 09, 2016 8:48:20 AM
Attachments: [KIAA FEIS Response June 2016.docx](#)

Hi Nani,

Attached is the response to the FEIS. Please confirm receipt. I'll be dropping off hard copies this morning as well.

Thank you,

Shawn Smith (on behalf of KIAA)

Kenwood Isles Area Association

Southwest Light Rail FEIS response

June 8th, 2016

Introduction to SDEIS Comments by the Kenwood Isles Area Association

The Kenwood Isles Area Association (KIAA) represents the neighborhood that extends, on its west side, from the proposed SWLRT Penn Avenue station to the Kenilworth Lagoon.

KIAA has participated in the SWLRT planning process in the spirit of cooperation and compromise for approximately nine years. For most of this time, we were assured verbally and in planning documents that freight rail in the Kenilworth Corridor was a temporary condition and would be moved to make way for LRT. The 2012 Draft Environmental Impact Statement clearly recommended that the best course of action was to relocate freight out of the Kenilworth Corridor.

As you are all well aware, this position was reversed in 2013, and the Metropolitan Council's policy is now to "co-locate" freight and light rail in the Kenilworth Corridor, which we continue to oppose. As we stated in our SDEIS response, we continue to consider this a significant breach of public trust and the low point of a deeply flawed planning process.

In our SDEIS response, we noted that it failed to assess the impact of co-location in the Kenilworth Corridor on many levels: safety, vibration, noise, environmental damage, Section 106 assessments, etc. We were told that these would be fully addressed and to wait for the FEIS. While we have waited, again in the spirit of cooperation, we are dismayed that many of these concerns remain unaddressed, or ambiguously addressed.

We are a volunteer organization and were only given only one month to respond to a 17,000 page FEIS document, with an extension requested by our state legislators denied. We are therefore responding to only some of the most critical disagreements and yet unaddressed questions in the FEIS.

Further, we are not comfortable that the Met Council is the body charged with ultimately determining the FEIS for adequacy. We feel that this is a conflict of interest since they are reviewing the documentation of their own work. We strongly support a review of this FEIS by the Environmental Quality Board.

FEIS Comments: New Concerns/Questions/Issues

The Need for the Project includes: "the need to maintain a balanced and economically competitive multimodal freight system." (page ES-2)

This so-called need has never been discussed over the 20+ years of SWLRT planning. It is included here only because Hennepin County and the Metropolitan Council failed to fulfill a fundamental assumption – that freight rail would be moved in the Kenilworth Corridor to make way for light rail.

“LRT 3A and LRT 3A-1 are also referred to in the Draft EIS as freight rail “relocation” and “co-location,” respectively. As noted in the Draft EIS and Supplemental Draft EIS, LRT 3A and LRT 3A-1 would provide the same transit service, with differing freight rail options, therefore the LPA is incorporated within both LRT 3A and LRT 3A-1. “ (page ES-4)

At the time of the presentation of the LPA recommendation the LPA did NOT include freight co-location. Addressing freight rail was to be, according to Hennepin County, a separate project with a separate (undetermined) funding stream. It was only just before the DEIS got underway that the FTA required the county to include freight rail in the study. The DEIS studied and presented 3A and 3A-1 as two separate alternatives. Neither the community nor, it is our belief, the Minneapolis City Council understood the LPA to include freight co-location when the City Council selected the Kenilworth route in January 2010. As discussed in a Minneapolis City Council Resolution, the City Council understood that it was choosing the Kenilworth route with freight relocation. If they had not been assured that freight would be relocated, the process and the decision would likely have been quite different.

“The Project is making minor infrastructure modifications to freight rail for very limited areas, mainly to facilitate the movement of light rail transit.” (p. ES-8)

Moving freight rail 45 feet to accommodate Light Rail and upgrading the infrastructure is inconsistent with the use of the word “minor” as it greatly expands the footprint of the rail presence in the corridor and adds to the adverse effects of co-location in the corridor. Further, the FEIS, in the explanation why freight is treated as an existing condition in the corridor, is faulty because it only measures incremental adverse effects rather than the total adverse effect of freight and light rail. This minimizes and understates the adverse effect of co-location.

While the Project will provide for the continuation of freight rail operations within the Kenilworth Corridor with relatively minor adjustments to freight rail facilities and operations, freight rail operations, including oversight of freight rail cargo, is outside of the scope and Purpose of this Project and outside of the jurisdiction of the Council and FTA. (p. ES-8)

KIAA names this statement as a convenient way to excuse the FTA and Met Council from culpability for fully considering the impacts of co-location. Further, we see this as an excuse to NOT EVEN CONSIDER the possibility of working harder to find alternatives to co-location, to which we stand opposed. While it is acceptable that the existing freight rail operation be included in the No Build alternative, and that *in theory* freight rail operations are outside the scope of the project, the fact is that decisions by Hennepin County and the Metropolitan Council related to freight in the Kenilworth Corridor mean that *in reality* not relocating freight means the Project makes it permanent in Kenilworth. In addition to plans to move and upgrade freight rails, the Project plans to spend approximately \$165 million to accommodate co-location with an environmentally questionable tunnel. Taxpayers would be surprised to learn that we’re spending \$165 million on something that’s only temporarily necessary. Freight rail has been in the Kenilworth Corridor for 20 years ONLY because MNDOT did not follow a Minnesota State law to relocate it out of the corridor years earlier. We strongly assert that the build alternative should include the impacts of keeping freight rail on a permanent basis in Kenilworth even though KIAA does NOT WANT freight to be kept on a permanent basis in Kenilworth.

Further, stating that safety programs are in place does nothing to assure the Kenwood neighborhood that the only plan, should there be a derailment and subsequent ethanol explosion, is to allow the fire to burn out, taking much of Kenwood with it. The June 3, 2016 derailment of a Bakken Oil train in Oregon is proof (<http://abcnews.go.com/us/wirestory/oregon-train-derailment-spills-oil-sparks-fire-39597168>).

Here are comments from officials in response:

"Fire Chief Jim Appleton says the usual amount of wind in Mosier could have turned this incident into a major disaster, destroying the town and sending flames across state lines.

"My attention was focused on the incident that didn't happen," Appleton said. "It probably would have burned its way close to Omaha, Nebraska. That's how big it would have been."

Mayor Arlene Burns said the people of Mosier were "incredibly lucky."

"I count myself lucky that we dodged a bullet," Burns said, after noting that her own child was at school within a few blocks of the derailment. "We hope that this is a wake-up call."

"Justin Jacobs, a spokesman for Union Pacific Railroad, "We want citizens to feel safe," Jacobs said. "We want the oil out of Mosier."

The only difference between the described details is that it is in Oregon and not Minnesota, and oil instead of ethanol. Ethanol is even more explosive/flammable than oil and runs downhill, into groundwater and sewer. We demand to see specific plans for "the worst case scenario": a derailment of an ethanol train that causes a spark-induced explosion within Minneapolis City Limits.

We also demand to understand what organization(s) would have liability in case of a crash, derailment, explosion, etc. prior to the FTA awarding federal funding. It is our current understanding that Hennepin County will transfer land in the corridor to the Met Council, who will then negotiate the terms of liability in secret with the freight rail operators. This not only hides the full cost of LRT operations in Kenilworth from the public, but also does not give adequate assurance to neighborhoods that freight rail companies will have every incentive to operate in the interests of the public when profits may be at stake.

(Re Section 106 NHPA Process), as noted in the table, there will be an adverse effect on the Kenilworth Lagoon as a result of the Project, and thus there will also be an adverse effect on the GRHD.

This is "new" information to the EIS process, but it has been well known that there would be adverse visual and environmental effects to the defined Section 106 properties. This supports public perception that other, less-damaging routes were not properly considered. We remind the FTA and Met Council that predetermining a route is a violation of federal law. It is disappointing that these findings have happened at a point of advanced planning.

Additionally, FEIS states that it is reasonable to expect to find undocumented ground water or soil contamination, without determining what the extent of those are. This is inappropriate for an FEIS because it is supposed to be "FINAL" and thus a complete assessment of the risks.

Because the Kenilworth Corridor lies between Cedar Lake and Lake of the Isles, and above a high water table, it is dismissive of the FTA and Met Council to state that there will not be adverse effects to the Chain of Lakes. It is well known that the Kenilworth Corridor north of 21st St is an old rail yard with significant contaminants that will be disturbed by construction, and put into both the air and water.

Further supporting the position that this alignment is highly environmentally damaging are the ecosystem adverse effects in table ES-4 3.10, where it is clearly referenced that habitat will be removed or degraded, and wildlife foraging, nesting, and breeding habitats will be disturbed. KIAA objects strongly and demands mitigation measures to prevent this from happening. Such damage degrades Cedar Lake and Lake of the Isles and contradicts the section 106 findings.

Given the many mistakes and adjustments we have seen throughout the EIS process, it would be more responsible to investigate and identify construction and operational issues and address them proactively.

The Project will not result in vibration impacts for any residential or institutional land uses. The Project would, however, result in 54 ground-borne noise impacts for residential land uses without mitigation. These impacts would be directly adjacent to and south of the proposed light rail tunnel in the Kenilworth Corridor.

We wholeheartedly disagree with this statement. The fact is that vibration can already be felt by freight rail in homes on both sides of the proposed tunnel as well as throughout the Kenilworth Corridor. Since the FTA and Met Council admit that freight operation is out of scope or control of this project, the statement that vibration is minimized by low speed of freight trains does not reassure us that speeds will not increase when freight infrastructure is upgraded.

Furthermore, there are homes that have close proximity to the Channel and to the proposed light rail line, yet for some reason are excluded from mitigation. KIAA submitted documentation during the DEIS scoping process showing that extra deep footings were required for residential construction near the channel within the last 10 years. This was due to the nature of the soil, its transference of vibration, and the need for greater stability.

Table ES-4.

Short-term: • Develop and implement a Construction Mitigation Plan and a Construction Communication Plan that will address short-term impacts to land use related to temporary construction easements and other construction activities; strategies may include:

- **Conduct public meetings**
- **Establish a 24-hour construction hotline**
- **Prepare materials with information about construction**
- **Address property access issues**
- **Assign staff to serve as liaisons between the public and contractors during construction**

If the past attempts to address impacts are the best predictor of the future, KIAA is concerned as to the overall responsiveness of the Southwest Project Office; there needs to be a more definitive plan to handle concerns. Community Advisory Committee meetings have been unexpectedly cancelled, responsiveness to inquiries has been slow or non-existent, liaisons have made statements at public meetings that “there will not be any discussion.” We would like some specifics as to the frequency of meetings and level of personnel that will be conducting public engagement.

Short-Term/Groundwater:

- **Adhere to permit requirements related to groundwater pumping and discharge from pumping**
- **Employ proper BMPs associated with groundwater removal during construction, to minimize the risk of building settlement**
- **Within Minneapolis, send groundwater discharged to the sanitary sewer system to the treatment plant on the Mississippi River**

The extra burden on the sanitary sewer system because of the extra groundwater being pumped out of the tunnel will likely become another financial burden on the City of Minneapolis and ultimately, its residents. KIAA states that this cost should be known so it can be included in the operating and maintenance costs and not borne by the City. Costs to the City of Minneapolis are of significant concern to Kenwood taxpayers.

Development

As we surfaced in the SDEIS response, the FEIS also lists “station area development” as an item to be addressed through continued consultation. This is inconsistent with numerous statements that have been made that development is not anticipated at the 21st Street Station. For example, the Southwest Community Works website and documents state: “Future development is not envisioned around this station....”

<http://www.swlrtcommunityworks.org/explore-corridor/stations/21st-street-station>

The discussion of development potential at the Penn Station does not relate to the Kenwood Parkway side:

<http://www.swlrtcommunityworks.org/~media/SW%20Corridor/Document%20Archive/investment-framework/ch-4-penn.pdf>

We request a written explanation about what development is being referred to throughout the FEIS as it relates to the 21st St Station area.

Comments on Table 3.3-16, p. 3-84

“Property acquisition and displacement: The Project will result in the partial acquisition of multiple parcels used for the Kenilworth Trail. The Project will not displace the trail or have a long-term effect on trail users because all existing trail connections, access points, and roadway crossings will be maintained.”

Hennepin County plans to transfer land adjacent to Cedar Lake Park to the Met Council for the SWLRT project in order to move freight rail to the west. This land has functioned as part of the park for many years; this will clearly have an impact on the park and the users’ experience. Furthermore, this land was thought to be donated by BNSF to the Minneapolis Parks and Recreation Board. The required documentation for MPRB ownership was not created or maintained, however. No taxes were paid on it for around 50 years.

“Noise and vibration impacts: No adverse impacts after mitigation”

While we appreciate that some efforts have been made to mitigate noise in a very quiet area, we have no confidence that noise from the station area will not be disruptive to the neighborhood. We realize that there are guidelines relating to decibel levels and frequency, but these do not coincide with the real-world experiences of residents and trail users. Furthermore, the SWLRT project, which spends approximately \$165 Million to co-locate freight and light rail, ignores the impacts of freight rail noise – especially with regard to additional noise that will be generated by freight in the 21st Street station area.

“Considering these mitigation measures, the Project will not adversely affect the overall visual quality of the neighborhood.” Table 3.3-16, p. 3-84

“Viewpoint 18 – View Toward the Kenilworth Corridor Crossing of West 21st Street”[...] “The visual impact of the Project will be a slight improvement in the quality of the view.” p.3-145,146

The Kenilworth Corridor is an important element of the Kenwood neighborhood. This project, even after mitigation, will clearly adversely affect the visual quality of this area. The Project plans to fill a well-used urban green space with concrete and steel, fences and walls, ballasted tracks and overhead wires with large structural supports. You are not replacing freight rail infrastructure as promised, but adding substantially to it. While we appreciate landscaping efforts and efforts to mask the power substation and freight rail utility sheds with greenery, it is simply absurd and insulting to say the level of visual impact in this area will be low.

“New at-grade light rail crossings of roadways and pedestrian/bicycle facilities: One new at-grade light rail/roadway crossing, which will be controlled by flashing lights and gates to allow for safe crossings by pedestrians and vehicles and to maintain acceptable traffic operations.” Table 3.3-16, p. 3-84

KIAA has consistently expressed concerns about light pollution, including and especially flashing lights at intersections, which could be a real problem for nearby homes.

“New physical barriers: Light rail alignment will be located adjacent to the existing Kenilworth Corridor, which is an active freight rail corridor (refer to Exhibit 2.1-5). All existing sidewalk, trail, and roadway crossings of the Kenilworth Corridor will be maintained, and, because the existing freight rail alignment is currently a physical barrier, the Project will not create a new physical barrier.” Table 3.3-16, p. 3-84

As pointed out in our DEIS response, LRT will create a new barrier to east-west bicycle and pedestrian travel. The topography of the area (lakes, valley, bluffs) limits east-west travel along the corridor, but there are many important informal east-west crossing points along the Kenilworth Corridor across the railroad tracks. Though these may be formally considered trespassing, it is a fact of most communities that people cross train tracks in places other than the designated areas, especially if a train maintains a reasonable speed limit through a residential area. The existing informal crossings are a germane means of community cohesion.

Summary of Concerns expressed in past responses that remain inadequately addressed in this FEIS:

Co-location ignores rapidly increasing concerns about rail safety and creates a dangerous alignment in Minneapolis.

The FEIS does not provide any details on proof of liability insurance by freight Rail Company because it is “out of scope.” But, it also fails to include any detail on emergency responder training, requirements to provide frequency of trains to responders, implementation of positive train control technology, speed reduction in the corridor, or any adequate measures to prevent the interaction of electrical sparks and volatile freight cargoes. In essence – you are going to put a mouse next to a cat, and hope for the best because it is “out of your scope.”

The cost is too expensive and is underestimated. We have no confidence that the project is budgeted correctly; more and more funding will be necessary. The FEIS clearly states that it expects to find undocumented contamination, and there is very little margin for error in the current budget. Perhaps the FTA and Met Council are hoping that at that point, cost overruns will be acceptable because ground will have been broken, literally.

KIAA was told by the Met Council that we needed to wait for the FEIS for responses to our DEIS and SDEIS concerns, and the FEIS falls short of addressing questions on the complete and total disruption of the park-like setting of the Kenilworth Corridor, environmental impacts, ridership questions, and a safety plan for co-location in case of a worst case scenario. And now we only have 30 days to respond, and were previously informed by Chair Duininck that there is no process for unresolved issues. This means that the only appropriate course of action is to withhold federal funding for SWLRT via this FEIS process until these issues can be resolved.

Because the FEIS falls short on critical components, we expect to see construction damage to historic and non-historic properties and infrastructure along the alignment beyond what has been specified.

There is a significant unresolved lawsuit by the Lakes and Parks Alliance that may halt construction now because the Met Council did not halt planning at the appropriate time to consider other routes. While KIAA is not participating in the lawsuit, we understand why Minneapolis residents and other organizations have been frustrated by the planning process and are compelled to take this action.

We do not trust the Met Council's role in determining adequacy of the FEIS. We support having a neutral third party, such as the EQB, determine adequacy to address this conflict of interest.

Finally, it is incomprehensible to KIAA that this enormously expensive project prioritizes a relatively small number of "choice riders" over the goal of more equitable access to transit. The Met Council sold this line as an "equity train" In Minneapolis, but this alignment and most of the rest of the selected route bypasses low-income areas and areas of heavy transit dependence. This plan provides no honest evidence of equity of access for those needing it in Minneapolis: low income, seniors, youth, or disabled communities.

With so many serious questions and flaws in the FEIS, why are we not being better served? Federal funding should not be allocated to Southwest Light Rail until we have real answers to our questions, not vague assurances. Our constituents deserve better when \$1.8B (and climbing) is going to be the bill to taxpayers.

From: [Shawn Smith](#)
To: [swlrt](#)
Subject: KIAA SWLRT FEIS Response
Date: Thursday, June 09, 2016 8:48:20 AM
Attachments: [KIAA FEIS Response June 2016.docx](#)

Hi Nani,

Attached is the response to the FEIS. Please confirm receipt. I'll be dropping off hard copies this morning as well.

Thank you,

Shawn Smith (on behalf of KIAA)

From: jrocnwr@juno.com
To: [swlr](#)
Subject: Re: Kenilworth Area
Date: Sunday, June 12, 2016 9:44:18 PM

I'm a rail expert & took pictures from the early 1970's on. For nearly a century there was plenty of "clatter in the corridor", with all the rail cars & tracks.

John

Affordable Wireless Plans

Set up is easy. Get online in minutes.

Starting at only \$9.95 per month!

www.netzero.net

From: [Valerie Thorp](#)
To: [swlrt](#)
Cc: [Tom Goodrum](#)
Subject: Redstone
Date: Monday, June 13, 2016 10:54:45 AM
Attachments: [FEIS 2016.pdf](#)
[SDEIS 2015.pdf](#)

Good Morning

Please see the attached documents on behalf of Tom Goodrum with Westwood Professional Services. I have a Supplemental Draft Impact Statement (SDEIS) from 2015, and a Final Environmental Impact Statement (FEIS) from 2016. Please let me know if you have any concerns.

Thank you,

Valerie Thorp

ADMINISTRATIVE ASSISTANT

valerie.thorp@westwoodps.com

Direct (952) 697-5786

Main (952) 937-5150

Westwood Multi-Disciplined Surveying & Engineering

7699 Anagram Drive | Eden Prairie, MN 55344

westwoodps.com

(888) 937-5150

Confidentiality Statement:

This message and any attachments may contain confidential, proprietary or legally privileged information. Any unauthorized dissemination, use, or disclosure of this information, either in whole or in part, is strictly prohibited. The contents of this e-mail are for the intended recipient and are not meant to be relied upon by anyone else. If you have received this message in error, please advise the sender by reply e-mail, and delete this message and any attachments. Thank you.

June 13, 2016

Nani Jacobson
Assistant Director, Environmental and Agreements
Metro-Transit—Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55246

RE: Comments on the Southwest Transitway
Final Environmental Impact Statement (FEIS)

Dear Ms. Jacobson and other Interested Parties:

We write on behalf of Idlewild Properties, LLC and Redstone American Grill, Inc. (together “Redstone”) to comment on the Final Environmental Impact Statement (FEIS) for the SWLRT project.

Redstone owns and operates the Redstone restaurant located at 8000 Eden Road, Eden Prairie. Redstone has completed a review of the FEIS document and continues to believe that the impacts of the project will result in substantial adverse impacts on Redstone’s ability to operate the restaurant and adverse impacts to the value of the property. The impacts include, but are not limited to; the loss of parking, access restrictions, increased noise, visual impacts, safety concerns, vibration concerns to existing retaining walls and buildings plus the public enjoyment of surrounding natural amenities.

The FEIS responses to Redstone’s comments relating to the above listed impacts are generally vague and contradictory and do not provide sufficient information in addressing our concerns as noted in our SDEIS comments. Redstone requests that the project office and the project files record our continued concerns and that the project leaders will make the necessary corrections to alleviate the impacts to our site and surrounding area if the project is to proceed.

Redstone offers the following specific comments concerning the FEIS:

Chapter 2: Alternative Considered

Redstone will be severely impacted by the location of the proposed route and is disappointed that the selection committee recommended the line go across the Redstone property. This decision will likely cause the closure of Redstone along with the displacement of 8 other business for a station that is deferred to possibly 2040. The initial route along Technology Drive would not displace any businesses and provide larger tracts of land for redevelopment opportunities. We continue to recommend that an alternative route be considered.

The FEIS response states that the Town Center Station is still planned to be in place by 2040 and is considered an element of the project.



Chapter 3: Affected Environment, Impacts and Mitigation—Land Use

The FEIS response in this section states that evaluation of environmental impacts for the project **includes reasonably foreseeable future actions** in the evaluation of cumulative impacts for the Project. It continues to state that improvements to city roads and parks as we noted in our comments are generally not included because they are not included in an approved local budget, plan, or policy, and, therefore are outside of the project scope. The road and park that we noted are shown on the Project plans as future road and park. We believe that since they are listed on the project plan that they are a reasonably foreseeable future action of the project. If the FEIS states that the Town Center is a still a planned action then the road and park associated with that plan should be considered.

Parkland, Recreational Areas and Open Spaces

We continue to point out that the trail along Lake Idlewild is designated and planned as a public trail. The FEIS response notes that the city trail map shows the trail as a “general trail” but continues to note that the map does not identify it as public or private. We will point out that this designation is not pointed out on any of the trails within the city trail map. The response then points out the trail is on private property as a defining fact that it is not a trail. Again, we point out that many publically used trails are on private land.

The FEIS response further states that “It is not anticipated that the Project would have any noise or visual impacts to the trail around Lake Idlewild” and that there will be no change to connectivity to the trail. We continue to point out that one of the trail access points is from the eastern side of the Redstone parking lot. With the proposed SWLRT line eliminating access to the eastern parking lot from the sidewalk plus having a train pass every 5 minutes during the day we believe that connectivity will be changed. In addition, the train is proposed to be within 350 feet of the trail with direct views from the trail and limited noise barriers. The bells and whistles at the at-grade crossings will be clearly audible as the noise crosses over the lake and along the trail.

Roadway and Traffic

The FEIS notes that both of Redstone’s existing driveways will be closed and a new access at the far western side of the site will be provided. This new access will include flashing-lights signals, automatic gates, and traffic signal preemption because the trains will be traveling faster than 35 miles per hour when crossing the driveway. It continues to state “Given that the project will maintain driveway access to the property and the property’s main entrance will be at a signalized intersection with an acceptable LOS, the project’s traffic operations are not anticipated to create substantial adverse impacts on Redstone’s ability to operate its restaurant at the property.”

Our comments to the SDEIS clearly spell out the significant impact that the driveway closings will create on the Redstone site, its operations and the safety of the patrons. The use of LOS data for roadway intersections is not applicable to a restaurant driveway. We noted in our comments the traffic impacts and



delays being experienced on the Green Line (Central Corridor) and that more specific analysis needed to be provided to Redstone to fully understand the impacts on our customers.

Parking

Our SDEIS comments were specific on the impact the project will have on Redstone parking. At that time the SDEIS noted the loss of 36 stalls leaving 143 stalls. We commented that more than 36 stalls will be lost due to the need to redesign the parking lot due to the taking, truck maneuvering and the relocation of the driveway while meeting city code requirements. Our preliminary analysis shows that the parking loss will be closer to 80 stalls. The loss of a single stall is significant to the restaurant as it often has limited parking due to its success.

The FEIS response now states that there will only be 10 stalls lost and those lost spaces can be recouped by the 38 new on-street parking that will be created. However, the FEIS does not provide a map or drawing on the specific calculations for this site. An engineered grading plan must be provided to demonstrate how the project will not impact parking. In addition, the on-street parking proposed to recoup the lost parking stalls provides little value to the restaurant. The on-street parking is separated from the restaurant by the LRT tracks and by trains traveling at 35 miles per hour. The only pedestrian access will be the new driveway located at the far western side of the site with a gated crossing. The inconvenience and safety issues related to this plan are unacceptable.

Noise

High noise levels are a very important concern with Redstone as its business operations depend on a relaxing, enjoyable atmosphere for patrons dining in the restaurant and for those using the outdoor patio. With trains traveling over 35 mph every 5 minutes throughout the day only a few feet from the building plus bells and horns at the Flying Cloud crossing and possibly at the Redstone driveway crossing, the noise impact will be substantial.

The FEIS does not appropriately address the noise impact on this site. All the information provided is in generalities and non-conclusive to fully understand the impact to Redstone. Because of the noise created at the at-grade crossings, especially the noise crossing over Lake Idlewild, and the removal of trees along Eden Road, a noise analysis must be conducted for this site and for the public using the trail and the lake.

Visual Quality and Aesthetics

We appreciate that the FEIS did recognize that the visual quality in this area is “Moderate” and not “Low” as identified in the SDEIS. This change is in reflection that the boulevard trees will be removed in front of Redstone and Lake Idlewild and replacement trees cannot be put back due to the close proximity of the train track to the parking lot. The boulevard trees will be replaced with LRT tracks, fencing and catenaries. The FEIS properly identifies this impact when it states the “intactness will be reduced by removing trees and by building the **visually intrusive tracks and OCS**, and by revealing the shopping center structures that are now hidden”. It continues to state that because of the amenities in this area there are a substantial number of pedestrians and because of their presence the visual sensitivity of the viewers



in this area is “high”. The Project needs to maintain the present views to protect the amenities already existing.

We disagree with the FEIS statement that visual unity will remain the same because the lineal features of the project will lead the viewer’s eye toward the water tower, which is the focal point of the view. The view of the water tower is only from the people traveling west on Eden Road. The predominate view of the pedestrian, as noted above, is with the amenities in this area including the trees and Lake Idlewild

Safety and Security

The FEIS notes that safety has been addressed by removing Redstone’s eastern drive access and putting gates at the proposed access at the far western side of the site. These safety features do not support Redstone’s patrons as they will have limited access to the site at only one point, creating a dangerous queuing situation. Patrons walking to the site must now walk all the way to the west driveway to enter the site and restaurant and vehicles will back up along onto Eden Road to the south and east plus backing up into the parking lot due to long waits at the gated access. We fear that these features will create even a greater safety issue than the previous plan that provided two accesses and a midpoint sidewalk connection. The Proposed SWLRT alignment simply creates too many conflict points between trains, vehicles and pedestrians in a very small and uncontrolled area.

Vibration Impact to Existing Retaining Walls and Building

The Redstone site contains retaining walls with significant height along the north side of the parking lot adjacent the city trail. As we become more fully aware of vibration impacts to walls due to trains consistently traveling along the same rails over many years, Redstone believes the operation of the LRT will have a substantial impact to the retaining walls on site and the building. We request that the Project includes a stability test of the retaining walls and building prior the construction of the LRT, if it is approved.

Summary

As noted above, and as we pointed out in our SDEIS comments dated July 21, 2015, the SWLRT project as currently designed will result in substantial adverse impacts on Redstone’s ability to operate its restaurant. These substantial adverse impacts include, but are not limited to, the loss of parking, access restrictions, increased noise, visual impacts, safety concerns, vibrations and the creation of obstacles to the public enjoyment of existing natural amenities (e.g, Lake Idlewild) in the immediate vicinity of the Redstone property.

Moreover, the FEIS is so vague, general and conclusory in nature that it cannot form the basis for reasoned analysis of the true environmental, social and economic effects of the SWLRT. Here, the effect of the SWLRT on the “human environment” surrounding the Redstone property will simply be disastrous. It will irreparably disrupt the natural and physical environment in which the Redstone property is currently situated by creating hazards and inconveniences for



REDSTONE™

AMERICAN GRILL

people attempting to enter that environment in order to dine at Redstone. Finally, it will cause substantial economic hardships for Redstone and similarly situated businesses located along the proposed SWLRT route recommended by the FEIS.

We respectfully request that the Project Office take the necessary actions to adequately address the concerns that we have stated. We look forward to working with you on addressing our concerns and finding solutions that benefit the SWLRT project, the City of Eden Prairie, Redstone and the public.

Very Truly Yours,



Craig A. Oberlander
Chief Manager
Idlewild Properties, LLC



Michael O'Leary
Chief Operating Officer
Redstone American Grill, Inc.

Enclosure

c: **B**ruce D. Malkerson, Esq., Attorney for Redstone
Tom Goodrum and Vern Swing, Westwood Professional Services, Engineering and
Planning Consultants for Redstone



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

RE: Comments on the Southwest Transitway
Supplemental Draft Environmental Impact Statement (SDEIS)

Dear Ms. Jacobson and other Interested Parties:

We write on behalf of Idlewild Properties, LLC and Redstone American Grill, Inc. (together, “Redstone”)¹ to comment on the Supplemental Draft Environmental Impact Statement (“SDEIS”) for the SWLRT project.

Redstone owns and operates the Redstone restaurant located at 8000 Eden Road, Eden Prairie. This property is located in the Eden Prairie Segment of the SDEIS and has been identified as a property that will be partially taken for the SWLRT project. Redstone has completed a review of the SDEIS document, and it opposes the recommendation stated in the SDEIS to move the location of the SWLRT rail line to Eden Road. The proposed location recommended by the SDEIS will result in substantial adverse impacts on Redstone’s ability to operate its restaurant. These substantial adverse impacts include, but are not limited to, the loss of parking, access restrictions, increased noise, visual impacts, safety concerns, and the creation of obstacles to the public enjoyment of existing natural amenities (e.g, Lake Idlewild) in the immediate vicinity of the Redstone property.

Redstone offers the following specific comments concerning the SDEIS:

Chapter 2: ALTERNATIVE CONSIDERED:

All of the rail alignments recommended in the DEIS showed the SWLRT line located along Technology Drive. This reasonably demonstrates that the route best suited for the SWLRT is along Technology Drive. We understand the SDEIS was authorized with the intent of reviewing this alignment based on requests by the City of Eden Prairie and certain businesses impacted by the proposed Technology Drive route. However, Technology Drive is the best alignment for the efficient operation of SWLRT as originally concluded.

¹ Idlewild Properties, LLC owns the real property located at 8000 Eden Road, Eden Prairie. Redstone American Grill, Inc. leases that real property and operates the Redstone American Grill restaurant located at the site.



Section 2.3.1 of the SDEIS states that the City of Eden Prairie asked the Metropolitan Council to investigate the feasibility of a more centrally located and walkable Eden Prairie Town Center Station that would provide better opportunities for transit-oriented development and redevelopment. The City prefers a station within walking distance of the Eden Prairie Center (a regional shopping mall) which the City believes will promote its long term economic development goals and provide higher ridership due to the station's proximity to existing and future commercial activity centers. These points are driven solely by the expected economic benefit to the City, not by any improvement in the operation of the SWLRT. As identified throughout this review, moving the route from Technology Drive to Eden Road:

- impacts more businesses
- impacts more roads and intersections
- requires the construction of a new road
- requires crossing more intersections
- creates more safety risks
- does not achieve the walkability to the mall that the city desired (1/4 mile to a mall entrance)

The proposed Town Center Station does not correspond to the three proposed station locations (described in the document attached hereto as Exhibit A), that the City had considered during the DEIS process. The closest recommended station location is near the intersection of Eden Road and Singletree Lane. (See attached maps and city location criteria) The desire to have the station more centrally located within the City's Town Center District is referenced in three city documents:

- Comprehensive Guide Plan, Future Land Use Plan (2009)
- Eden Prairie Town Center Design Guidelines (2007)
- Eden Prairie Major Center Area Study (2006)

Through the 4-step evaluation process conducted for the SDEIS selection of alternative alignments, there are two alignments along Singletree Lane compared to a single alignment along Eden Road. The final step of the evaluation identified two finalist routes for this section of the line:

- Option 1 is the proposed route (comprehensive plan)
- Option 3 is the Singletree Lane route

Both routes are very comparable in their listed advantages to the LRT system. However, it is noted the Singletree Lane route (Option 3) received a Very Good rating for walkability to the Eden Prairie Mall while Option 1 only received a Good (Table F.3.7 from Appendix F). This noted because it reflects a key criteria from the City of Eden Prairie in its request to move the line away from the DEIS recommended route along Technology Drive.

In light of the new announcement that the SWLRT alignment is being amended due to budget constraints and that the Town Center Station is being deferred for cost savings, we demand a new review of the SDEIS alignment be conducted to re-evaluate if the Technology Drive or the Singletree Lane alignment and the proposed Town Center Station are better suited elsewhere to stay on budget for the project.

Chapter 3: AFFECTED ENVIRONMENT, IMPACTS and MITIGATION

Section 3.1.2.1 (Land Use) of the SDEIS states that there is no significant change in land use from the DEIS alignment and the SDEIS alignment. The SDEIS review evaluates which alignment can support higher density or mixed use development. There are no specific federal regulations guiding land use, so the SDEIS relies on local zoning and comprehensive plans to guide their assessments.

There is a significant difference in existing land uses between the Technology Drive alignment and the City's Comprehensive Plan alignment. Although the guiding and zoning of the lands are similar, the actual existing land uses and impacted properties are significantly different. The proposed alignment will impact at least six more businesses than would be impacted on the Technology Drive route. Moreover, the large vacant land areas and under-used land within the larger developed lots along Technology Drive can support future redevelopment better than the smaller parcels along Eden Road. For these reasons as well as the additional reasons identified above, we demand that the Project Office re-evaluate the potential redevelopment of this area in relation to a Town Center Station that will be built (if at all) several years in the future. During that time, the City can plan and construct improvements that will make a station along Technology Drive a viable destination for people to live, work, and play. A road connecting Singletree Lane to Technology Drive and a Town Center Park on the existing Emerson property are currently being considered. These planned projects can be catalysts in supporting a station on Technology Drive.

Section 3.1.2.4 (Parklands, Recreation Areas, and Open Spaces) of the SDEIS notes that land within 350 feet of the proposed SWLRT rail line was considered for potential impacts and that no parks, recreational areas or open spaces exist along this segment of the SWLRT line. The SDEIS therefore concludes that there are no long-term impacts. The SDEIS is simply incorrect on this point, and a new evaluation must therefore be undertaken. The new evaluation must include Lake Idlewild, which is well within the 350 feet limit identified in the SDEIS and, in fact, is only 150 feet from the proposed SWLRT rail line at the east side of the Redstone property. The SDEIS evaluation failed to consider any impacts at all, either, direct, indirect, long-term or short-term to Lake Idlewild. The City of Eden Prairie's 2013 trail map shows the trail around Lake Idlewild as a public trail, and the City's 2007 Comprehensive Plan identifies a future Town Center Park on the vacant land eastern edge of the land owned by Emerson Process Management Educational Services adjacent to Lake Idlewild. These impacts should and must be

considered. It is obvious the noise and scenic disruption caused by the SWLRT will have a long-term impact on these existing and future recreational areas.

We demand that this existing trail and future park be incorporated into the SDEIS document and be given the same consideration provided to Purgatory Park by the SDEIS. In section 3.2.1.4 of the SDEIS, there is a great amount of detail concerning how the SWLRT line will impact Purgatory Park. The SDEIS lists several ways Purgatory Park would be indirectly impacted by the SWLRT including impacts to access into the park, amenities that would require relocation to avoid the rail line, and the visual intrusions that would be experienced by park users as a result of the proposed rail structures. These changes in the Purgatory Par setting would disrupt a visitor's visual experience, resulting in a moderately-low to low impact upon views into and from the park. A solution to avoiding the existing trail and the future park will be to move the proposed rail line to the other finalist alignment along Singletree Lane (Option 3).

Chapter 3.2 EDEN PRAIRIE SEGMENT

This section provides a summary of the potential environmental impacts within the area between Mitchell Road and Flying Cloud Drive, which includes the Redstone property. Our comments relating to this section will be focused on the direct impacts that the recommended SWLRT line would have on Redstone and on its ability to successfully operate the existing restaurant business at the property. In our review of the SDEIS, it is clearly evident that the recommended SWLRT line route would result in substantial adverse impacts on Redstone's ability to operate its restaurant at the property.

Subsection 3.2.4.2 (Roadway and Traffic) of the SDEIS notes that the SDEIS was analyzed using a preemption strategy for LRT traffic signals, as opposed to the Traffic Signal Priority (TSP) operation that was used for the traffic study in the DEIS. In theory, the preemption strategy would represent the worst-case scenario for vehicular traffic. However, this strategy does not analyze the possibility of increased delays caused by the arrival of trains at the very end of the green cycle for the main line movement, the extension of the green light to service the train, and the transition back into that main line green before transitioning to service the minor driveway approaches. In other words, the analysis employed by the SDEIS does not accurately model the traffic signal delays caused by SWLRT that may be experienced by vehicle traffic seeking to enter or depart from the Redstone property. Delays of this sort occur frequently on the Green Line (Central Corridor Light Rail). Given the operational history of LRT in the Twin Cities Metro area, there is a significant potential for Redstone customers to have to wait up to three traffic signal cycles before being given the right-of-way. The analysis conducted for the SDEIS failed to address this situation and how it will impact the minor approaches at signalized intersections.

The intersections of Eden Rd/Eden Rd and Glen Rd/Eden Rd are not expected to meet vehicular signal warrants without the presence of the LRT. The traffic impact study states that driveways were included in the analysis. However, there is no evidence to support this claim. This

information must be provided to allow businesses to evaluate SWLRT impacts. Based on observations of the Green Line (Central Corridor), which also operates with TSP, phases are skipped and excessive delays on the side streets are experienced. Significant delays are not conducive to long term customer relations for a business. Redstone must be presented with the analysis showing the change in delay values from the No Build to the Build scenario to determine true impacts to customers entering and exiting the restaurant.

The traffic impact analysis presented in the SDEIS fails to accurately reflect traffic operations consistent with other LRT lines operating with TSP. It was also not included in the air quality section. With increased delays present on the minor approaches, there will be an increase in emissions along the corridor. This must be addressed.

Subsection 3.2.4.3 (Parking) of the SDEIS includes a chart that shows the Redstone property currently having 179 parking stalls. As a result of the SWLRT project as currently proposed, Redstone will lose 36 stalls due to the acquisition of part of the Redstone property, leaving only 143 stalls remaining. This loss of parking raises several issues that are inadequately addressed in the SDEIS.

We disagree with the number of lost parking stalls predicted by the SDEIS at the Redstone property and believe that the actual number of lost parking stalls will be much higher. The Redstone parking lot will need to be reconfigured as a result of the SWLRT project to provide adequate maneuvering space for delivery vehicles and to accommodate the relocation of the western parking lot access. This reconfiguration will eliminate several additional stalls currently unaccounted for by the SDEIS. Reconfiguring the parking lot will require City of Eden Prairie site plan approvals. The reconfigured parking lot must satisfy City setback requirements and may require variances from the City's zoning ordinance.

The loss of any parking stall is critical to the Redstone property. The Redstone parking lot is continuously full, and Redstone's patrons currently struggle to find parking spots. Redstone employees even now must park off-site to free spaces for Redstone customers. The loss of even a few parking stalls would be detrimental to Redstone's business operations. Based on our review, Redstone will have only 97 parking stalls remaining after construction of the SWLRT project, note the 143 parking stalls identified in the SDEIS. Redstone cannot accept additional stalls that are off the current Redstone property, especially to the east, as this would create too great of a distance for Redstone customers to walk to the restaurant's front door.

We believe that the acquisition of additional parking stalls along the southern edge of the Redstone parking lot adjacent to Eden Road and the proposed rail line will be necessary in order to construct the SWLRT. The engineered plans fail to show grading limits or cross sections to adequately account for grading impacts to our site. This must be addressed in the SDEIS.

Review of the engineered plans show there is only one to two feet between the parking stalls and the side of a train. This does not take into consideration vehicle overhang from the curb stop.

Furthermore, the SDEIS ignores the safety of Redstone's patrons parking and exiting their vehicles so close to the passing LRT. The safety of those patrons, especially those with small children and those visiting Redstone at night, is of great concern to Redstone. Redstone notes that, for approximately six months of every year, the majority of Redstone's patrons visit the restaurant after sunset. Redstone also notes that approximately 130 of its employees park off-site and therefore will be required to cross the SWLRT tracks when walking to and from their vehicles each workday. Current plans for the SWLRT do not provide for any sort of physical barrier between the Redstone parking lot and SWLRT rail line. These conditions are simply not safe, and they are not adequately addressed by the SDEIS.

Redstone's driveways will also be drastically impacted by SWLRT trains creating unsafe conditions at the access into and out of the Redstone property. The traffic impact study did not include any discussion regarding how the driveways at the Redstone property would be controlled in coordination with the associated train crossings. Will gate arms be provided for the driveways? Will the trains have the right of way through Redstone's driveways? What will be the speed of the LRT through the Redstone property? Redstone has concerns about the answers to these questions based on the frequency with which vehicles stop at rail crossings within the Twin Cities Metro area on or beyond the painted stop bar at those crossing combined with the proposed volume of LRT crossings expected across the driveways at the Redstone property. We have significant concerns regarding the safety of Redstone patrons entering and leaving the Redstone property. According to the traffic impact studies prepared for the SDEIS, there is an expectation of 10 minutes headway between train vehicles in the p.m. peak hour, consistent with the Blue Line and Green Line operations. "A 10 minute headway corresponds to 12 trains in the peak hour (six in each direction) which equates to one train approximately every five minutes." Redstone customers would be subject to delays, close encounters with the trains, and confusion maneuvering between the tracks and Eden Road, especially in the later hours. This will create a sense of fear and will cause potential customers to avoid the Redstone site, which will have significant negative impacts to the operation of Redstone's business operations.

Subsection 3.2.2.3 of the SDEIS notes that permanent noise impacts would not affect the area around Redstone. It does state that there is a moderate noise impact at one hotel, and moderate or severe noise impact at other nearby hotels. There were four sites where noise monitoring was conducted. The two monitoring sites closest to Redstone were N4 and N25, as identified on table 3.2-8 and Appendix H. Site N4 was conducted at the Lincoln Park Apartments in July-August of 2013 as part of SDEIS, and site N25 was conducted at the Homestead Hotel across from Lake Idlewild in 2010 as part of DEIS. Site N4 measured for 24 hours near the water tower and is representative of the ambient noise conditions at the Lincoln Park and Water Tower apartments plus Singletree Lane. According to Table 3.2-9 of the SDEIS, the Summary of Noise Impacts for Residential Lane Use is as follows:

Excerpt from SDEIS Table 3.2-9
 Summary of Noise Impacts for Residential Lane Use – Eden Prairie Segment

Location	Distance from near LRT Track Centerline (ft)	Existing Noise Level (dBA)	Project Noise Level, LRT (dBA)
Lincoln Park Apartments	138	62	57
Water Tower Apartments	113	62	58
Residence Inn	44	61	65

Noise levels at 59 dBA are considered moderate, and noise levels over 64 are considered severe. With projected noise levels at 58 dBA, one level below a moderate level impact, further studies are needed to fully understand the noise impact in this area. How are the projected noise levels shown to be lower than the existing noise levels? The last few pages of Appendix H are a SWLRT Noise Fact Sheet which includes a table of Typical Maximum Noise Levels. According to this table, an LRT vehicle traveling at 45 mph at a distance of 50 ft from the noise source generates noise volumes in the range of 71-76 dBA. The noise analysis reported in the SDEIS does not have results consistent with the associated fact sheet and must be accurately addressed.

Furthermore, the noise impacts become more concerning with the numerous bells and horns that are emitted at intersections and stations are included. The SDEIS does not consider these impacts. Appendix H lists the dBA levels for the bells and horns used along train corridors (see below). The train speed will be at 45 mph when crossing the at-grade intersection at Flying Cloud Drive, and the use of LRT horns are therefore necessary. Bells are expected to be used at the Redstone driveway crossings if gates are provided, and will be used at the Town Center Station 750 feet away.

- LRT bells are sounded for 5 seconds as Light Rail Vehicles approach at-grade crossings
- Grade crossing bells will ring for 20 seconds for each train
- LRT horns would be sounded at an at-grade intersection when traveling 45 mph
- Bells would be sounded twice when entering/exiting a station
- Crossing bells have a sound exposure level of 106 dBA
- LRT bells have a sound exposure level of 88 dBA
- LRT horn have a sound exposure level of 99 dBA

The SDEIS states that LRT vehicles speeds are expected to range between 20 to 55 mph. The SDEIS fails to study the noise associated with an LRT vehicle braking as it approaches a station. The volume of noise from a braking train will be higher than the train noise itself, thus increasing the noise of an LRT vehicle approaching a station and at the Redstone property significantly more than what is described in this section of the SDEIS.

The SDEIS further fails to address noises associated with accessible pedestrian signals that will be installed at the proposed traffic signals near Redstone. While we recognize and support the need for such devices, they produce noise, are subject to noise pollution, are loud, and emit constant beeps and tones which will also have an impact on the dining experience at Redstone.

High noise levels are a very important concern with Redstone, as its business operations depend on a relaxing, enjoyable atmosphere for patrons dining in the restaurant and especially for those using Redstone's outdoor patio. With noise from the trains directly in front of the restaurant plus noise carried across Lake Idlewild from other areas of the SWLRT line, intense focus on the study of noise at Redstone is necessary to protect Redstone's business. The SDEIS only analyzed noise impacts associated with a residential area and did not take into consideration other types of uses, such as restaurants with outdoor patios. There are many such businesses in the area with outdoor facilities in addition to Redstone, such as Champps and Old Chicago. Redstone will lose the ambiance that its customers have come to know and expect with the relative quiet that is provided in Redstone's existing setting adjacent to a nature park, lake, and suburban environment.

Subsection 3.2.1.5 (Visual Quality and Aesthetics) of the SDEIS notes that viewpoint 9 was taken at the eastern end of the Redstone property looking west along Eden Road. That view shows the line of boulevard trees along the parking lot edge of Redstone. Due to the boulevard trees, the existing view score was Moderately Low while the anticipated change in visual quality and aesthetics scored Low due to the loss of those trees. In accordance with the SDEIS findings, the SWLRT project may reduce visual unity of the view unless design and landscape measures are taken. The visual quality of the view will be reduced because of the removal of vegetation and the introduction of the SWLRT tracks, which will reduce the visual intactness and visual unity for this view. The overall level of change in the visual quality of this view is Moderate, not Low as inaccurately stated in the SDEIS.

In review of the engineered plans there will not be enough space to plant trees between Redstone and the tracks nor along the sidewalk. The existing views from Redstone will be altered from trees to a LRT train and tracks with no space for screening. The removal of trees along the boulevard and the inability to screen the trains from our patrons and the public is a substantial negative impact to our business. We are a fine-dining establishment that promotes ambiance and a natural aesthetics atmosphere for our patrons.

Another objection to the SDEIS review of the visual quality and aesthetics near Redstone is the absence of any consideration of the view looking over Lake Idlewild and the trees that surround it. Lake Idlewild provides an aesthetic backdrop for the businesses in this area and is clearly

visible to the public driving on Eden Road or walking among the surrounding shops. We demand that further analysis be conducted on the view-sheds near Redstone so that the analysis includes views to the north across Lake Idlewild.

Subsection 3.2.4.5 (Safety and Security) of the SDEIS reviews the long-term direct and indirect safety and security impacts. Redstone is outraged by the newly introduced potential for violent train-vehicle or train-pedestrian conflicts that will be present at the at-grade crossing of roadways or driveways at and around the Redstone property. The SWLRT trains will be crossing not only Redstone's two driveways but also the intersection of Glen Road and Eden Road. There will be numerous Redstone patrons trying to get into and out of the Redstone property by vehicle or on foot. With SWLRT trains crossing in front of the Redstone property with unknown measures for public safety, Redstone may face potential liability arising from accidents caused by the SWLRT crossings near its property. The proposed SWLRT alignment simply creates too many conflict points between trains, vehicles and pedestrians in a very small and uncontrolled area.

The SDEIS identifies a sidewalk section for pedestrians that would require pedestrians to traverse a parking lot and use a sidewalk currently associated with another business (Brunswick Zone Bowl). This is unacceptable to Redstone. Easements are required to use a private walk for public use and liability will perpetually be an issue. Moreover, requiring pedestrians to walk through the middle of an existing parking lot creates considerable safety concerns. A safer alternative is to provide sidewalks along public roads. If the Town Center Station were located east of the intersection with Eden Road, then a sidewalk could be provided adjacent to Eden Road south to Singletree Lane. The SWLRT's blatant disinterest in the safety of its riders and Redstone's patrons requires correction and further study.

Summary

As noted above, the SWLRT project as currently designed will result in substantial adverse impacts on Redstone's ability to operate its restaurant. These substantial adverse impacts include, but are not limited to, the loss of parking, access restrictions, increased noise, visual impacts, safety concerns, and the creation of obstacles to the public enjoyment of existing natural amenities (e.g. Lake Idlewild) in the immediate vicinity of the Redstone property.

"The adequacy of an environmental impact statement is subject to challenge on both procedural and substantive grounds." *Minnesota Public Interest Research Group v. Adams*, 482 F. Supp. 170 (D. Minn. 1979). An environmental impact statement is substantively inadequate when an agency's "actual balance of costs and benefits" is arbitrary and when the agency gives "insufficient weight to environmental values." *Minnesota Public Interest Research Group v. Butz*, 541 F.2d 1292, 1300 (8th Cir. 1976). An EIS is likewise inadequate if it does not contain sufficient information to permit a reasoned choice of alternatives. *Id.* Moreover, an EIS "must not be so vague, general and conclusory that it cannot form the basis for reasonable evaluation and criticism." *Id.*

The SDEIS prepared for the SWLRT here is both substantively and procedurally inadequate. The costs and benefits set forth in the SDEIS are arbitrary and give insufficient weight to the environmental values that underlay NEPA and MEPA. Moreover, the SDEIS is so vague, general and conclusory in nature that it cannot form the basis for reasoned analysis of the true environmental, social and economic effects of the SWLRT

As such, the SDEIS prepared for the SWLRT here fails to fulfill the fundamental purposes of the National Environmental Policy Act, 42 U.S.C. 4432, et seq. or the Minnesota Environmental Policy Act, Minn. Stat. § 116D.01, et seq. “[T]he overall purpose of NEPA is to establish ‘a broad national commitment to protecting and promoting environmental quality.’” *Sierra Club v. United States Army Corp of Engineers*, 446 F.3d 808, 1126 (8th Cir. 2006), quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989). An EIS prepared pursuant to NEPA and MEPA must consider the “social and economic effects of [a] proposed agency action must ... once it is determined that the proposed agency action significant affects the physical environment.” *Id.* NEPA and MEPA require government agencies to evaluate environmental impact of a proposed government action and possible alternatives to that action before the agency takes any action that will “significantly affect the quality of the human environment.” *Id.* Notably, the term “human environment” must be interpreted “comprehensively to include the natural and physical environment and the relationship of people with that environment.” *Id.*

Here, the effect of the SWLRT on the “human environment” surrounding the Redstone property will simply be disastrous. It will irreparably disrupt the natural and physical environment in which the Redstone property is currently situated. Moreover, it will create hazards and inconveniences for people attempting to enter that environment in order to dine at Redstone. Finally, it will cause substantial economic hardships for Redstone and similarly situated businesses located along the proposed SWLRT route recommended by the SDEIS.

Redstone recognizes that there have been many changes to the SWLRT project since the release of the SDEIS. The Metropolitan Council has recently supported the elimination of the Mitchell Station and the deferment of the Town Center Station along with many other cost saving adjustments. To support cost reductions and a more efficient LRT operation, Redstone encourages the Project Office to act upon its request to re-examine the many issues raised in this letter and consider if past options or new options can provide a better alignment for the SWLRT. The Eden Prairie Segment carries numerous costs and environmental impacts that must be investigated further. The widening and extension of Eden Road is just one example. A second is the ability to avoid the wetland south of Costco if the line is realigned. As noted earlier, the Technology Drive and Singletree Lane alignments were considered viable options and deserve to be reconsidered now. We ask that the Metropolitan Council do so.

We look forward to working with you on addressing our concerns and finding solutions that benefit the SWLRT project, the City of Eden Prairie, Redstone and the public.

Very Truly Yours,

SWLRT SDEIS Comments
Idlewild Properties, LLC/Redstone American Grill, Inc.
July 21, 2015
Page 11



Craig A. Oberlander
Chief Manager
Idlewild Properties, LLC



Michael O'Leary
Chief Operating Officer
Redstone American Grill, Inc.

Enclosure

c: Bruce D. Malkerson, Esq., Attorney for Redstone
Tom Goodrum and Vern Swing, Westwood Professional Services, Engineering and
Planning Consultants for Redstone

From: [Mark Wegner](#)
To: [swlrt](#)
Cc: [Victor Meyers](#)
Subject: Comments on the Southwest LRT Final Environmental Impact Statement
Date: Monday, June 13, 2016 11:26:32 AM
Attachments: [20160613110239800.pdf](#)

To whom it may concern:

Attached is Twin Cities & Western Railroad Company's response to the Southwest LRT Final Environmental Impact Statement.

Would you send me an e-mail confirming the Southwest LRT Project Office has received this?

Thank you,

Mark

Mark Wegner
President
Twin Cities & Western Railroad Company
Glencoe, Minnesota

This message (including any attachments) may contain confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message. Any disclosure, copying, or distribution of this message, or the taking of any action based on it, is strictly prohibited.



TWIN CITIES & WESTERN RAILROAD COMPANY

2925 - 12th Street East
Glencoe, MN 55336
(320) 864-7200
FAX (320) 864-7220

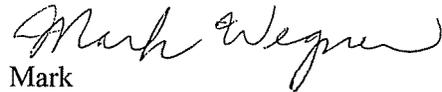
June 13, 2016

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
Saint Louis Park, Minnesota 55426

Dear Ms. Jacobson,

Attached please find Twin Cities & Western Railroad Company's response to the Southwest LRT Final Environmental Impact Statement.

Sincerely,



Mark

Mark Wegner
President
Twin Cities & Western Railroad Company
Glencoe, Minnesota

Twin Cities & Western Railroad Company Response to Metropolitan Council's Southwest
Transitway Final Environmental Impact Statement (FEIS)

Twin Cities & Western Railroad Company (TC&W), along with its subsidiary railroads Minnesota Prairie Line, Inc. and Sisseton Milbank Railroad Company provide the freight rail link to the national freight rail network in Saint Paul for communities in central and western Minnesota and eastern South Dakota. TC&W is able to provide this safe, economical, efficient and greenhouse gas friendly freight transportation utilizing the freight rail tracks in Hopkins, Saint Louis Park and Minneapolis. TC&W has cooperated to facilitate SWLRT, but under federal law we must ensure that the producers, businesses and communities TC&W serves will not be harmed by this project. TC&W will continue to coordinate with the SWLRT project office while ensuring TC&W's federally mandated responsibility to serve our freight customers' needs is met.

Twin Cities & Western Railroad Company (TC&W) responded to the Southwest Transitway Draft Environmental Impact Statement (DEIS) in December 2012, and the issues raised in that response remain in effect and should be considered part of this response. Additionally, TC&W responded to the Supplemental Draft Environmental Impact Statement (SDEIS) in July 2015. At that time TC&W specifically stated that the freight track capacity lost due to the proposed freight rail alignment change east of Highway 169 (from the south side of the corridor to the north side of the corridor to accommodate increased Transit Oriented Development) MUST be replaced. While this understanding exists at the staff level as a result of our SDEIS comments, the Final Environmental Impact Statement (FEIS) does not explicitly address the replacement of this freight track capacity as a necessary part of the project, and it must do so.

TC&W believes that the 30 day comment period for responding to the FEIS is too short. It does not allow our impacted customers, communities and counties an adequate time to respond to this 17,000-page document. It should be understood that the concerns raised by these stakeholders in their 2012 DEIA comments remain valid and should be considered in the context of the FEIS.

TC&W's comments should be viewed in the context of the critical freight rail service TC&W provides to the counties, communities and customers in Minnesota and South Dakota. Over the last 10 years these stakeholders have invested in excess of \$100 million dollars in their freight rail facilities, creating additional jobs and economic growth in this region of rural Minnesota and South Dakota.

Since southwest metro area development has expanded to Chaska in Carver County, the only realistic option for replacing the lost track capacity mentioned above is 25 miles farther west of the exiting side tracks now located in Saint Louis Park and Hopkins. This will place a permanent additional cost burden on TC&W and its customers as a minimum additional 50 miles (round trip) will be added to the movement of customer carloads hauled by TC&W which currently use the existing sidings now scheduled to be removed. TC&W has been working with SWLRT

project office to arrive at a way to ameliorate these additional permanent costs as part of the project.

Freight rail changes are governed by the federal Surface Transportation Board (STB), which exists to protect the interstate freight rail interests of freight rail customers. One of the assertions within the FEIS is that the STB will not have jurisdiction over the alignment change. TC&W contends that the STB will indeed have jurisdiction, as the alignment change will permanently deny property owners on the south side of the corridor the same access to freight rail they currently have. Under federal law this requires notice and also potential hearing by the STB..

TC&W has called attention to the inherent safety issues of co-location of freight rail alongside the SWLRT, from the point in Hopkins where the alignment parallels TC&W's route all the way east and especially in the space-constrained Kenilworth Corridor. It is imperative that safety measures be put in place for freight rail as well as LRT not only during the construction of the SWLRT alongside the active TC&W freight corridor, but also for future freight rail operations.

While TC&W has had productive conversations with SWLRT engineering staff, we are concerned that the freight rail aspect of the overall project may be a focus of cost-cutting efforts. In order to meet our federally mandated responsibilities to our customers, TC&W cannot and will not accept any compromises that impair our ability to operate safely and efficiently along the SWLRT route in the Twin Cities or as we travel through the communities we serve in outstate Minnesota.

Our specific comments to the FEIS are as follows:

Within the executive summary (page ES-4), one paragraph incorrectly asserts that TC&W was [primarily] concerned about costs with respects to a re-route. TC&W's primary concerns have been and continue to be the physics of rerouting freight trains and the inherent safety issues associated with the proposed re-routes.

Within the executive summary (page ES-7), one paragraph incorrectly asserts that "they will not result in substantial long-term impacts to freight rail operations," -but there is no mention of the need to replace the lost siding track capacity in the bullet points above. There MUST be an acknowledgement of that need, otherwise the concluding paragraph is false.

On page ES-8, the second paragraph refers to freight rail having been in operation in the Kenilworth corridor for nearly 20 years. A more accurate description would be for the last 135 years, with a short period of dormancy from 1993 to 1998.

With respect to the safety discussion on page ES-9, TC&W will work with the SWLRT staff to ensure that all of these measures meet freight rail safety standards. There can be no compromise on safety.

The comment on page ES-10 about the southerly connection is misleading and represents a lack of understanding about freight rail economics. A southerly connection must be maintained, but the freight rail traffic that would flow via that southerly connection (existing or proposed) is

completely dependent on the Upper Mississippi River grain market, relative to other grain markets.

Page ES-18 again asserts there are no adverse impacts to freight rail operators and ignores the need to replace the lost freight rail track capacity.

Page ES-35 contains the assertion that there will be "...No adverse impacts as there are no substantial changes to freight rail operations." This statement is completely inaccurate. There must be an acknowledgement that the project will bear the cost of replacing the lost track capacity, so as not to reduce freight rail capacity. Without that information, the statement is false and misleading.

Page ES-42 – For clarity, the fourth full paragraph should read "The Final EIS documents and responses to all..." –so the average reader will understand that responses to comments on the SDEIS are part of the FEIS. It was not clear, upon first reading of the FEIS that responses to comments on the SDEIS were contained in the FEIS.

On pages 2-13 – 2-14 STB action is required as a result of the southerly properties permanently losing their access to freight rail. Additionally, should the siding track lost not be replaced as part of the project, commerce to south central Minnesota and eastern South Dakota will be significantly impacted, requiring STB involvement.

On Page 2-45, in paragraph 2. , it should be noted that physics were a primary concern of the TC&W (before operational and economic, but physics implied safety issues).

On page 3-46, within the table and footnote, again it is not made clear that replacing the lost freight rail side track capacity is part of the process to move the freight rail alignment. While CP is mentioned in the footnote, nowhere does it mention the impact on TC&W's current freight rail operations of the loss of the siding track capacity, which is in close proximity to TC&W's large railroad connections. As part of the SWLRT project, this track capacity must be replaced, and due to suburban development, it will be at least 25 miles farther west than the current track capacity locations, adding permanent costs for freight operations due to increased distance to and from Twin Cities freight rail connections.

Currently some freight rail traffic is hauled by TC&W from Saint Paul to the side tracks in Saint Louis Park and Hopkins, where it is stored on behalf of customers until the customers determine where in North America the freight is to be sent, and the cars are hauled back to Saint Paul. Adding at least 50 miles round trip to this traffic will increase the costs for this movement permanently. These costs need to be ameliorated as a part of the SWLRT project.

On page 3-50, 3.2.4.3, A, the FEIS asserts that no mitigation measures are warranted. It needs to be explicit in stating that replacing TC&W's lost track capacity is a MUST in order to protect the communities in Minnesota and South Dakota that TC&W serves. The statement, as written, is false.

On page 4-47, the reader could be misled by the assertion that a direct southerly connection could increase freight rail traffic over that connection. Freight rail traffic will occur over that connection (pre or post LRT) based on grain market conditions on the Upper Mississippi River, relative to other grain markets. The design of the connection does not impact the amount of freight rail traffic over that connection - market conditions do.

On page 4-49, there is no mention of the need to replace the 11,770 feet (2.23 miles) of freight rail track. Additionally, the Southwest Project Office has recently identified an extra 4,000+ feet (.78 miles) of freight rail side track to be removed to accommodate the project. Nor is there a mention that additional side track may be needed to be removed as a result of this SWLRT project. All of this track capacity, factoring in its close proximity to TC&W's interchange point with other railroads, will need to be replaced as a part of the SWLRT project.

In Appendix F, page F-79, the paragraph describing the "Swap" and "Southerly Connection" does not describe how the project would replace all of the lost side track capacity. Integral to TC&W's consideration of this concept is the understanding that the siding track capacity will be replaced. If the siding track capacity is not replaced, then TC&W, on behalf of the communities and customers it serves, will be forced to invoke federal protection on their behalf.

Conclusion:

TC&W has long recognized the need for a transit solution to serve the southwestern metropolitan area, and has worked cooperatively with the communities and the governmental agencies to accomplish this.

At the same time, TC&W has studied the long-term freight rail needs of the primarily agricultural area it serves. In our service area, crop yields per acre have increased steadily over the past 20 years, and there is every reason to expect this trend to continue. As the entire SWLRT process has demonstrated, transportation planning is not a process that occurs quickly. TC&W must plan responsibly now in order to continue moving Minnesota and South Dakota produce to market far into the future. This is why TC&W has worked collaboratively and in good faith to ensure that the SWLRT can become a reality while not compromising TC&W's ability to transport the products of south central Minnesota and eastern South Dakota efficiently and safely.

The FEIS needs to be more explicit on the essential need to replace the side track capacity that will be lost as a result of the decision to locate the SWLRT on the southerly side of the corridor, east of Highway 169 to facilitate Transit Oriented Development. This is an essential part of the project and cannot be discounted or ignored.

TC&W stands ready to cooperate, but under federal law we must ensure that the producers and communities TC&W serves will not be harmed by this project. TC&W will continue to coordinate with the SWLRT office while meeting TC&W's federally mandated responsibility to ensure that our freight customers' needs are met.

From: [Terry A. Kreft](#)
To: [swlrt](#)
Cc: [Peter Beck](#)
Subject: Attached Correspondence
Date: Monday, June 13, 2016 1:21:33 PM
Attachments: [Letter to Mani Jacobson - Luther 6-13-16.pdf](#)

Attached please find correspondence from Peter K. Beck.

Please contact Mr. Beck at peter@peterbecklaw.com or 612-991-1350 if you have any questions or comments.

Thank you.

Terry Kreft
Legal Administrative Assistant
McGrann Shea Carnival Straughn & Lamb, Chartered
800 Nicollet Mall, Suite 2600
Minneapolis, MN 55402-7035
(612) 752-1941

Information in this message, including attachments, is intended only for the confidential use of the recipient(s) named above. This message may be an Attorney-Client communication from the law firm of McGrann Shea Carnival Straughn & Lamb, Chartered, and as such is privileged and confidential. If you are not an intended recipient of this message, or an agent responsible for delivering it to an intended recipient, you are hereby notified that you have received this message in error, that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this message in error, please notify the sender immediately at 612-338-2525, delete the message, and return any hard copy print-outs.

BECK LAW OFFICE

4746 Sheridan Ave. S.
Minneapolis, MN 55410

Peter K Beck
Attorney at Law

612-991-1350
peter@peterbecklaw.com

June 13, 2016

Mani Jacobson, Assistant Director
Environmental and Agreements
Metro Transit/Southwest LRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426

Re: Comments on Southwest LRT Final Environmental Impact Statement

Dear Ms. Jacobson:

This comment letter is submitted on behalf of The Luther Company LLLP (“Luther”), owner of the Hopkins Honda property located at 250 5th Avenue South (the “Property”) in the City of Hopkins, Minnesota. The Property is located immediately to the south of the Southwest LRT (“SWLRT”) Downtown Hopkins Station.

Luther submitted a comment letter on the SDEIS for the SWLRT Project expressing a number of concerns with the proposal to take a strip of property on the northern edge of the Property which would potentially block both of Luther’s access points to the Property. In response to this comment, the Final Environmental Impact Statement states that:

The construction activities within the temporary easement will be managed such that only one of the two access points to the property at 8th Avenue or 5th Avenue will be closed at any given time and the drive aisle that connects between 8th Avenue or 5th Avenue is excluded from the temporary easement boundary.

It appears from this response that Luther’s two access points will be closed at different times. It is not clear how often this will occur, nor whether one or both access points will be closed just once or multiple times in the course of construction of the SWLRT.

This letter is to request that Luther’s access points not be closed any more often than necessary, and preferably only on one occasion for each access point. Further, Luther requests 90 days’ written notice before closure of an access point so that they can communicate the closure to their customers well in advance. Failure to provide such a notice will result in Luther customers not knowing which way to enter the dealership at any given time and potentially turning onto 5th or 8th Avenue when access is closed and having to make a u-turn to get back out

Mani Jacobson
June 13, 2016
Page 2

and proceed to the other access. This seems not only inconvenient to Luther's customers, but dangerous as well. For that reason, we request 90 days' before closure of an access.

Very truly yours,

PETER K. BECK ATTORNEY AT LAW PLLC

By: Peter Beck
Peter K. Beck

PKB:tk

cc: Linda McGinty
Kyle Alison

From: [Christopher S. Hayhoe](#)
To: [swlrt](#)
Cc: [peter.stegner \(peterstegner@msn.com\)](mailto:peter.stegner@msn.com)
Subject: Calhoun-Isles Condominium Association Objections to Final EIS
Date: Monday, June 13, 2016 2:21:08 PM
Attachments: [imagee16306.PNG](#)
[Jacobson Letter.pdf](#)

Dear Ms. Jacobson,

Attached is the letter of objection to the final EIS with attached engineering statement and technical memorandum, all submitted by the Calhoun-Isles Condominium Association, Inc. Please acknowledge receipt of this email and attachment. Thank you.

Christopher Hayhoe

Christopher S. Hayhoe

Attorney

220 South 6th Street, Suite 2200, Minneapolis, MN 55402
Direct: 612.373.8505 | Main: 612.339.6321 | Fax: 612.338.4608
chayhoe@felhaber.com
www.felhaber.com



 *Follow us on social media.*

Confidentiality Notice: This is a confidential communication from a law firm to the intended recipient. If you have received it by mistake, please delete it and notify the sender. Thank you.

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**, an innovator in Software as a Service (SaaS) for business. Providing a **safer** and **more useful** place for your human generated data. Specializing in; Security, archiving and compliance. To find out more [Click Here](#).

Christopher S. Hayhoe
612-373-8575
Fax: 612-338-4608
chayhoe@felhaber.com

June 13, 2016

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit - Southwest LRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, Minnesota 55426

**RE: Final EIS -- Southwest Light Rail Transit Impact on Calhoun-Isles Condominium
Our File No. 25274.004**

Dear Ms. Jacobson:

We represent Calhoun-Isles Condominium Association (the "Association"), which consists of 143 residential units and a large, multiple-story parking structure. The Association's residential and parking structures are located immediately adjacent to the easterly right-of-way for the Kenilworth Corridor. The current plan for the construction of the Southwest Light Rail Transit Line provides for the construction of a shallow tunnel which will be located literally within two feet of the exterior walls of the Association's high-rise structure, as close as six inches to the foundation for the Association's parking ramp and within 43 feet of a row of single-family townhomes. We are greatly concerned about the failure of the final EIS to address accurately the likely impacts of the construction of the line in the shallow tunnel upon the Association's buildings and the homes of our residents, and submit that the analysis is faulty and fails to account for necessary mitigation. In short, the final EIS is inadequate and should not be approved.

We cannot afford, as a residential community, to wait for the Metropolitan Council to develop a "Construction Plan" and a "Mitigation Plan" to protect our properties against damage. Please recognize that the current plan provides for trains to run through the shallow tunnel on rails located approximately 12 feet from the footings of the residential high rise and parking ramp, and some 15.5 feet from their exterior walls. Vibration and noise will certainly affect the habitability of these homes in material ways. The final EIS provides no assurance whatever that operation of 225 trains per day in a shallow tunnel only 12 feet from the foundations of the Condominium's residences and parking structure will not materially undermine their integrity and safety. The final EIS does not provide any mitigation plans and, in fact, misstates material facts that relate to the impact of the Project on Calhoun-Isles.

220 South Sixth Street
Suite 2200
Minneapolis, MN 55402-4504

Phone: 612.339.6321
Fax: 612.338.0535

felhaber.com

Ms. Nani Jacobson
June 13, 2016
Page 2

The Association lacks the expertise to review and understand the final EIS as it relates to the Calhoun-Isles properties. As a result, the Association found it necessary to engage Itasca Consulting Group, Inc., a geotechnical consulting firm well-versed in vibration, noise and geotechnical design issues. Enclosed with this letter is Itasca's Executive Summary of its expert analysis of the final EIS, together with Itasca's supporting Technical Memorandum which identifies significant deficiencies in the final EIS as it relates to Calhoun-Isles.

We believe that the Metropolitan Council should reimburse us for the cost of obtaining Itasca's expert advice on the inadequacy of the final EIS. This request for reimbursement is for the sum of \$10,000.00. We also respectfully request that the final EIS be determined to be inadequate unless and until it properly protects Calhoun-Isles.

Yours very truly,


Christopher S. Hayhoe



June 13, 2016

Board of Directors
Calhoun Isles Condominium Association
3151 Dean Court
Minneapolis, MN 55416

Dear Board of Directors:

The Calhoun Isles Condominium Association (CICA) retained Itasca Consulting Group (Itasca) to assess possible impacts of the Southwest Light Rail Transit (LRT) project on CICA residents, structures, and property. The assessment is based on the project's Final Environmental Impact Statement (EIS)¹, and our findings are presented in the attached Technical Memorandum. Throughout this letter and the memorandum, the acronym "CICA" is used to represent the CICA residents, structures, and property. The terms high rise and condominium are used interchangeably throughout the document to represent the converted grain silo structures.

The potential for impacts on CICA are based on several factors:

1. Proximity—The CICA high rise and parking ramp are immediately adjacent to and less than two feet from proposed construction activity, which includes the installation of a sheet pile wall and construction of a cut and cover tunnel. CICA townhouses are within approximately 43 feet of the proposed construction activity.
2. Susceptibility—Pile driving for a residential development approximately 150 ft southeast of CICA was a nuisance to residents and caused damage. Since the distance is beyond the limits commonly thought to produce pile driving damage, the CICA high rise appears to be susceptible to vibration impacts.

We have identified the following potential impacts to CICA: 1) vibration impacts during construction; 2) vibration impacts during LRT operations; 3) noise impacts during construction; 4) noise impacts during LRT operations; 5) adequacy of the geotechnical site investigation and the potential for settlement; and 6) sheet pile wall constructability.

Our findings are summarized below.

¹<http://metro council.org/Transportation/Projects/Current-Projects/Southwest-LRT/Environmental/Final-EIS.aspx?source=child>

1. **Construction Vibration Impacts:** Under FTA guidance, the construction vibration damage criteria listed in Table 2.2-4 of Appendix K of the Final EIS should be used during the environmental impact assessment to identify problem locations that must be addressed during final design. Construction vibrations will impact the CICA structures and residents. The Final EIS does not identify the susceptibility category of the CICA structures and does not consider the evidence that the CICA high rise is susceptible to vibration impacts. The CICA high rise should be identified as a Building Category IV structure based on recent experience with damage induced by construction vibration. Due to the high potential for vibration impacts during both construction and operation, a detailed vibration susceptibility analysis of all CICA structures is necessary.
2. **LRT Operational Vibration Impacts:** The FTA guidance manual states that: *“For operation in subway, the ground-borne vibration is usually a significant environmental impact.”* A review of the force mobility input, line source transfer mobility function, distance from the LRT track centerline, LRT speed, design mitigation magnitudes based on FTA guidelines, the effects of efficient vibration propagation, possible track conditions, and possible wheel conditions results in estimated vibration magnitudes significantly higher than the FTA vibration impact criterion. Even assuming a “best-case” scenario, which considers excellent track condition, excellent wheel condition, and inefficient vibration propagation, the vibration levels are still estimated to exceed the FTA vibration impact criterion. Furthermore, the Final EIS does not consider the evidence that the CICA high rise is susceptible to vibration impacts. The Final EIS statement that “the Project will result in no vibration impacts for residential land uses” is inaccurate as it pertains to CICA structures. The Final EIS must address the mitigation of these operational vibration impacts.
3. **LRT Operational Noise Impacts:** The Southwest LRT will be underground in the vicinity of the CICA property; therefore, the Final EIS correctly concludes that airborne noise impacts are unlikely. However, ground-borne noise from the LRT train will likely exceed Minnesota Pollution Control Agency (MPCA) noise standards. The Final EIS must address the mitigation of these operational noise impacts.
4. **Geotechnical Site Investigation:** The Final EIS proposes open cut and cover construction for the Kenilworth Tunnel. The excavation support (a sheet pile wall) will be installed two feet from the CICA condominium and within about six inches of the parking garage. Cone Penetration Tests (CPT) and Standard Penetration Tests (SPT) next to the condominiums and garage do not extend deep enough to provide characterization of the ground below the tunnel in the critical tunnel reach adjacent to the condominiums and garage. In fact, boreholes 1050ST, 1049ST and 1138CT barely reach the bottom elevation of the tunnel and should have been advanced to the same depth as 1139CT. It is

critical that the material below the tunnel and adjacent to the condominium and garage are adequately characterized due to the weak clay layer observed in borings I156ST and I139CT. This weak clay layer (if present near the condominium and garage) will have design implications with regards to the passive reaction of the embedded portion of the sheet pile wall. It is therefore recommended to perform an additional three to four CPTs using a seismic cone in order to be able to measure shear wave velocity. Shear wave velocities are essential for evaluating soil deformability at small strain from which, depending on the constitutive model adopted for the design, the operational soil modulus can be properly evaluated.

5. **Sheet Pile Wall Constructability:** The standard vibratory driving method for sheet pile wall installation is not applicable near the CICA condominium and garage due to the close vicinity of sensitive buildings. The most promising alternative outlined in the Final EIS is the press-in method where the sheet pile is pushed into the ground without vibratory hammers. Depending on the soil type and strength it may be necessary to utilize techniques to facilitate the penetration of the sheet pile wall to the desired depth. Boring I138CT shows layers with strength as high as 6,200 psi (43 MPa) or higher for which the Super Crush method would be necessary. Boring I137CT shows a strength of about 1,800 psi (12 MPa) for which the water jetting technique would be sufficient.

Sincerely,



Augusto Lucarelli
Principal



D. Lee Petersen
Principal

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature:



Typed or Printed Name: Ryan L. Peterson

Date: June 13, 2016 License Number: 44953

Enclosure

Ref. 2-5717-01

Technical Memorandum



Date: June 13, 2016
To: Calhoun Isles Condominium Association
From: Ryan Peterson, Lee Petersen, Augusto Lucarelli
Re: Southwest LRT Impacts on Calhoun Isle Condominiums
Ref: 16-2-5717-01-28TM

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature:

A handwritten signature in black ink, appearing to read "Ryan L. Peterson".

Name: Ryan L. Peterson

Date: June 13, 2016

License Number: 44953

1.0 INTRODUCTION

The Calhoun Isles Condominium Association (CICA) retained Itasca Consulting Group (Itasca) to assess possible impacts of the Southwest Light Rail Transit (LRT) project on CICA residents, structures, and property. The assessment is based on the project's Final Environmental Impact Statement (EIS)¹. Throughout this technical memorandum, the acronym "CICA" is used to represent the CICA residents, structures, and property. The terms "high rise" and "condominium" are used interchangeably throughout the document to represent the converted grain silo structures.

The potential for impacts on CICA are based on several factors:

1. Proximity—The CICA high rise and parking ramp are immediately adjacent to and less than two feet from proposed construction activity, which includes the installation of a sheet pile wall and construction of a cut and cover tunnel. CICA townhouses are within approximately 43 feet of the proposed construction activity.
2. Susceptibility—Pile driving for a residential development approximately 150 ft southeast of CICA was a nuisance to residents and reportedly caused damage. Since the distance is beyond the limits commonly thought to produce pile driving damage, the CICA high rise appears to be susceptible to vibration impacts.

We have identified the following potential impacts to CICA: 1) vibration impacts during construction; 2) vibration impacts during LRT operations; 3) noise impacts during construction; 4) noise impacts during LRT operations; 5) adequacy of the geotechnical site investigation and the

¹<http://metro council.org/Transportation/Projects/Current-Projects/Southwest-LRT/Environmental/Final-EIS.aspx?source=child>

potential for settlement; and 6) sheet pile wall constructability. This technical memorandum presents our assessment of these potential impacts.

2.0 VIBRATION IMPACTS

Vibration impacts to CICA are separated into four categories, including:

- vibration impacts causing damage to structures during construction;
- vibration impacts causing nuisance to residents during construction;
- vibration impacts causing damage to structures during LRT operations; and
- vibration impacts causing nuisance to residents during LRT operations.

The vibration impact criteria used in the Final EIS are based on the information contained in Chapter 8 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment manual². The following sections summarize the Southwest LRT construction vibration impacts and long-term LRT vibration impacts.

2.1 Construction Vibration Impacts

As noted in the Introduction, CICA has reportedly experienced recent impacts (nuisance and damage) due to ground-borne vibrations from the Trammel Crow project (located approximately 150 feet southeast of CICA). The distance between the source (vibratory pile driving) and receiver (CICA high rise and townhouses) was significant and it is surprising that these impacts, which extended to the upper floors of the high rise, were experienced given the source-receiver separation distance. The immediate conclusion is that CICA is susceptible to vibration impacts, which could be due to some or all of these factors:

1. the geologic conditions promote efficient vibration propagation;
2. the soil-to-building foundation attenuation is very low; and
3. the floor-to-floor attenuation is very low.

The construction vibration damage assessment herein is based on values in the FTA guidance manual and is listed in Figure 1. Typically, structures similar to the CICA would be classified as Category I buildings. However, based on recent experience, the CICA structures are significantly susceptible to construction vibration. The Final EIS does not identify the building category of the CICA structures. In lieu of a detailed analysis, we recommend that the Calhoun Isles be identified as Building Category IV structures based on recent experience with damage induced by construction vibration. The building category should be identified in a supplement to the Final EIS and should be based on a susceptibility field study.

² https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

TABLE 2.2-4
 FTA Vibration Damage Criteria from Construction

Building Category	PPV (in/sec)	Approximate Lv ^a
I Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV Buildings extremely susceptible to vibration damage	0.12	90

^a RMS velocity in VdB re 1 micro-inch/second

Figure 1 *Vibration damage criteria from construction (Appendix K of the Final EIS).*

2.2 Long-Term (Operational) LRT Vibration Impacts

The FTA guidance manual states:

“For operation in subway, the ground-borne vibration is usually a significant environmental impact.”

Hence, the vibration estimates in the Final EIS have been reviewed and independent vibration estimates have been performed using FTA guidance procedures.

Comments regarding vibration estimates in the Final EIS follow.

- The Final EIS uses force mobility inputs from an earlier study to estimate vibrations impacted by the project. It is unclear whether the force mobility input (reference speed = 40 mph) was adjusted for train speed near the CICA property (estimated speed = 45 mph). Adjusting for train speed increases the estimated vibration.
- A line source transfer mobility function was developed by the Metropolitan Council from field measurements taken roughly 450 ft north of the condominium (at Dean Court and W 28th Street). The field measurements were made on the ground surface, so the transfer function may not adequately represent subsurface propagation of vibrations from tunnel depth.
- The Final EIS lists the horizontal distance from the centerline of the LRT track to the condominium as 43 ft. This value is representative of the distance to townhouses, not the condominium. Actual horizontal distance from the centerline of the eastbound LRT track to the condominium is 13 ft (see Figure 2). Adjusting the distance to the actual value results in a significant increase in estimated vibration.
- The Final EIS identifies two design elements for mitigating operational vibrations.
 - The first design element is highly resilient fasteners. The resulting vibration reduction attributed to these fasteners could be interpreted as being effective at reducing vibrations by 5 VdB above 80 Hz and not effective at reducing vibrations

below 80 Hz. The FTA manual suggests that highly resilient fasteners are effective above 40 Hz. The actual effectiveness will depend on the fastener material properties.

- The second design element is the tunnel slab. No details regarding the estimated magnitude of vibration reduction are given in the Final EIS. Table 10-1 of the FTA guidance manual suggests an appropriate adjustment to vibration propagation for a cut and cover tunnel is a reduction of 3 VdB. This value seems reasonable in the absence of any documented values.
- The total vibration mitigation resulting from proposed design measures appears to be 3 VdB below 80 Hz and 8 VdB above 80 Hz. The magnitude of vibration mitigation presented in the Final EIS is a factor of two to three times greater than these values. The source of the additional mitigation is undocumented and unreferenced in the Final EIS.
- The Final EIS vibration estimates for CICA are far too low, primarily because the source-receiver distance used was more than three times the actual. Also, the Final EIS considered unlikely “best-case” conditions including: 1) much higher vibration mitigation from design features than the FTA guidance manual suggests; 2) high attenuation of vibration propagation through soil; and 3) ideal wheel and track conditions (as opposed to wheel and track conditions that would cause vibrations).

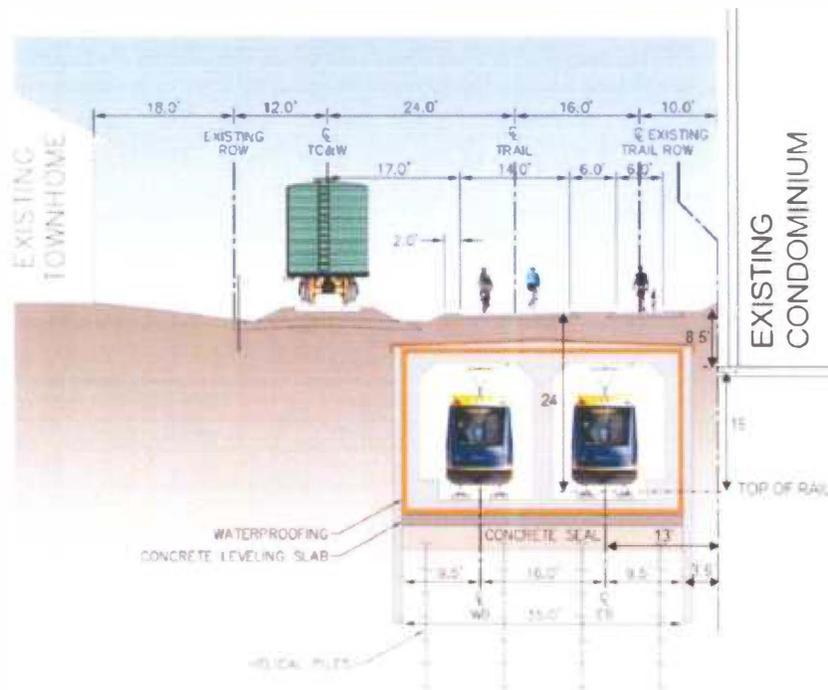


Figure 2 Track centerline to existing condominium distance based on Final EIS documents.

Exhibit 4.2-5 in Appendix K of the Final EIS shows the estimated vibration levels 50 feet from an at-grade embedded track source (reproduced here as Figure 3). Site V8 represents the line source transfer mobility function from the measurements at Dean Court and W 28th Street. This transfer function is used to independently estimate the vibrations at CICA locations.

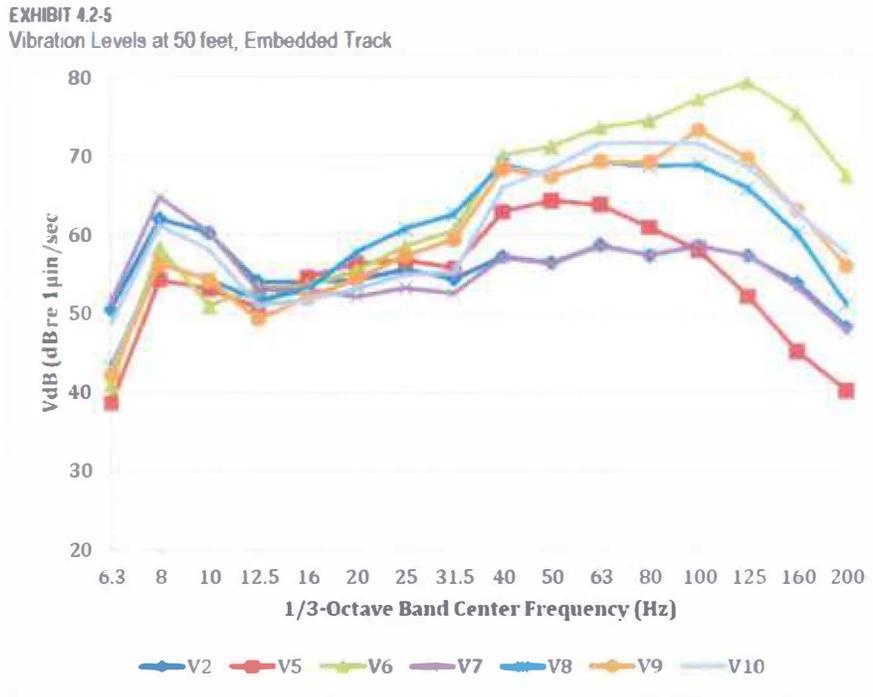


Figure 3 Estimated vibration levels 50 feet from an at-grade source.

The blue line in Figure 4 is a reproduction of the Site V8 line shown in Figure 3 (corrected to a speed of 45 mph). At 50 feet from an at-grade embedded track configuration, the estimated vibration levels will be slightly below the residential nighttime criteria. At 50 feet from a subsurface embedded track configuration (grey line), the estimated vibration levels are reduced due to the cut and cover tunnel structure and the highly resilient fasteners, as proposed in the Final EIS. However, the CICA condominium is only 13 feet from the east bound track centerline (not 43 feet as listed in the Final EIS). Three vibration estimates are shown for a distance of 13 feet and are discussed below.

The first estimate of vibration level (yellow line in Figure 4) assumes a “best-case” scenario based on the data provided in the Final EIS. The force mobility has been corrected to a speed of 45 mph. The line source transfer mobility function has been calculated using a distance of 13 feet. Mitigation measures (highly resilient fasteners and tunnel slab) have been incorporated. This “best-

case” scenario predicts that nighttime criterion is exceeded between 50 and 160 Hz and that daytime criteria is exceeded between 50 and 125 Hz.

The “best-case” scenario does not account for the possibility of efficient propagation. Efficient propagation is likely based on the Trammel Crow experience. It is also likely considering that the distance between the condominium and the sheet pile wall is roughly two feet. LRT vibrations need only travel two feet through geotechnical material (the properties of which may be modified during sheet pile installation) to reach the condominium. The second estimate (dark blue line in Figure 4) considers the efficient propagation of vibrations through soils. An adjustment factor of +10 VdB was used for efficient propagation through soil based on the FTA manual. This second estimate can be considered an “average-case” scenario. This “average-case” scenario predicts that nighttime criteria is exceeded between 20 and 160 Hz and that daytime criteria is exceeded between 40 and 160 Hz.

The best- and average-case scenarios do not consider the effects of worn wheels, wheel flats, corrugated track, or mill scale on new track, all of which have the potential to impact the CICA properties. Therefore, a third “worst-case” scenario (green line in Figure 4) was estimated to incorporate these vehicle and track parameter effects, which can increase vibrations as much as 10 VdB according to the FTA manual. This “worst-case” scenario predicts that nighttime criteria is exceeded between 8 and 200 Hz and that daytime criteria is exceeded between 20 and 160 Hz.

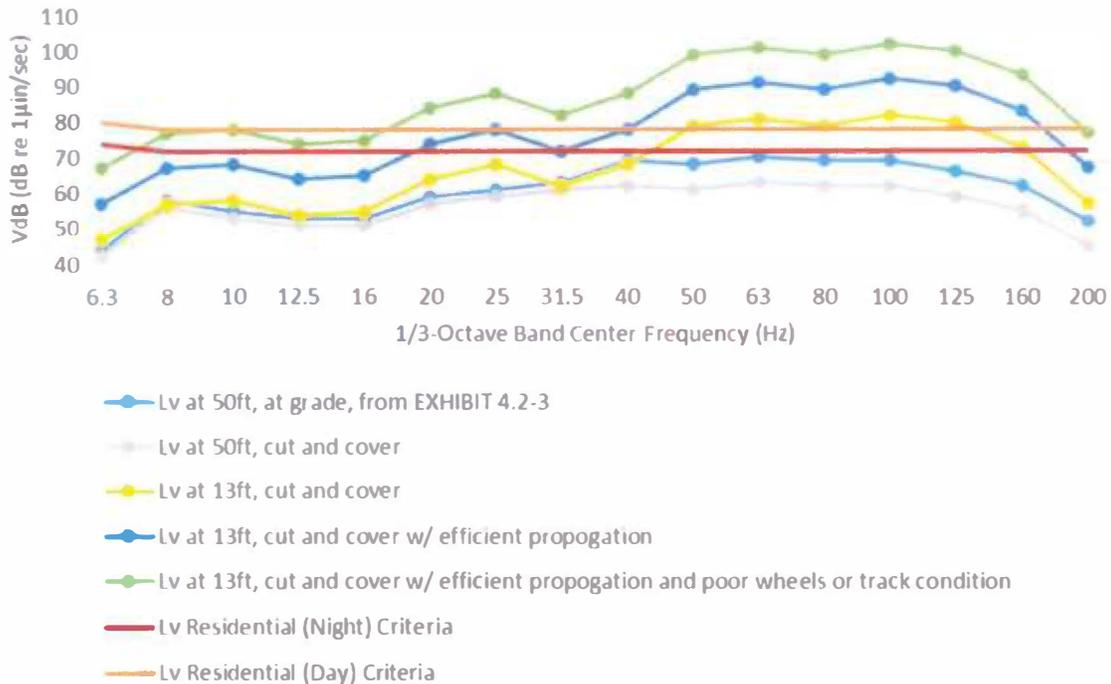


Figure 4 *Estimated range of vibration impacts to the existing CICA condominiums (Lv at 13 ft) relative to FTA day and nighttime criteria and estimates at 50 feet.*

In summary, the preceding calculations indicate that the operational vibrations will significantly exceed FTA guidelines. A susceptibility study is necessary to provide a better estimate of impacts, from which the appropriate additional mitigation measures may be determined.

3.0 NOISE

Noise impacting CICA is subject to Title 3, Chapter 59 of the Minneapolis Code of Ordinances and the Minnesota Pollution Control Agency (MPCA) (Minnesota Rules Chapter 7030). The City of Minneapolis requires an after-hours work permit for any construction occurring on weekends, federal holidays, and before 7:00 am and after 6:00 pm on weekdays. The MPCA noise standards are listed online (<https://www.revisor.leg.state.mn.us/rules>) and in Appendix K of the Final EIS.

MPCA noise standards and long-term (24-hours) measurements of existing noise levels at CICA are listed in Table 4.1-2 of Appendix K of the Final EIS and reproduced in Table 1. Note that only peak levels (presumably daytime values) were reported in the Final EIS. Nighttime levels were measured, but not reported.

Table 1 Comparison of MPCA Noise Criteria and Noise Measurements

Description	Daytime		Nighttime	
	L ₅₀ (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₁₀ (dBA)
MPCA Noise Area Classification 1 Standard	60	65	50	55
Existing Noise Measurements (Appendix K of the Final EIS)	55	67	Not Listed	Not Listed

It is important to differentiate between noise impacts due to construction and due to long-term operations of the Southwest LRT. The following sections include summaries of the review of the Final EIS construction noise impacts and operational noise impacts.

3.1 Construction Noise

As the Final EIS correctly states, construction noise levels are, to a degree, unavoidable for this type of project. Construction noise mitigation measures can be implemented to lessen the impact. The impact of construction noise appears to have been adequately addressed in the Final EIS.

3.2 Operational Noise

The Southwest LRT will be underground in the vicinity of the CICA property; therefore airborne noise impacts are unlikely. The FTA guidance manual provides a method to estimate ground-borne noise based on estimated vibration levels. Figure 5 shows estimated ground-borne noise for the best, average and worst cases above. Although the ground-borne noise estimate is not in terms of L₁₀ dBA (basis of the MPCA criteria), it does suggest the possibility that ground-borne noise could exceed MPCA noise standards.

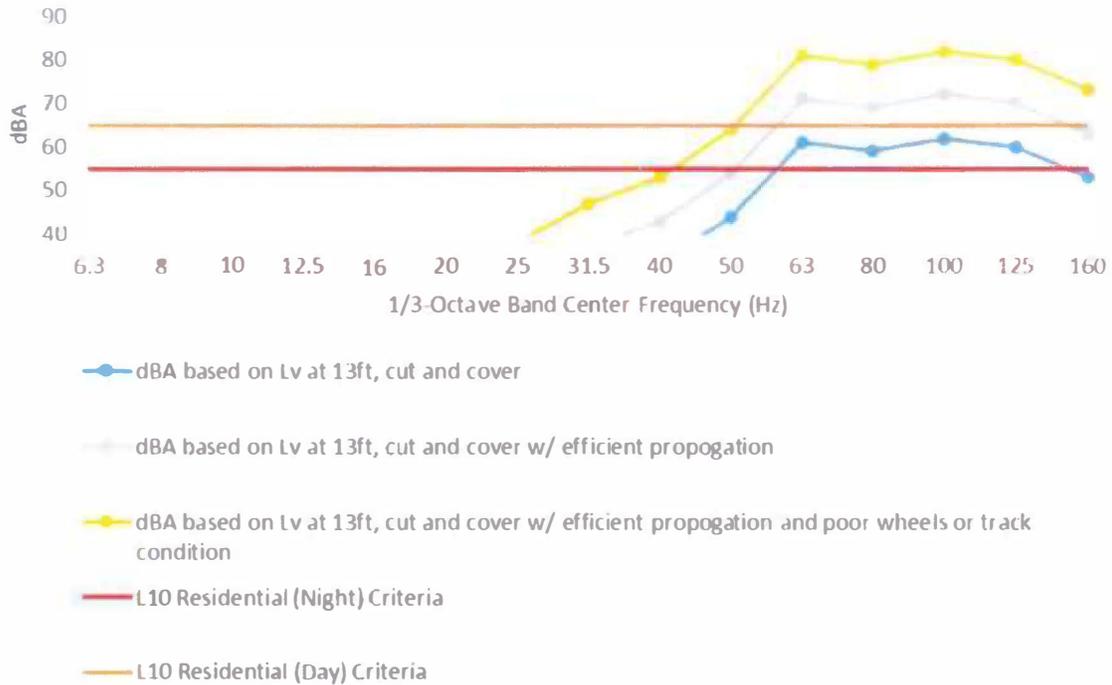


Figure 5 *Estimated ground-borne noise impacts relative to MPCA noise criteria.*

4.0 SITE INVESTIGATION

The CICA structures and their foundations are very close to the planned LRT tunnel construction, with some garage foundations within six inches of the back of the sheet pile wall. In addition, the foundations are relatively shallow compared to the bottom of the tunnel, and so are more sensitive to movements of the sheet pile wall.

The geotechnical conditions in the vicinity of the Calhoun Isles Condominium have been investigated with standard penetration test borings (SPT) and piezocone penetration test borings (CPT). Figure 6 shows the location of each investigation (SPT borings have the suffix ST and CPT borings have the suffix CT).

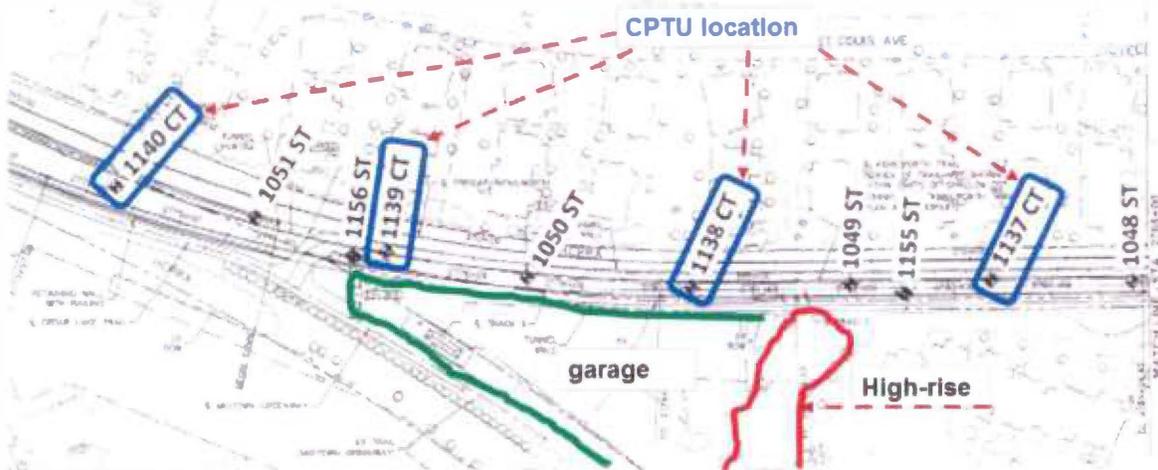


Figure 6 Location of SPT and CPT borings.

There are four CPT borings (1140CT, 1139CT, 1138CT, and 1137CT) and six SPT borings (1051ST, 1156ST, 1050ST, 1049ST, and 1155ST). A CPT test consists of pushing a cone with standardized dimensions at a constant velocity into the ground. The force necessary to push the cone is continuously monitored, providing very detailed information about the local soil stratigraphy and strength. Figure 7 provides a schematic view of the cone along with the parameters that are monitored during the test.

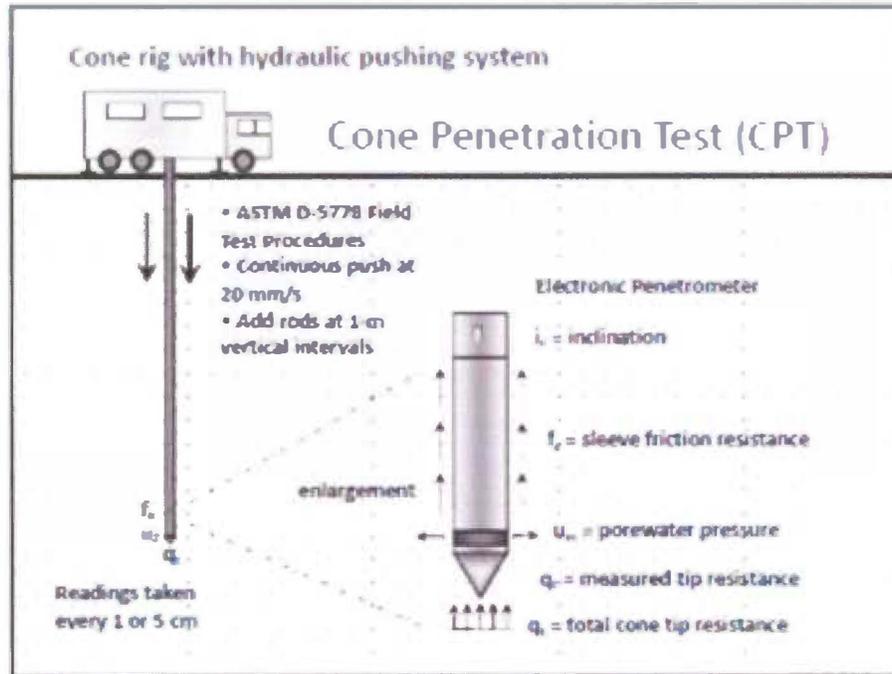


Figure 7 Schematic view of the piezocone

Whenever the soil conditions allow, like in this case, CPT are the preferred test due to speed, cost, and higher quality data.

The geotechnical longitudinal profile is usually an effective way to represent subsurface conditions allowing for an immediate understanding of the geotechnical unit correlations, weak and strong zone alternation, pore pressure distribution, and so on. Figure 8 shows the subsurface conditions adjacent to CICA.

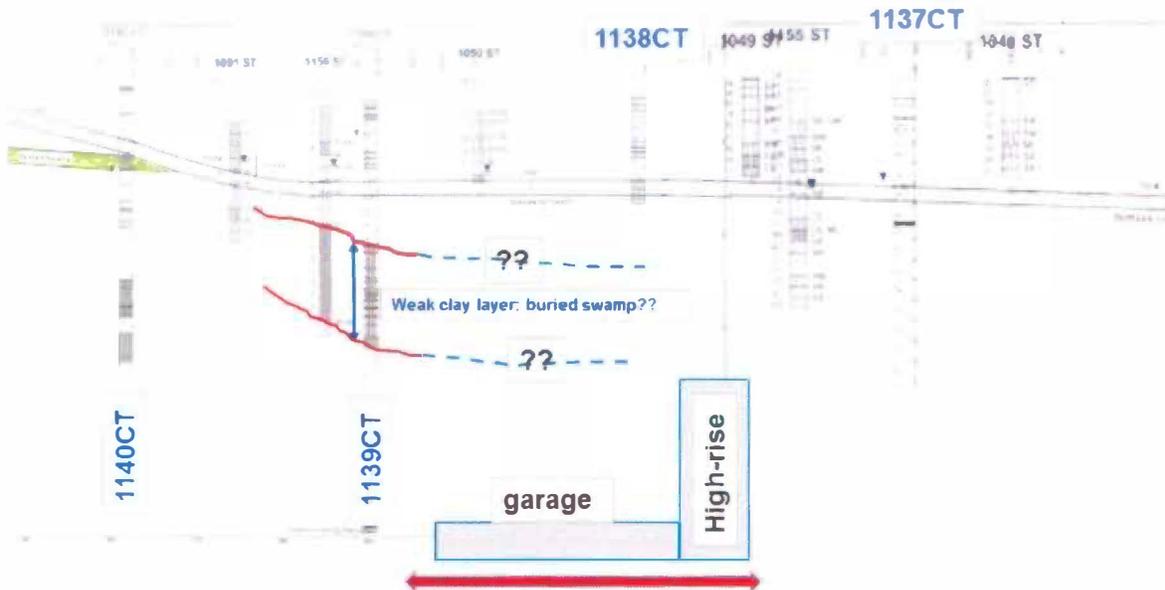


Figure 8 Geotechnical profile adjacent to CICA.

As we can see from the profile, some borings are too short to be able to provide useful information in front of the CICA high rise and garage. Borings 1050ST, 1049ST, and CPT 1138CT barely reach the bottom of the tunnel. These borings should have reached the same depth as test 1139CT. The reason for doing so is that the soil condition below the excavation bottom plays a very important role for the stability of the sheet pile wall (SPW) and for the potential settlements induced to adjacent structures during excavation.

Another important observation comes from the 1139CT results in Figure 9. There is a weak clay layer in the close vicinity of the excavation bottom where the passive reaction of the embedded part of the SPW is supposed to develop. Unfortunately, because test 1050ST, 1138CT, and 1049ST are too short, it is impossible to evaluate the extent and geometry of this weak layer.

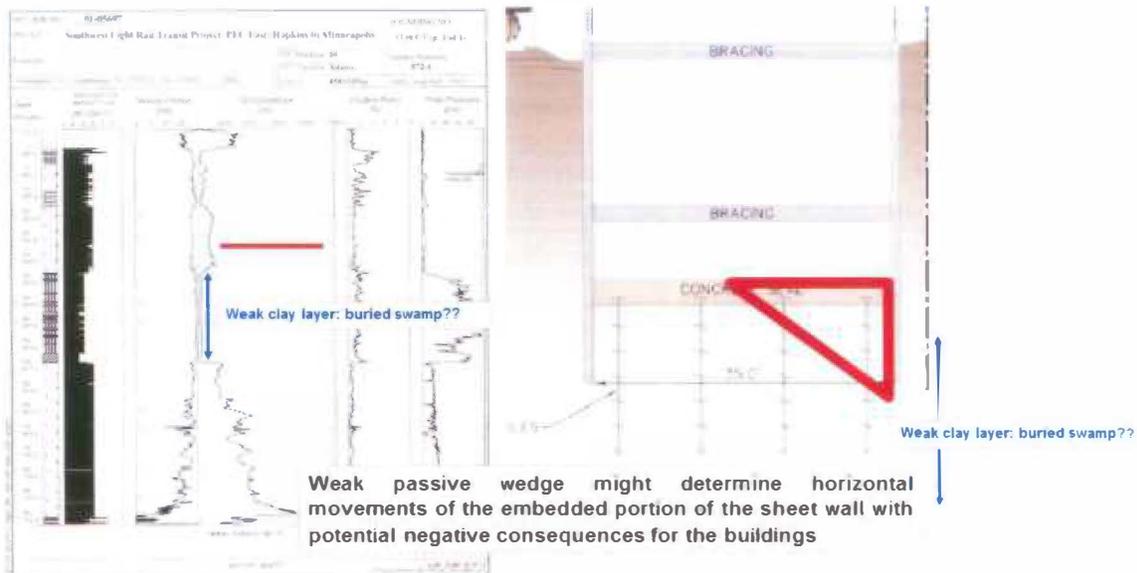


Figure 9 CPT 1139CT profile details.

The presence of the weak layer in 1139CT and the absence of deep borings between 1139CT and 1137CT represent a significant risk to CICA. We consider the site investigation to date to be inadequate in the vicinity of CICA. At least three or four additional CPT borings are necessary—additional CPT borings may be necessary if the subsurface conditions are complex.

The risk to CICA arises because the strength and deformability of the soil below the excavation bottom plays a vital role on the deformations induced behind the wall where the CICA high rise and garage are founded. These structures may be vulnerable to differential settlements.

In addition to future site investigation, the risk to CICA may be mitigated by improving the soil condition just below the excavation bottom. One possible way to achieve the improvement is to realize a jet-grouting strut below the excavation bottom as shown in the following Figure 10. The soil treatment can be realized locally in front of the high-rise and the garage, especially if the new soil investigations confirm the presence of a weak layer below the excavation bottom. The great advantage of such treatment is that it will be immediately effective while other internal contrasts require soil excavation first (and therefore producing deformation first) before they can exert any reaction. Moreover, the second lower internal strut may not be necessary.

Regarding the additional CPT borings, it would be desirable to use a seismic cone in order to be able to measure shear wave velocity. Shear wave velocity of the soils is essential to evaluate soil deformability at small strain from which, depending on the constitutive model adopted for the design, the operational soil modulus can be properly evaluated.

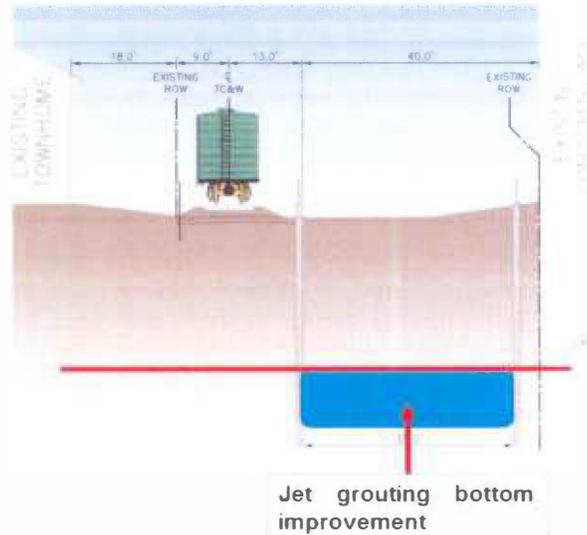


Figure 10 Excavation bottom improvement.

5.0 SHEET PILE WALL CONSTRUCTABILITY

Construction of the sheet pile wall (SPW) adjacent to CICA has the potential to negatively impact CICA. This SPW, which is within six inches of some foundation elements, is necessary to support the soil during construction of the cut-and-cover tunnel. The standard driving method is not applicable in this case due to the close vicinity of the CICA high rise. The most promising alternative is the press-in method where the SPW is pushed into the ground without vibratory hammers. Depending on the soil type and strength, it may be necessary to adopt helping techniques to facilitate the penetration of the SPW at the desired depth.

Subsurface conditions show soils that will require supplemental techniques for pile installation. Figure 11 shows the potential strength variability, with 1138CT showing layers with strength as high as 6,200 psi (43 MPa) or higher and 1137CT showing strength of about 1,800 psi (12 MPa).

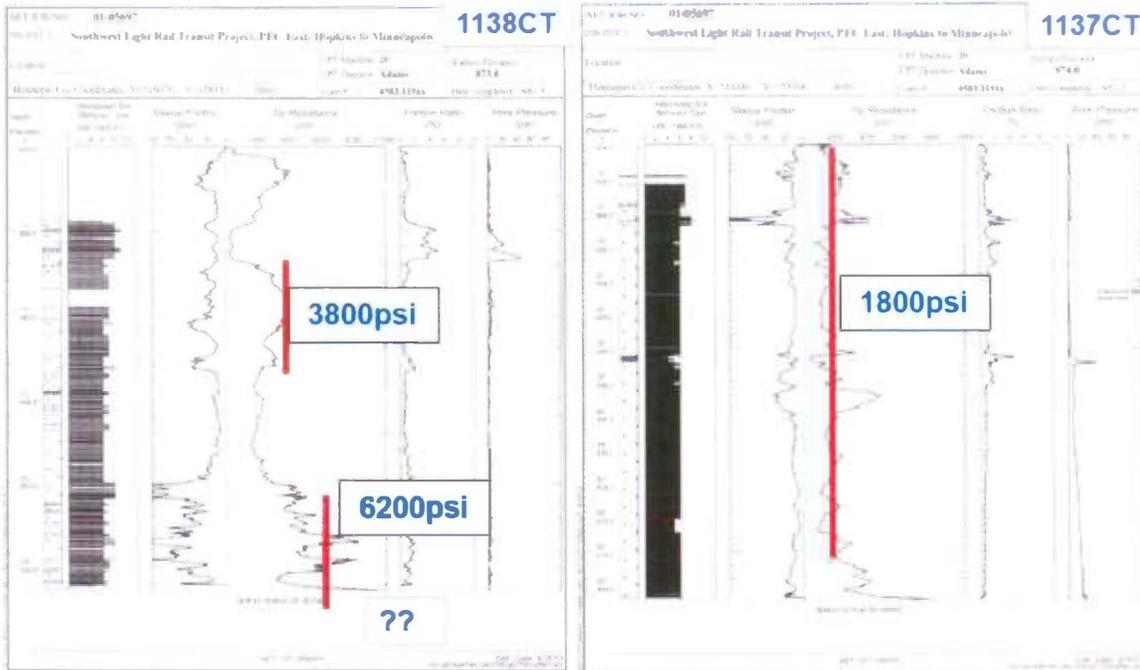


Figure 11 Soil strength variability from CPT borings.

Figure 12 shows a diagram that relates the strength of the soil and the SPW length to the recommended helping technology for successful driving. It is quite evident that, at a minimum, the water jetting technique will be necessary. The conditions encountered in 1138CT show that the Super Crush helping technology may be necessary.

More soil investigation is necessary to fine tune the final choice, which should be corroborated by a field test performed in different locations along the alignment monitoring all the mechanical parameters during the operation.

Cone Penetration Testing
1) Granular Soil

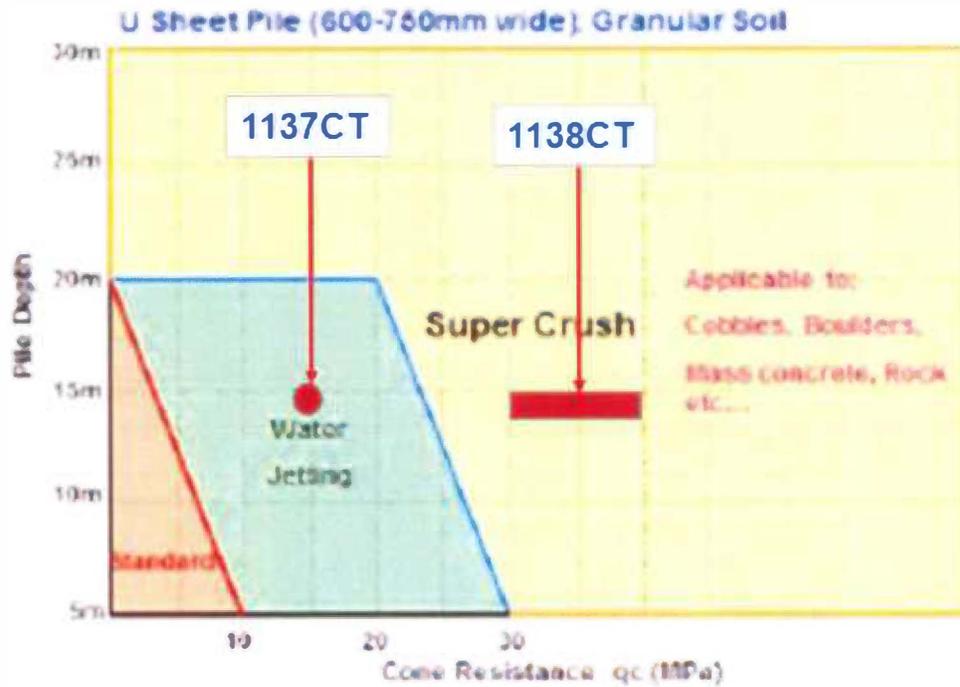


Figure 12 SPW press-in chart: helping techniques.

From: [Jacobson, Nani](#)
To: [swlrt](#)
Subject: FW: DOI Letter: Southwest LRT FEIS
Date: Monday, June 13, 2016 2:29:03 PM
Attachments: [ER15-0311 FEIS DOI comment letter.pdf](#)

From: Braegelmann, Carol [mailto:carol_braegelmann@ios.doi.gov]
Sent: Monday, June 13, 2016 2:36 PM
To: Simon, Marisol (FTA)
Cc: Nicholas Chevance; Sarna, Maya (FTA)
Subject: DOI Letter: Southwest LRT FEIS

Dear Ms. Simon,

Attached is the Department of the Interior letter regarding the Final Environmental Impact Statement and Section 4(f) Evaluation for the Southwest Light Rail Transit (Metro Green Line Extension) in Hennepin County, MN. Please contact Nick Chevance at 402-661-1844 which any questions.

Regards,
Carol Braegelmann

--

Carol Braegelmann
Natural Resources Management Team Leader
Office of Environmental Policy and Compliance
Department of the Interior
carol_braegelmann@ios.doi.gov
phone: 202-208-6661



United States Department of the Interior

Office of the Secretary
Washington, D.C. 20240

JUN 13 2016

9043.1
PEP/NRM

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 Final Environmental Impact Statement (EIS) 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 with regulations at 23 C.F.R. 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 (HCRRRA) 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. A Draft Environmental Impact Statement (DEIS) for the Project was released in the late fall of 2012; the Department felt at that time the analysis in the Section 4(f) evaluation was too preliminary to be able to concur with any findings. A Supplemental Draft Environmental Impact Statement (SDEIS) was released in May of 2015, to address comments received on the DEIS and potential significant environmental effects from changes to the project not considered in the DEIS. The Department concurred with the preliminary determinations presented in the SDEIS, with the assumption there would be no subsequent changes to the preferred alternative or in the impacts to the eligible properties.

In the Final EIS, the FTA considered the impacts to several 4(f)-eligible resources; 14 were parks, open space, or recreation areas and 28 were historic properties either individually eligible for or listed on the National Register of Historic Places, 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 determined that of the 12 park properties, one property (Purgatory Creek Park) would be affected only temporarily by construction (no permanent use), and four properties (Kenilworth Channel/Lagoon, Byrn Mawr Meadows Park, the Opus Development Trail Network, and an

unnamed open space labelled “B”) 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 the determination 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 has concluded 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 FTA determinations. We have no authority to agree or disagree with the determinations of *de minimis* impacts, but we would again state that those determinations appear to have been decided correctly. The Department would likely concur with the 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, execute the agreement document that appears as final but not signed in the Final EIS. 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,

A handwritten signature in cursive script that reads "Mary Josie Blanchard". The signature is written in dark ink and is positioned above the typed name and title.

Mary Josie Blanchard
Acting Director, Office of Environmental
Policy and Compliance

cc: marisol.simon@dot.gov
Maya Sarna (maya.sarna@dot.gov)
NPS-MWR-PC (Chevance)

From: [J Meath](#)
To: [swlrt](#)
Subject: A response to the FEIS for SWLRT on behalf of LRT Done Right
Date: Monday, June 13, 2016 3:40:28 PM
Attachments: [LRT Done Right response to FEIS June-13-2016.docx](#)

Dear Ms. Jacobson,

Attached please find our response to the Final Environmental Impact Statement for the Southwest Light Rail Transit project.

Thank you --

Judy Meath
On behalf of LRT Done Right
2700 Kenilworth Place
Minneapolis MN 55405

LRT-Done Right

2700 Kenilworth Place
Minneapolis, MN 55405

June 13, 2016

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:

LRT-Done Right is a grassroots organization of approximately 500 Minneapolis residents and taxpayers who have conducted exhaustive research and advocacy on the effects of light rail transit and freight lines on community well being. We hereby submit to you our comments on the Southwest LRT Final Environmental Impact Statement (FEIS). These comments are the product of many volunteer hours of research, analysis, and writing. As citizens of Minneapolis and the Metro area, we hope and expect that they will receive due attention and response.

We must enter into the public record our consternation with the inadequacy of a 30-day response period for lay citizens processing a 17,000 page technical document. Our comments here would be much more extensive had our state legislators' request for an extension been granted.

In our detailed response to the SDEIS, LRT Done Right noted that the SDEIS failed to assess the multiple impacts of co-location in the Kenilworth Corridor in terms of many factors including safety, vibration, noise, environmental damage, Section 106 assessments, etc. We were assured that these issues would be comprehensively dealt with in the FEIS. And yet we find in the FEIS that many of our critical concerns are either not addressed or inadequately addressed.

Finally, we perceive a conflict of interest in the Met Council's responsibility for determining the adequacy of the FEIS, since it is the work of the Met Council. Therefore we strongly encourage that the Met Council seek the Environmental Quality Board's review of the FEIS.

Judy Meath
On behalf of LRT-Done Right

LRT-Done Right response to Southwest Light Rail Final EIS

From FEIS Executive Summary:

2. WHAT IS THE PURPOSE AND NEED FOR THE PROPOSED PROJECT?

The Purpose and Need provides the foundation for the proposed Project. The Purposes of the proposed Southwest LRT Project are summarized below:

- *Improve access and mobility to the jobs and activity centers in the Minneapolis central business district and the expanding southwest suburban employment centers*
- *Provide a competitive, cost-effective travel option to attract choice riders to the transit system, in an area of the region experiencing congested roadway connections between corridor cities and downtown Minneapolis*
- *Be part of an efficient system of integrated regional transit-ways serving the Twin Cities*

The Need for the Project is summarized as follows: Since the late 1980s, the Council has identified that the Southwest Corridor warrants a high level of transit investment to respond to increasing travel demand in this highly congested area of the region. This area of the Twin Cities experiences daily congestion on the roadway network, speed and use limitations within shoulder bus operations, and capacity constraints in downtown Minneapolis. Four primary factors make the Southwest LRT Project important for people who live and work in the southwest metropolitan area: (1) declining mobility; (2) limited competitive, reliable transit options for choice riders and people who rely on public transportation, including reverse-commute riders; (3) the need to maintain a balanced and economically competitive multimodal freight system; and (4) regional and local plans calling for investment in additional LRT projects in the region.

LRT Done Right Comment: Purpose and Need for SWLRT

“Since the late 1980s, the Council has identified that the Southwest Corridor warrants a high level of transit investment to respond to increasing travel demand in this highly congested area of the region.”

Purpose of Proposed Project: An Investment in Suburbanization

In line with the national post-war pattern of suburban growth, per Minnesota Compass, the core cities of Minneapolis and St. Paul experienced a 38% drop in population while the suburbs grew 380% from 1950 to 1980. From 1980 until very recently, the core cities' population remained unchanged, while the exurban and suburban population rings rose by over 50%.¹ Eden Prairie, the SWLRT southwest terminus located 12 miles from Minneapolis, provides an example of this suburban

¹ Rebecca Sohmer, David Jackson, Bruce Katz, Amy Liu and David Warren, “Mind the Gap: Reducing Disparities to Improve Regional Competitiveness in the Twin Cities,” (Brookings Metropolitan Policy Program) 2005, p.4.

growth with its population rising 300% from 16,000 to 50,000 from 1980 to 2000 (SWLRT DEIS, 2012) and another 12,000 by 2013.

The Civil Rights Project at the Harvard Center for Community & Change described post-war suburbanization in *Moving to Equity* and linked income inequality and racial segregation to growth and development of suburbs located increasingly farther away from central cities.² It was in this context of ongoing suburbanization in the late 1980's that the Met Council first chose the Southwest Corridor as warranting a "high level of transit investment."

At the time that planning for SWLRT began in earnest in the mid-2000's, the Brookings Institution Metropolitan Policy Program issued *Mind the Gap: Reducing Disparities to Improve Regional Competitiveness in the Twin Cities*. The report found that while the Twin Cities have many assets that make them strong and competitive, "Underneath these broad regional successes are some disturbing social and economic disparities, demonstrating that progress is not widely shared."³ The report identified and called for the reduction of three sets of "gaps" or areas of disparity: among racial and ethnic groups, among different income groups, and between the central cities and the suburbs — that show that the region's prosperity does not benefit all residents or communities.⁴

These areas of disparity are interrelated and intersect in the gap between central cities and suburbs:

Place disparities, or differences between cities and suburbs (and among suburbs), result from uneven development that has led to concentrations of poverty in the regional core and concentrations of relative wealth in the outer suburbs.⁵

The two central cities have markedly different demographic patterns than the rest of the metropolitan area. While some older, inner ring suburbs are beginning to resemble the central cities in some respects, the region still displays a fairly traditional pattern of poorer, more diverse central cities surrounded by wealthier, whiter suburbs.⁶

As SWLRT planning unfolded in 2005, the *Mind the Gap* study found:

Concentrated poverty—neighborhoods where the poverty rates are 40 percent or higher—is solely found in Minneapolis and St. Paul. In other words, there are no extremely poor suburban neighborhoods, only extremely poor central city neighborhoods. *According to a*

² Sanchez, Stolz, Ma, "Moving to Equity" (The Civil Rights Project at the Harvard Center for Community & Change), 2003, p.17.

³ Sohmer, Jackson, Katz, Lui, and Warren, "Mind the Gap," p.3

⁴ Ibid, p.3,4

⁵ Ibid, p.9

⁶ Ibid, p.20

study done by the DC Fiscal Policy Institute, the Twin Cities has the second starkest differential between city poverty rates and suburban poverty rates in the country. The central cities' poverty rate is 4.5 times higher than the suburban poverty rate, which is a higher ratio than the Baltimore, Detroit, Cleveland, and Philadelphia metro areas (emphasis added).⁷

SWLRT as an answer to “increasing travel demand in this highly congested area of the region” was conceived and planned in this stark context of Twin Cities’ metro suburban and urban disparity.

- LRTDR rejects the following FEIS justification of SWLRT: This area of the Twin Cities experiences daily congestion on the roadway network. Provide a travel option to attract choice riders to the transit system, in an area of the region experiencing congested roadway connections between corridor cities and downtown Minneapolis.
- The SWLRT project enacts the stark metro place disparity by prioritizing the most costly public works project in state history for the purpose of providing “a travel option to attract choice riders” who have caused the congestion produced by southwestern suburbanization.

Furthermore, the move to affluent and distant suburbs has been accompanied by an unacceptable and extraordinarily low carpool rate during commute hours between the Southwest suburbs and Minneapolis. An efficient use of the existing transit and transportation resources must be required of “this area of the Twin Cities.”

The FEIS ridership table 4.1-2 on p. 4-18 shows that SWLRT is expected to take only 6500 vehicles off the road by 2040. Attaining a 9% carpool rate among southwest metro drivers over SWLRT planners' time horizon of 25 years – only 520 new carpoolers per year - would achieve the same congestion relief at very little, if any, cost. A 9-10% carpool rate is typical for other metropolitan areas. This area of the Twin Cities and the entire metro should be expected to match what is achieved in other metropolitan areas.

SWLRT Planning: Performance of Place Disparity

SWLRT planning history can be seen as a repeated performance of the stark differential between city and suburb documented in *Mind the Gap*. A representative enactment is the “diagonal route,” described in the FEIS as a positive characteristic of SWLRT. However, the diagonal route is not equally shared by city and suburb. On the one hand, the diagonal route was insisted on in Minneapolis by SWLRT planners as the fastest way into downtown jobs for suburban commuters, though key characteristics of that route were that it missed urban density, insulated suburban riders from major Minneapolis commercial areas and neighborhoods, and limited the opportunity for urban development.

⁷ Ibid, p.21

On the other hand, the diagonal route was abandoned at the southwest suburban end to serve business needs there. Early Southwest LRT plans had the train remaining to the north on the existing railroad right-of-way it will use for most of its route from Minneapolis. “We pushed hard to get it down into our core jobs and commercial districts,” says Mayor Tyra-Lukens⁸

In 2007, Minnetonka and Eden Prairie made it clear that routing SWLRT through the Hennepin County-owned recreational trails in their communities, comparable to the Kenilworth Trail in Minneapolis, would limit development and economic opportunities and be detrimental to their cities’ quality of life. Eden Prairie and Minnetonka were not allocated mitigation of a poor route. They “pushed hard” and got a better, more valuable alignment for their suburban cities.

Eden Prairie Mayor Nancy Tyra-Lukens described the purpose and need for the SWLRT and its alignment in Eden Prairie as follows: “One of the largest software companies in the Twin Cities, HelpSystems, just told me it can’t fill jobs out here. We don’t want these businesses moving. It’s a competitiveness issue for us.”⁹

According to Mayor Tyra-Lukens, the SWLRT reroute out of the HCRRA trail was needed *to keep* businesses in Eden Prairie. This suburban economic strategy is directly contrary to the FEIS statement of Purpose and Need to “improve access and mobility to ... the *expanding* southwest suburban employment centers.”

SWLRT as a strategy to *keep or attract* businesses to the southwest suburbs, *rather than to provide needed transit* to “expanding southwest suburban employment centers,” is reported in a recent Mpls/St.Paul Business Journal article (3/18/16), “*The Great Minneapolis Migration: As employers head downtown, suburbs play catch-up to add amenities to hold onto tenants.*” It reported that over the past two years, more than 15 companies have announced relocations to downtown Minneapolis. A consequence of the shift by businesses from suburban to downtown office locations is a drop in demand for suburban office space. An office broker specializing in the southwest suburbs at Cushman & Wakefield/NorthMarq predicts the drop in demand for southwest suburban office space will improve with the proposed SWLRT line. He is cited as expecting “a bump in suburban office demand as light rail transit along the southwest corridor gets closer to opening in 2020,” echoing Eden Prairie Mayor Tyra-Lukens’ description of the need for SWLRT as “a competitiveness issue for us.”

- *LRTDR rejects the FEIS depiction of SWLRT Purpose and Need “to improve access and mobility to ... expanding southwest suburban employment centers.”*
- *SWLRT as routed is a public investment in an amenity for the competitive position of private southwest suburban business. It is desired by Southwest suburbs and implemented as a strategy to retain their employment centers, not a public transit need to access expanding southwest suburban employment centers.*

⁸ Adam Platt, “Transit Showdown in Southwest Metro,” (Twin Cities Business) October 30 2015).

⁹ Ibid

Thus, the proposed SWLRT route hooks at its southwest suburban end rather than continuing the diagonal route along the HCRRRA-owned right-of-way. Prior to the route change in Eden Prairie, there was a citizens' activist group there, Trails not Rails.¹⁰ Also, citizen activism occurred early in SWLRT planning to preserve areas near the HCRRRA Trail in Eden Prairie occurred early in SWLRT planning.¹¹ The Trail is now a valuable recreational greenspace surrounded by high-end homes and a golf course.

Therefore, in addition to the reroute achieved as a strategy to enhance its business competitiveness, Eden Prairie has obtained an increase in its recreational green space with the HCRAA- purchased rail corridor. Eden Prairie and Minnetonka have roughly 2 to 3 times more open space acreage per person than Minneapolis. Hence, southwest suburban SWLRT routing enacts and worsens another element of urban and suburban disparity, which will be repeated by the adverse and degrading impact of SWLRT on the Minneapolis Chain of Lakes. Eden Prairie was publicized in Money Magazine's "Best Places to Live" in September 2012. The magazine promoted the high quality of life in the suburb, listing \$116,000 as the median household income and a coming "commuter rail project" as a reason to live there.

The *Mind the Gap* study strongly argued for reducing the "stark differential" of place and poverty between metro suburbs and the core cities on the bases of social equity and regional economic growth.¹² Nonetheless, due to planners' priority to improve the alignment in Eden Prairie and Minnetonka, \$300 million in project costs were added, thereby increasing the overall SWLRT project budget from about \$900 million to about \$1.2 billion. The 30% suburban budget increase occurred at the beginning of planning and caused enormous and unrelenting pressure thereafter to keep costs down for the SWLRT alignment in Minneapolis. The improvement in the southwest suburban alignment thus may be said to have played a causal role in determining a poor route in the city.

The new alignment out of the HCRRRA Trail in Eden Prairie and Minnetonka also meant SWLRT must be built through wetlands there. The additional financial (as distinguished from environmental) cost of doing so was not made public until the spring of 2015 and then portrayed as part of \$300 million of engineering "surprises" to SWLRT planners.¹³ Significantly, the Met Council will not break down the most recent additional \$300 million project costs by municipality. Therefore, information is not available regarding the total public transit dollar investment for Eden Prairie's and Minnetonka's SWLRT strategy as "a competitiveness issue for us." However, we do know that the environmental cost to wetlands is steep, and in fact, cannot be mitigated. As stated in the FEIS, the Met Council must purchase wetland mitigation bank credits to offset the damage caused by the route.

Minneapolis Disenfranchised from Alignment Selection: No SWLRT in Urban Density

¹⁰ http://fbiw.net/old_site/Trail/LRTGuide.pdf p.17

¹¹ http://fbiw.net/old_site/News/

¹² Sohmer, Jackson, Katz, Lui, and Warren, "Mind the Gap," p.26

¹³ <http://www.mprnews.org/story/2015/06/22/video-choo-choo-bob-explains-southwest-light-rails-newest-woes>

Former Minneapolis Mayor R.T. Rybak’s office supported an alignment that would serve Uptown and dense neighborhoods to the east in South Minneapolis. After \$300 million was prioritized and frontloaded for the southwest suburban alignment, SWLRT planners decided the financial leeway to consider routing through urban density was gone, and the potential cost of providing transit for the urban core was seen as unaffordable as well as unnecessary to obtain federal funds. In addition to the pressure created by the suburban routing to keep costs down in Minneapolis, as the City of Minneapolis states in Resolution 2014R-362 and included in its FEIS response:

The decision about where to route the Southwest LRT line was made when the Bush-era transit funding formula was still in effect. That formula said that only new transit riders should count. If you were already a transit rider, you didn’t count towards projected ridership. That formula was inherently biased against urban neighborhoods where lots of people already ride transit. That formula was inherently favorable to suburban areas where it is easier to find potential riders not currently taking transit. The Bush-era formula created an incentive for transit planners and policy-makers to avoid, rather than serve, dense neighborhoods where many people already take transit.

The routing of Southwest LRT was not designed around serving disadvantaged populations or serving the greatest number of Minneapolis residents. It was designed to achieve the fastest route between suburban and downtown destinations (emphasis added.)

Mayor R.T. Rybak said of the route, “The history on this is clear. The county pushed the idea of the Kenilworth Corridor over our objections.”¹⁴ Minneapolis did not want the Kenilworth alignment, but agreed to it on the condition and promise that the freight rail that had been temporarily placed there would be moved.

LRTDR endorses the City of Minneapolis FEIS Staff comment on regarding SWLRT project history:

The development of the project including route selection differs significantly from the recounting outlined in the FEIS ...

There were serious mistakes made during the development of this project: failing to secure a binding agreement with St Louis Park, failing to secure a binding agreement with the railroads, failing to follow up with MNDOT to ensure they were following the law requiring a binding agreement before disbursing funds for the Golden Auto site, failing to design a new version of a freight reroute to reflect changes in industry practice, failing to hire an independent engineering firm like TranSystems years earlier, and when a new viable reroute was finally identified, an unwillingness to bring that plan to the STB for approval.

Regarding the failure of SWLRT planning in Minneapolis, Gov. Mark Dayton commented, “While Hennepin County has been blamed for not resolving the potential conflict between light-rail and freight trains, it could easily have been foreseen by Met Council staff, the planners and the like, at

¹⁴ MinnPost 10/15/2013

least five years if not 10 years ahead of now.”¹⁵ *The poor performance of SWLRT planners has not lessened Gov. Dayton’s advocacy for the project.*

This failure in planning meant that Minneapolis was disenfranchised from the alignment selection process as the unviable Kenilworth option distorted and eclipsed real planning and options. The routes through density favored by the City could not be and were not fairly or accurately evaluated.

- LRTDR rejects the FEIS statement that SWLRT fulfills the Purpose and Need: Be part of an efficient system of integrated regional transit-ways serving the Twin Cities.
- SWLRT will not improve the efficiency of regional transit-ways serving the Twin Cities. FEIS ridership data on table 4.1-2 on p. 4-18 shows Total System-wide Transit Trips will increase by a barely measurable 200 trips by 2040.
- The lack of improvement in efficiency of the regional transit-way is reflected in the outcome that SWLRT as routed will actually increase GHG. FEIS Environmental Analysis p. 3-204 concludes: The Project operation will increase the Green House Gas emission in the Twin Cities area by approximately 2,000 metric tons per year in 2040 compared to No Build Alternative.

When Mayor Hodges voted against the co-location plan on April 2, 2014, she underscored the preemption of Minneapolis’ participation in alignment selection:

“This would not be the route that Minneapolis would have supported for light rail. We would’ve had a clarion call ... we need to find another alternative here because our support is predicated on the reroute of freight.”¹⁶

Enactment of suburban and urban place disparity continued in the SWLRT planning process. Though a safe engineering method to reroute freight was established by TranSystem, all suburban cities on the Corridor Management Committee (CMC) voted instead in favor of retaining co-location in the Kenilworth Corridor in Minneapolis. (Though Edina would have no SWLRT stations within its borders, it is included on the CMC and has a vote equal to Minneapolis.) The suburban cities without exception prioritized their own municipalities and unanimously overrode past promises and fairness for Minneapolis. The Minneapolis FEIS Staff comment recounts:

Of the government agencies represented at the CMC, only the City of Minneapolis, was willing to re-route freight out of the corridor by going to the STB. Mayor Hodges was outvoted at the CMC by all the cities along the corridor as well as Hennepin County and Metropolitan Council representatives. Opponents of rerouting the freight expressed concern that opposition to the

¹⁵ *Star & Tribune, April 9, 2014*

¹⁶ MinnPost, Betsy Hodges, “LRT remarks: 'This is about a fundamental failure of fairness,' ” 4/3/14

freight re-route by TC&W at the STB would result in unacceptable delays, even if it were ultimately approved.

Since the TranSystems report is still unrefuted by any credible source, the City does not concede that Freight could not be re-routed safely from the corridor.

The deep tunnel option to retain the freight was estimated at \$250-300 million, an amount that had been and is still viewed as credible and acceptable by planners for the reroute from the HCRRRA Trail into the business district in Eden Prairie and Minnetonka. With the suburban spending prioritized and growing, great pressure continued on Minneapolis by suburban dominated project planners to keep costs down. Both a route through urban density that would provide transit and support development and the deep tunnel to protect the City's signature and economically invaluable Chain of Lakes were rejected on the basis of cost.

The northern portion of the shallow cut and cover tunnel was also eliminated in a closed-door meeting between Met Council Chair Adam Duinick and Mayor Betsy Hodges. In addition to the realistic expectation of incompetence and betrayal, there are many practical reasons to conclude that the improvised engineering of the shallow tunnel plan will not be feasible and the southern shallow tunnel will never be built. Time does not permit discussion in this section of the many serious issues related to the tunnel.

Nonetheless, co-locating freight operations through much of the Kenilworth Corridor in addition to building a southern cut-and-cover shallow tunnel added a significant \$130- 160 million to the SWLRT budget, making the new, co-locating version of the LPA almost as expensive as the options favored by the City through urban density. Nevertheless, the decision on the part of the Met Council and suburban members of the CMC that any delay to revisit the SWLRT alignment in Minneapolis or reroute the freight was unacceptable resulted in their choice of a costly but still unacceptable plan for a failed LPA.

Though a pivotal actor in bringing about the LPA with co-location in the Kenilworth, Met Council Chair Adam Duinick stated two months ago that SWLRT and Bottineau "didn't go down perfect routes, in my opinion, through the city of Minneapolis."¹⁷

In addition to extremely low urban utility and the danger of building and co-locating electrified LRT in proximity to unit trains carrying highly flammable ethanol in the Kenilworth Corridor, the Minneapolis Parks and Recreation Board strongly objected to the impact of SWLRT on the Chain of Lakes and Grand Rounds. In an attempt to preserve rare and historically significant urban parkland, the MPRB initiated a legal challenge to the Met Council's plan for crossing the historic Lagoon that created the Chain of Lakes, the body of water whose completion was celebrated by a boating trip by Theodore

¹⁷ Star&Tribune, 4/19/16

Wirth himself. The Park Board challenge was ended not based on legal standing, environmental or urban planning goals, but due to steps taken by the Gov. Dayton to defund \$3 million from the Minneapolis Park System unless their legal challenge was dropped.

In a thoroughly consistent performance of SWLRT planning as suburban/urban place disparity – as the Minneapolis Park Board, Met Council, and southwest suburbs well knew – SWLRT will adversely impact the Kenilworth Lagoon and the Grand Rounds in the City of Minneapolis.

Section 1.5, Purpose and Need: Limited Competitive, Reliable Transit Options for Choice Riders and Transit Dependent Populations including Reverse Commute Riders

This section includes discussion of characteristics of bus operations such as orientation toward peak direction travel and frequent stops that result in longer travel times, apparently as a justification for the expenditure of \$1.8 billion for SWLRT. However, Table 1.5-1 appears to considerably overstate transit times from Eden Prairie to Minneapolis: it should reflect the SouthWest Transit (SWT) express *bus* service offering rush-hour travel time of just 23 to 25 minutes from Eden Prairie to its first stop in the center of the CBD at 12th & Hennepin (and 4 minutes more to the next CBD stop at 2nd Avenue and 11th St.). It runs every 5 minutes at peak rush hour, compared to every 10 minutes planned for SWLRT. Furthermore, if there is demand for reverse-commute service then SW Transit could easily and efficiently provide it. This bus system, extremely popular in the suburbs, has found demand for only 7 reverse-commute trips from the Minneapolis CBD to Eden Prairie each morning.

As Metro Transit knows, because it just opened the Rapid Bus A line in St. Paul and has plans for other similar lines, an alternative to expensive fixed-rail construction is limited-stop rapid bus service, which addresses many of the shortcomings of bus service noted in the FEIS, for a fraction of the cost of SWLRT, enabling a more equitable and effective use of transit funds. The cost of constructing the A line was merely \$27 million.

This section also states that the people most affected by limited bus service are those who don't own a car. It states that [only] 14% of the households in the major activity centers along the line do not own a vehicle and then admits that Minneapolis drives up the percentage of households without a vehicle. Ironically, SWLRT would not serve the transit dependent populations of Minneapolis, as it travels into the city through sparsely populated areas – primarily park-type land (which has limited transit-oriented development potential.) This section mentions Hopkins as having a “slightly” higher average of households without a car: Hopkins has a relatively small population, so the number of households without a car is only 1,248 (Table 1.5-2). Surely this cannot be sufficient justification for the need for this Project. This section also points to the senior population in the corridor as a justification for the project. Not all seniors are transit dependent. Does the FEIS quantify the numbers of seniors who would use SWLRT, and where they would be going? Historically the vast majority of the projected ridership of SWLRT has been “home-based work” trips.

This section cites the Scoping Report as supporting the need for this Project. That report was done in 2009 based on a 2007 Alternatives Analysis. These reports should be redone to reflect dramatic changes in the Project, including co-location of freight rail and light rail in the Kenilworth Corridor, requiring the addition of a shallow tunnel, other routing changes in the western portion of the route,

and the discovery of unfavorable soil conditions. By adding freight rail to the project after the LRT alignment was selected, the Met Council improperly limited the study and choice of reasonable SWLRT routing alternatives. Such a fundamental change and substantial cost increase should warrant new review of routing alternatives.

The Project rationale of “needing to maintain a multi-modal transportation system” – i.e. including freight – was suddenly introduced with the publication of the SDEIS. This is circular reasoning: now that freight is not being relocated, leaving it in place and spending hundreds of millions along the line to improve it, is now a purpose of the project? The last in the list of four reasons given that this Project is needed is that regional/local plans call for investment in additional light rail transit projects in the region. Again, circular reasoning: the fact that the Met Council is planning for this project cannot be used, at the same time, as justification for need.

It is not even until page 4-19 that ridership is mentioned, and even then in a circumspect way. It appears that the number of rides will increase by 32,600 in 2040 for the Green line if the Project is built, and 33,600 for total rail system. This appears to be lower than previous projections of over 34,000 rides for SWLRT: why is projected ridership less than previous estimates? Also, most importantly, the forecast is that only 13,015 for 2040 of those rides are new to transit, so assuming round trips, only 6,507.5 new transit users. This is too low to justify the expenditure of \$1.8 billion.

Chapter 3: Environmental Analysis

Section 3.3: Neighborhood and Community

Table 3.3-16 (Impacts to Community Facilities, Community Character, and Community Cohesion) states:

“New physical barriers: Light rail alignment will be located adjacent to the existing Kenilworth Corridor, which is an active freight rail corridor (refer to Exhibit 2.1-5). All existing sidewalk, trail, and roadway crossings of the Kenilworth Corridor will be maintained, and, because the existing freight rail alignment is currently a physical barrier, the Project will not create a new physical barrier.” Table 3.3-16, p. 3-84

As stated on page 3-83 of the FEIS, Visual change in the Kenilworth Corridor from the Project will include “substantial level of impact on multiple representative viewpoints within this area.

Visual impacts associated with the Project include those related to vegetation removal, relocation of the existing freight rail tracks, relocation of trails, and the addition of an LRT station. The crossing of the Kenilworth Channel will require construction of new bridge structures. In the transition areas between the at-grade and below-grade segments, there will be substantial visual impacts because of the extensive tree clearing required to accommodate the Project and the visual dominance of the trenches and the concrete retaining walls they will require.”

Other sections describe the crash walls that will be constructed whenever the separation between freight rail and light rail is too narrow to be safe.

In light of these impacts, it is absurd to conclude that the Project will not create a new physical barrier, especially in comparison to slow-moving, infrequent freight trains that travel there now, or adversely affect the visual quality of the neighborhood.

The FEIS claims there will be no changes to vehicle parking or adverse effects on traffic in the vicinity of the 21st Street station, including to the historic properties in the area. This is absurd, given that the Met Council is projecting 2,000 people getting on and off the train at that station.

Section 3.11 Air Quality and Greenhouse Gases

3.11.3.3 Greenhouse Gas

Implicit in public support for LRT as a general transit concept is significant concern regarding climate change. Green House Gas (GHG) is linked to climate change, and human-made GHG is linked to several different sources, one of which is carbon based fuel. Gasoline fueled vehicles emit *tailpipe* CO₂, a GHG. Light rail, as well as electric cars, trucks, subways, or buses, do not emit *tailpipe* CO₂.

However, LRT, as well as electric cars, subways, or buses, use electricity that produces CO₂ as part of its generation process, unless it is produced via solar, wind, or water, etc. That is, CO₂ associated with electricity generation (“upstream energy emissions of raw materials energy consumption” p. 3-205 FEIS) and depends upon the fuel used to create the electricity. In Minnesota, 42% -50% of XCEL electricity is produced from coal, and the majority of the remainder is produced by nuclear power plants and from natural gas piped in from Colorado, obtained by fracking.

Energy sources vary in their political support by affiliated businesses. The political support for ethanol in Minnesota is high – by state law gasoline sold within the state must be 10% ethanol. Ethanol comes from corn, a crop grown in Minnesota and other neighboring Midwestern states. Major ethanol producers have production plants located by railways in, for example, South Dakota, and from there ethanol is shipped by rail to Minnesota.

Ethanol, a Class 3 liquid, is as volatile as oil. Within environmental circles, the actual benefit of ethanol, though deemed a renewable energy source, is highly controversial due to energy costs and GHG involved in massive corn production for ethanol, as well as the utilization of land available for plant based food crops to raise corn for ethanol. Nonetheless, the 10% ethanol gasoline requirement is state law. At the same time, state support for solar energy and independent solar energy production has been inconsistent. Conflict has arisen between XCEL Energy and independent solar producers. From an environmental point of view, overall reduction in demand is indicated for both electricity and carbon based fuels.

The above is simply to review that concern for climate change can be and has been misused on a large scale to support a variety of related businesses, while not positively impacting GHG. It is unfortunate that the same process is involved in some LRT projects. That is, support is elicited from the public on the basis of concerns about climate change, though the LRT project provides little to no benefit for precisely that metric.

SWLRT is an example of an LRT project that increases, rather than reduces, GHG. The FEIS states:

The Project operation will increase the GHG emission in the Twin Cities area by approximately 2,000 metric tons per year in 2040, compared to No Build alternative (FEIS, p 3-2004).

The actual increase in GHG, if SWLRT is constructed, is minimized in the FEIS:

“If amortized over the life of the Project, the GHG emission from this project is minimal. In addition, the Project is included in the regional RTP and TIP, which consider climate change mitigation, adaptation and resilience for sustainable development of the region. Therefore, GHG emissions from the proposed Project will not hinder the region’s emission reduction efforts.” (P. 3-205).

Though from the point of view of the Metropolitan Council’s FEIS, SWLRT will not “hinder” the region’s emission reduction efforts, in fact, if built, SWLRT will add to the GHG that requires those efforts. Without SWLRT, that is *the No Build condition*, the total annual metric tons of GHG will be 2000 tons *less than under the Build condition*. As such, under No Build, the benefits of state GHG efforts would be increased. Further, the cited “adaptation and resilience for sustainable development” considered in the regional RTP, is an extremely vague and elastic phrase, capable of interpretation as desired by a variety of interests not focused on providing the best environmentally, equitably, or cost-effective transit. These interests seem already to have been over represented in the planning of SWLRT.

In terms of GHG, it will be a net benefit to the State of Minnesota not to build SWLRT (FEIS Table 3.11-3). That is, per the FEIS, Southwest LRT adds to the annual total of GHG.

Put another way, even with the projected, very minimal 6500 cars off the road noted in the FEIS, in 2040, *there would be a net GREATER increase of GHG annually with SWLRT than if the 6500 cars stayed on the road.*

From the point of view of GHG, it is better not to build SWLRT and to shift to less GHG intensive modes of transportation. Though not uniformly pursued by transportation planners within the Metro, car pools lanes are an additional means to reduce single occupancy vehicle usage, and are utilized on

those freeways that have them. Carpooling means more than one passenger per vehicle and is a more GHG efficient use of vehicle transport than single passenger vehicle use.

It is noteworthy given the expressed dissatisfaction with congestion and the commute time periods in the Southwest suburbs, that carpooling is not more in evidence, even without a car pool lane, since it is both environmentally beneficial and shares the burden of both driving and parking among driver and passenger in each car.

“The proposed project construction may require removal of a limited number of trees and disturb some vegetated areas along the rail corridor. Trees and vegetation sequester CO₂ through the process of photosynthesis and store the gas as carbon in their biomass. When trees and vegetation are removed, some of their stored carbon may be released as CO₂ into the atmosphere, although the quantity and rate of CO₂ that is emitted may vary, depending on the amount of removal and how the biomass would be handled afterwards. Because the number of trees and the area of vegetation disturbance would be limited during Project construction, the effects on the sequestered CO₂ or the loss of carbon stored in the removed trees or vegetation would be minimal and are not further analyzed.” (FEIS p 3-204)

It is erroneous to describe tree removal as a possibility that SWLRT “may require” and as “limited.” Significant tree removal has already been identified as part of the co-location construction process for SWLRT in the Kenilworth Corridor. As such, this type of “analysis” makes a mockery of the environmental regulations with which this FEIS is purportedly complying, reducing the EIS process, intended to protect the environment that is being considered for an LRT construction project, to simply another piece of paperwork.

Previously, SPO staff minimized the value of the trees that would be removed by referring to them as mostly Buckthorn. Informal citizen survey found that the majority of trees were not Buckthorn. In terms of being CO₂ sequesters, referred to as ‘sinks’ in the world of GHG reduction, trees are “sinks,” regardless of the tree species. That is, trees remove CO₂ from the atmosphere. In urban areas, they are even more important, as they mitigate against the heat increasing effects of asphalt and concrete. The impact of tree loss is not simply the release of carbon caused by tree removal, but the loss of tree “sinks” in the urban environment for ongoing CO₂ sequestration.

3.11.3.2 Mobile Source Air Toxics Analysis

“Project operations will have the potential effect of increasing MSAT emissions in the vicinity of nearby homes, schools, and businesses; therefore, under the Project there may be localized areas where ambient concentrations of MSATs will be higher than under the No Build Alternative. The localized increases in MSAT emissions will likely occur near the proposed light rail stations, the park-and-ride lots, and OMF; however, as discussed in the Technical Memorandum, the magnitude and the duration of these potential effects cannot be reliably quantified due to incomplete or unavailable

information in forecasting project-specific health impacts. In addition, even if these increases do occur, they will be substantially reduced in the future due to implementation of EPA’s vehicle and fuel regulations.” (FEIS p 3-203)

In terms of air toxics, that which is most well known as ‘smog’, such toxics will increase due to congestion around SWLRT stations and Park and Rides. Not included in the FEIS analysis is the increased congestion associated with the frequent LRT crossings of urban roadways. Increased congestion at intersections has already occurred for both the Hiawatha and Central Corridor LRTs. To omit a known source of increased air toxics associated with LRT routes is both poor science and poor environmental analysis. Congestion and therefore air toxics will occur and will increase at roadways impacted by the SWLRT route. Further, SWLRT will add to air toxics at precisely those locations where people will congregate: at LRT stations, at Park and Rides, and at any planned TOD in the vicinity of those areas. Mobile Source Air Toxics are associated with the increase in asthma in urban areas, a significant public health concern.

Per the FEIS, this should not be a concern, as federal regulations regarding vehicle emissions, not SWLRT, will continue to reduce air toxics in the future.

3.12.1 Noise Regulatory Context and Methodology

The erroneous definition in the SDEIS of the baseline condition of noise levels in the corridor is not altered or corrected in the FEIS. In the SDEIS, the baseline condition of noise levels in the corridor included the freight line, though its placement in the corridor was on a temporary basis. The freight placement was changed to a permanent basis by the Metropolitan Council when it decided not to move the freight out of the corridor.

This decision was made by the Metropolitan Council, yet framed as though it was “not possible” to move the freight, though the independent freight rail expert hired by the Metropolitan Council to evaluate moving the freight determined that it was, in fact, possible to move the freight, and possible to do so safely.

Again, to review factual history rather than Metropolitan Council rewrite, moving the freight was the condition upon which the City of Minneapolis accepted the route through the corridor. Several years later, after the City of Minneapolis’ agreement has been obtained, rather than moving the freight, its location through a residential neighborhood has been made permanent, and over a hundred million dollars in public transit funds has now been allocated, as part of the proposed SWLRT project cost, to enhancing the rail track, for the benefit of private railroad companies using the corridor.

For the clear reasons stated above, the freight noise is now a permanent condition of the corridor only because the project planners decided it would not be moved, and, further, dedicated additional transit monies to its infrastructure. As such, permanent freight rail noise is a new feature of the

corridor, caused by the SWLRT project plan, and should not be included in the baseline noise condition when measuring noise impacts of the proposed project.

3.12.1.2 Noise Criteria

“FTA noise criteria are based on the land use category of the sensitive receptor:

Land Use Category 1 Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet.

Land Use Category 2 Residences and buildings where people normally sleep.

Land Use Category 3 Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, theaters. Places for meditation or study ...campgrounds and recreational facilities can also be considered to be in this category. Certain historical sites and parks are also included.” (FEIS p 3-208)

The determination of impact is a combination of 2 factors: The Land Use Category, and the Environmental Noise assessment. “The standards include both daytime and nighttime limits for three different categories of land use or noise area classification” (FEIS, p 3 -210). In other words, depending on the Land Use Category, the same Environmental Noise level may be rated as no impact, moderate impact, or severe impact.

“As shown in Table 3.12-6, the Project will result in one moderate noise impact at the Kenilworth Channel. The Kenilworth Channel was assessed as a Category 3 land use, which represents parks and other similar uses. The lagoon bank at the Kenilworth Channel was assessed as a Category 1 land use, which represents locations with very high sensitivity to noise.” (FEIS p 3-219)

In spite of a classic depiction of serenity being a kayak gliding on a quiet lake – such a photo of a kayak in the Kenilworth lagoon recently was published in the Minneapolis Star and Tribune --the lagoon has been classified as Category 3 land use. As such, the impact of noise from 12 LRT trains per hour overhead are put in a lower category than the impact of the same noise on a “sensitive receptor” sitting on the lagoon banks, looking at the same Kayak floating in the water. Since the “sensitive receptor” on the banks is at a further distance from the LRT trains overhead than the Kayak in the lagoon, the noise impact, though reaching a “sensitive receptor” in a location designated as a Category 1 land use and having a very high sensitivity to noise, is rated as having no impact whatsoever, and therefore not requiring mitigation.

Remarkably, the Project Noise Level impact for the Lagoon Bank, 54 Leq (dBA) is exactly the same as the Existing Noise Level Leq (dBA), 54, for the Lagoon Bank. Per the FEIS, the addition of 12 LRT trains

per hour overhead does not add any additional noise to the area designated as a location with very high sensitivity to noise. While the “sensitive receptor” in the Kayak on the lagoon, though even closer to trains crossing the lagoon overhead, is deemed only to suffer a moderate impact, as the lagoon location is not deemed an area with a very sensitivity to noise. And therefore, the threshold to reach criteria for severe noise impact is higher, and not met.

Mis-categorizing the Lagoon as an active recreational area, and then using the misleading category to downgrade impacts to the Lagoon as moderate, does not fulfill the purpose of EIS regulations to protect environmental areas.

In spite of public testimony as to the nature of the recreational use of the Lagoon, and that the waterways of Lake of the Isles permit only non-mechanized watercraft, the FEIS maintains the category 3 designation for the Lagoon and defines the resulting impact on the park as moderate.

Further, when sound travels over water, the reverse is closer to the reality of impact on “sensitive receptors.” From the point of view of the science of sound on water, sound travels further, and is amplified, over water. That is, sound will be experienced as louder on the Lagoon by the “sensitive receptors” in kayaks and canoes.

On calm lakes, bays, creeks, or in restricted visibility, sound carries exceptionally well. If ever went camping around a lake, knowledgeable campers often would tell you to keep the noise down at night, since cool air, and a flat-water surface amplified the sound you were making, so that everyone on the lake heard you.

According to Howard Shaw, Ph. D. and Cheryl Jackson Hall, Ph. D., "Experience suggests that sound, like light, travels (more or less) in straight lines. However, to the contrary, sound actually tends to curve downwards over a lake's surface.

Sound traveling along straight lines would disperse quickly into the space above the lake. Instead, sound that "should" rise up and be lost typically curves back down to the lake/ground level. Therefore, it sounds louder than it "should." This is a well-known and easily demonstrated observation, measurable out there on real lakes (American Boating Association, 2016).

FEIS Table 3.12-7 Summary of Mitigation Measures and Residual Impacts for Residential and Institutional Locations

From the FEIS Table 3.12-7:

Minnetonka: Claremont Apartments Noise Impacts: Moderate Impacts without Mitigation
Noise Level Increase (dB)a 3.7 Mitigation Measure: 8 foot high noise barrier extending 1,800 feet.

Hopkins: Monroe Avenue Noise Impacts: Moderate Impacts without Mitigation
Noise Level Increase (dB)a 3.2 Mitigation Measure: 3 foot high parapet barrier extending 500 feet on elevated structure over Excelsior Boulevard

Minneapolis: Kenilworth Channel Noise Impacts: Moderate Impacts without Mitigation
Noise level Increase (dBa) 7.2 Mitigation Measure: 2 foot high parapet wall and rail dampers, 300 feet.

To mitigate the “moderate impact” of 12 trains an hour over the lagoon, the FEIS and SPO has determined that a 2 foot high parapet wall is sufficient to mitigate a 7.2 Noise Level increase in urban parkland that is a rare and unique resource within urban borders. Given the need for areas of tranquility in urban settings, increasingly validated by new research on the impact of noise on health and cognitive functioning, it would seem that every effort, including an 8 foot high sound wall to effectively wall off LRT noise from the Lagoon, would be made to mitigate the noise impacts on this sensitive environmental area. However, it be that any parapet wall higher than 2 feet would block the view of the Lagoon by suburban SWLRT passengers commuting into the city.

The impact of noise in urban areas is coming under increasing scrutiny by urban planners. Rather than the old-fashioned belief that the urban environment is simply one of skyscrapers and industrial areas that urban dwellers are and should be able to adapt to, it is becoming more apparent that human beings need areas of quiet to function adequately, for learning, sustained cognition, and for regular physiological restoration in a built environment. Though receiving renewed attention by urban planners now, this fundamental understanding was the impetus that spurred the foundation of the Minneapolis Park System. Community leaders who founded the Minneapolis Park System as a separate entity from Minneapolis City Government, witnessed firsthand the destructive impact of industrialization on neighborhoods in places such as Chicago, and did not want the same degradation of quality of life to be created in Minneapolis.

Parkland is always threatened by development, and urban parkland exponentially more so. Yet urban residents are faced with higher and more constant levels of noise than their suburban counterparts, from commuter traffic, trains, airports, and industry, and consequently have greater needs for the quiet and green space provided by urban parks.

Researchers report in the Southern Medical Journal that sustained growth in highway, rail, and air traffic are especially concerning, in a way that is analogous to second-hand smoke, second-hand noise is an unwanted airborne pollutant produced by others; it is imposed on us without our consent, often against our wills, and at times, places, and volumes over which we have no control. Researchers found that it took only 30dB to disturb sleep and cardiovascular

effects are seen after exposure to 65dB (CityLab 2012, Benfield, “Just How Bad is Noise Pollution for Our Health?”).

Further, noise is correlated with public health risks:

Laboratory studies carried out on humans have shown that the exposure to noise affects the autonomous nervous system and the endocrine system. Heart rate, blood pressure, cardiac output, blood flow in peripheral blood vessels and stress hormones (including epinephrine, nor-epinephrine, cortisol) are affected. At moderate environmental noise levels such acute reactions are found, particularly, when the noise interferes with activities of the individuals (e.g. concentration, communication, relaxation). Noise-induced instantaneous autonomic responses do not only occur in waking hours, but also in sleeping subjects even when they report not being disturbed by the noise (“Cardiovascular Effects of Noise on Man,” Wolfgang Babisch, presented at the 2015 Acoustical Society of America annual meeting).

Even moderate noise impacts increase stress hormones, not only in adults, either when awake or sleeping, but children as well. When an old airport closed near a school and opened at a distant site, the students near the former airport site demonstrated improved tests on memory and reading, while students near the new airport site showed a decline in scores after the new airport opened (Weiss, cited in CityLab 2012, op cit).

3.15.3.1: Electromagnetic Fields and Electromagnetic Interference

The SWLRT FEIS, Section 3.15.3, does consider the effects of electromagnetic fields (EMFs) on public utilities, but the effects of EMF on riders and residents is cursory and incomplete. Not addressed in the FEIS is the fact that EMFs created by pantographic/catenary power lines have been associated with detrimental impacts on human health. Pantographs/catenary lines will run close to residences along the SWLRT route. Some studies link EMF exposure with childhood leukemia (Ahlbom, IC, Cardis E, Green A, et al. Review of epidemiological literature on EMF and Health Environmental Health Perspectives, 2001; 109 Suppl 6:911-933) and while controversial, there is a duty to protect members of the public (including pregnant women, infants, the unborn, children and the infirm) from short-term and long-term exposure to EMF. Further analysis is needed.

3.17: Cumulative Impacts

We don't see evidence that safety concerns raised by co-location are adequately understood or addressed. LRT Done Right fully supports the comments submitted by Citizen’s Acting for Rail Safety - Twin Cities.

Chapter 7: Financial Analysis

Table 7.1-3 sets forth the various sources of funds for the local share of the Project. Language should be added to reflect that the 2016 Legislature adjourned sine die without making any provision for the remaining local funding needed for the Project. The missing funds are part of the \$165 million listed as the State's contribution. The Met Council has been able to obtain some of the funds the State has decided not to appropriate so far (and make up for the \$30 million the legislature actually rescinded last year) by taking funds from a reserve fund and making it up with some MVST revenue not intended for SWLRT.

The \$165 million listed for HCRRA's contribution does not include the value of the land that HCRRA is transferring to Hennepin County who will donate it to the Project. This should be clarified.

The Met Council should disclose who will be financially responsible for the cost of any derailment or other incident arising from the close proximity of freight rail and light rail, and include that cost as a Project cost.

The public should be informed that according to Table 7.2-2, both the State AND CTIB are shown as having to increase their Metro Transit subsidies by \$18.93 in 2040 if the Project is built compared to the No Build scenario. Please explain these figures, compared to the \$20.8 million total operating cost of SWLRT shown on the New Starts rating summary description from November, 2015.

The public should also be aware that Table 7.2-2 shows an increase in the annual subsidy needed for SW Transit in the amount of \$14.88 million in 2040, without having an identified source to make up for that loss. Please disclose how many SW Transit Express bus riders the Met Council is projecting will change to SWLRT, and how much of the additional subsidy noted above is the result of the commitment to maintain SW Transit, with reduced ridership.

Please explain to the public what is meant by this statement in section 7.3: "Across all scenarios, it is noteworthy that the financial structure of the Metropolitan Council Transportation Division and the Southwest LRT Project are dynamically resilient."

From: [Mark Wegner](#)
To: [swlrt](#)
Subject: Corrected Comments on the Final Environmental Impact Statement
Date: Monday, June 13, 2016 3:13:08 PM
Attachments: [20160613145518333.pdf](#)

To Whom it may concern:

The comments this morning inadvertently referenced the "DEIA" when it should have read "DEIS" .

Please accept these corrected comments with that change.

Sincerely,

Mark

Mark Wegner
President
Twin Cities & Western Railroad Company
Glencoe, Minnesota

This message (including any attachments) may contain confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message. Any disclosure, copying, or distribution of this message, or the taking of any action based on it, is strictly prohibited.



TWIN CITIES & WESTERN RAILROAD COMPANY

2925 - 12th Street East
Glencoe, MN 55336
(320) 864-7200
FAX (320) 864-7220

June 13, 2016

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
Saint Louis Park, Minnesota 55426

Dear Ms. Jacobson,

There was a typographical error in the comments sent earlier today.

Attached please find corrected Twin Cities & Western Railroad Company's response to the Southwest LRT Final Environmental Impact Statement.

Sincerely,

Mark

Mark Wegner
President
Twin Cities & Western Railroad Company
Glencoe, Minnesota

Twin Cities & Western Railroad Company Response to Metropolitan Council's Southwest
Transitway Final Environmental Impact Statement (FEIS)

Twin Cities & Western Railroad Company (TC&W), along with its subsidiary railroads Minnesota Prairie Line, Inc. and Sisseton Milbank Railroad Company provide the freight rail link to the national freight rail network in Saint Paul for communities in central and western Minnesota and eastern South Dakota. TC&W is able to provide this safe, economical, efficient and greenhouse gas friendly freight transportation utilizing the freight rail tracks in Hopkins, Saint Louis Park and Minneapolis. TC&W has cooperated to facilitate SWLRT, but under federal law we must ensure that the producers, businesses and communities TC&W serves will not be harmed by this project. TC&W will continue to coordinate with the SWLRT project office while ensuring TC&W's federally mandated responsibility to serve our freight customers' needs is met.

Twin Cities & Western Railroad Company (TC&W) responded to the Southwest Transitway Draft Environmental Impact Statement (DEIS) in December 2012, and the issues raised in that response remain in effect and should be considered part of this response. Additionally, TC&W responded to the Supplemental Draft Environmental Impact Statement (SDEIS) in July 2015. At that time TC&W specifically stated that the freight track capacity lost due to the proposed freight rail alignment change east of Highway 169 (from the south side of the corridor to the north side of the corridor to accommodate increased Transit Oriented Development) MUST be replaced. While this understanding exists at the staff level as a result of our SDEIS comments, the Final Environmental Impact Statement (FEIS) does not explicitly address the replacement of this freight track capacity as a necessary part of the project, and it must do so.

TC&W believes that the 30 day comment period for responding to the FEIS is too short. It does not allow our impacted customers, communities and counties an adequate time to respond to this 17,000-page document. It should be understood that the concerns raised by these stakeholders in their 2012 DEIS comments remain valid and should be considered in the context of the FEIS.

TC&W's comments should be viewed in the context of the critical freight rail service TC&W provides to the counties, communities and customers in Minnesota and South Dakota. Over the last 10 years these stakeholders have invested in excess of \$100 million dollars in their freight rail facilities, creating additional jobs and economic growth in this region of rural Minnesota and South Dakota.

Since southwest metro area development has expanded to Chaska in Carver County, the only realistic option for replacing the lost track capacity mentioned above is 25 miles farther west of the exiting side tracks now located in Saint Louis Park and Hopkins. This will place a permanent additional cost burden on TC&W and its customers as a minimum additional 50 miles (round trip) will be added to the movement of customer carloads hauled by TC&W which currently use the existing sidings now scheduled to be removed. TC&W has been working with SWLRT

project office to arrive at a way to ameliorate these additional permanent costs as part of the project.

Freight rail changes are governed by the federal Surface Transportation Board (STB), which exists to protect the interstate freight rail interests of freight rail customers. One of the assertions within the FEIS is that the STB will not have jurisdiction over the alignment change. TC&W contends that the STB will indeed have jurisdiction, as the alignment change will permanently deny property owners on the south side of the corridor the same access to freight rail they currently have. Under federal law this requires notice and also potential hearing by the STB.

TC&W has called attention to the inherent safety issues of co-location of freight rail alongside the SWLRT, from the point in Hopkins where the alignment parallels TC&W's route all the way east and especially in the space-constrained Kenilworth Corridor. It is imperative that safety measures be put in place for freight rail as well as LRT not only during the construction of the SWLRT alongside the active TC&W freight corridor, but also for future freight rail operations.

While TC&W has had productive conversations with SWLRT engineering staff, we are concerned that the freight rail aspect of the overall project may be a focus of cost-cutting efforts. In order to meet our federally mandated responsibilities to our customers, TC&W cannot and will not accept any compromises that impair our ability to operate safely and efficiently along the SWLRT route in the Twin Cities or as we travel through the communities we serve in outstate Minnesota.

Our specific comments to the FEIS are as follows:

Within the executive summary (page ES-4), one paragraph incorrectly asserts that TC&W was [primarily] concerned about costs with respects to a re-route. TC&W's primary concerns have been and continue to be the physics of rerouting freight trains and the inherent safety issues associated with the proposed re-routes.

Within the executive summary (page ES-7), one paragraph incorrectly asserts that "they will not result in substantial long-term impacts to freight rail operations," -but there is no mention of the need to replace the lost siding track capacity in the bullet points above. There MUST be an acknowledgement of that need, otherwise the concluding paragraph is false.

On page ES-8, the second paragraph refers to freight rail having been in operation in the Kenilworth corridor for nearly 20 years. A more accurate description would be for the last 135 years, with a short period of dormancy from 1993 to 1998.

With respect to the safety discussion on page ES-9, TC&W will work with the SWLRT staff to ensure that all of these measures meet freight rail safety standards. There can be no compromise on safety.

The comment on page ES-10 about the southerly connection is misleading and represents a lack of understanding about freight rail economics. A southerly connection must be maintained, but the freight rail traffic that would flow via that southerly connection (existing or proposed) is

completely dependent on the Upper Mississippi River grain market, relative to other grain markets.

Page ES-18 again asserts there are no adverse impacts to freight rail operators and ignores the need to replace the lost freight rail track capacity.

Page ES-35 contains the assertion that there will be "...No adverse impacts as there are no substantial changes to freight rail operations." This statement is completely inaccurate. There must be an acknowledgement that the project will bear the cost of replacing the lost track capacity, so as not to reduce freight rail capacity. Without that information, the statement is false and misleading.

Page ES-42 – For clarity, the fourth full paragraph should read "The Final EIS documents and responses to all..." –so the average reader will understand that responses to comments on the SDEIS are part of the FEIS. It was not clear, upon first reading of the FEIS that responses to comments on the SDEIS were contained in the FEIS.

On pages 2-13 – 2-14 STB action is required as a result of the southerly properties permanently losing their access to freight rail. Additionally, should the siding track lost not be replaced as part of the project, commerce to south central Minnesota and eastern South Dakota will be significantly impacted, requiring STB involvement.

On Page 2-45, in paragraph 2. , it should be noted that physics were a primary concern of the TC&W (before operational and economic, but physics implied safety issues).

On page 3-46, within the table and footnote, again it is not made clear that replacing the lost freight rail side track capacity is part of the process to move the freight rail alignment. While CP is mentioned in the footnote, nowhere does it mention the impact on TC&W's current freight rail operations of the loss of the siding track capacity, which is in close proximity to TC&W's large railroad connections. As part of the SWLRT project, this track capacity must be replaced, and due to suburban development, it will be at least 25 miles farther west than the current track capacity locations, adding permanent costs for freight operations due to increased distance to and from Twin Cities freight rail connections.

Currently some freight rail traffic is hauled by TC&W from Saint Paul to the side tracks in Saint Louis Park and Hopkins, where it is stored on behalf of customers until the customers determine where in North America the freight is to be sent, and the cars are hauled back to Saint Paul. Adding at least 50 miles round trip to this traffic will increase the costs for this movement permanently. These costs need to be ameliorated as a part of the SWLRT project.

On page 3-50, 3.2.4.3, A, the FEIS asserts that no mitigation measures are warranted. It needs to be explicit in stating that replacing TC&W's lost track capacity is a MUST in order to protect the communities in Minnesota and South Dakota that TC&W serves. The statement, as written, is false.

On page 4-47, the reader could be misled by the assertion that a direct southerly connection could increase freight rail traffic over that connection. Freight rail traffic will occur over that connection (pre or post LRT) based on grain market conditions on the Upper Mississippi River, relative to other grain markets. The design of the connection does not impact the amount of freight rail traffic over that connection - market conditions do.

On page 4-49, there is no mention of the need to replace the 11,770 feet (2.23 miles) of freight rail track. Additionally, the Southwest Project Office has recently identified an extra 4,000+ feet (.78 miles) of freight rail side track to be removed to accommodate the project. Nor is there a mention that additional side track may be needed to be removed as a result of this SWLRT project. All of this track capacity, factoring in its close proximity to TC&W's interchange point with other railroads, will need to be replaced as a part of the SWLRT project.

In Appendix F, page F-79, the paragraph describing the "Swap" and "Southerly Connection" does not describe how the project would replace all of the lost side track capacity. Integral to TC&W's consideration of this concept is the understanding that the siding track capacity will be replaced. If the siding track capacity is not replaced, then TC&W, on behalf of the communities and customers it serves, will be forced to invoke federal protection on their behalf.

Conclusion:

TC&W has long recognized the need for a transit solution to serve the southwestern metropolitan area, and has worked cooperatively with the communities and the governmental agencies to accomplish this.

At the same time, TC&W has studied the long-term freight rail needs of the primarily agricultural area it serves. In our service area, crop yields per acre have increased steadily over the past 20 years, and there is every reason to expect this trend to continue. As the entire SWLRT process has demonstrated, transportation planning is not a process that occurs quickly. TC&W must plan responsibly now in order to continue moving Minnesota and South Dakota produce to market far into the future. This is why TC&W has worked collaboratively and in good faith to ensure that the SWLRT can become a reality while not compromising TC&W's ability to transport the products of south central Minnesota and eastern South Dakota efficiently and safely.

The FEIS needs to be more explicit on the essential need to replace the side track capacity that will be lost as a result of the decision to locate the SWLRT on the southerly side of the corridor, east of Highway 169 to facilitate Transit Oriented Development. This is an essential part of the project and cannot be discounted or ignored.

TC&W stands ready to cooperate, but under federal law we must ensure that the producers and communities TC&W serves will not be harmed by this project. TC&W will continue to coordinate with the SWLRT office while meeting TC&W's federally mandated responsibility to ensure that our freight customers' needs are met.

From: [Goodrich, John T.](#)
To: [swlrt](#)
Cc: [Anderson, Cynthia K.](#)
Subject: MPRB Comments on FEIS 20160613
Date: Monday, June 13, 2016 4:50:46 PM
Attachments: [061316 MPRB ltr to Nani Jacobson comments on FEIS 20160613.pdf](#)

Greetings,

The attached letter is sent on behalf of Liz Wielinski, president of the Minneapolis Park & Recreation Board.

John Goodrich
Executive Assistant/Office of the Superintendent
Minneapolis Park & Recreation Board
2117 West River Rd. N.
Minneapolis, MN 55411
612-230-6404 (office)
www.minneapolisparcs.org



**Minneapolis
Park & Recreation Board**

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.minneapolisparcs.org

VIA EMAIL TO: Email: SWLRT@metrotransit.org

13 June 2016

Ms. Nani Jacobson, Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426

RE: **Comments regarding Final Environmental Impact Statement
Southwest Light Rail Transit Project (Metro Green Line
Extension)**

Dear Ms. Jacobson:

The Minneapolis Park & Recreation Board (“MPRB”) appreciates the continued opportunity to offer comments on the Southwest Light Rail Transit Project (“Project”) and on the Final Environmental Impact Statement for the Southwest Light Rail Transit Project (Green Line Extension). The MPRB acknowledges the significant efforts made by the Metropolitan Council (“Council”) to discuss impacts of the Project on park resources and its efforts work with the MPRB to frame resolution to issues during the several years of the Project. While this letter points to certain concerns, the MPRB looks forward to continued work with the Council aimed at bringing clarity and resolution to a range of Project issues related to impacts upon parklands under the jurisdiction of the MPRB.

In this letter, the MPRB points to several areas of the Project where it has been involved but where work remains to align Council efforts with outcomes expected by the MPRB.

Kenilworth Channel Bridges

The Council’s response to comments offered by the MPRB related to the Supplemental Draft Environmental Impact Statement is correct in that there was a process related to the design of bridges spanning the Kenilworth Channel and that the concept was approved by the MPRB’s Board of Commissioners. However, it was made clear by the Council that the concept presented to the MPRB did not include all details related to the bridge, including substantial features such as railings and slope treatments. In a Memorandum of Understanding (MOU) between the MPRB and the Council, it was stated that the MPRB would be involved in the design of the bridge. It is the understanding of the MPRB that the design of the bridges is not complete and that the MPRB will remain involved in the design of remaining details according to the terms of the MOU and a statement in response to comments offered by the MPRB related to the Supplemental Draft Environmental Impact Statement

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



indicating “The Council will continue to coordinate with MPRB to advance the design of the bridge for the Kenilworth Lagoon crossing.”

Kenilworth Corridor Landscape Design

The MPRB Board of Commissioners received a presentation of the proposed landscape design for the Kenilworth Corridor by the chair of the Kenilworth Corridor Landscape Design Committee. The recommendations offered by the committee suggest that management of a newly planted landscape is as important as the initial planting operation and that the success of the design depends on managing the new plantings through a period that might extend to five years following plant installation. This is a significant recommendation by the committee, but the MPRB does not see that level of commitment to replacing the removed Kenilworth Corridor vegetation in the Final Environmental Impact Statement.

In response to a comment offered by the MPRB related to the Supplemental Draft Environmental Impact Statement, it is suggested that “The Council will continue to work with the Kenilworth Landscape Design Committee” to “help ensure that landscape design will restore the natural setting while incorporating the regional trail system, light rail, and freight rail.” The MPRB anticipates continued discussions with the Council related to its role, if any, during post-planting management activities in the Kenilworth Corridor.

Detours during construction

The MPRB is one of several agencies responsible for the care of trails and bikeways that will be impacted by the construction of the Project. While the FEIS notes in several areas a commitment to maintaining pedestrian and bicycle connectivity during construction, there have been, to date, limited discussions of detours with the MPRB. Because trail users frequently access the MPRB’s website to view trail conditions, it is important that the MPRB be engaged in discussions of detours and be provided timely information regarding trail closures, durations, and details. The FEIS seems to commit to providing that information.

Continuation of freight rail operations in the Kenilworth Corridor

While the MPRB remains supportive of the Project and has been involved in efforts related to defining the future of the Kenilworth Corridor, the FEIS response to concerns about co-location do not fully address the concerns of perpetuating freight rail in the corridor. It seems the FEIS is suggesting the Project is not controlling the future of freight rail, yet the LPA, which the MPRB understood to be the basis for preliminary engineering, did not include freight rail in the Kenilworth Corridor. Because freight rail will become a fixed element of the corridor under the Project, it remains reasonable to presume its presence as a new condition that should be additive when considering the introduction of light rail transit to the corridor.

The MPRB appreciates the safety measures proposed for the Project, but contends the need for intrusion detection and what the FEIS suggests are commonly referred to as “crash walls” only reinforce concerns related to corridor safety. While the MPRB understands the need to adhere to design criteria, the suggestion that intrusion detection and crash walls may be needed does not suggest a safe condition related to the combination of freight rail and light rail operations.

Cultural resources and visual quality

The response to comments from the MPRB related to the Grand Rounds Historic District notes that a Construction Protection Plan will be prepared detailing measures to be implemented during Project construction to avoid adverse effects. The MPRB expects the CPP will be made a part of any permit issued related to work on park lands, so review with the MPRB prior to finalizing the CPP is recommended.

Preparation of guidance for future preservation activities under a Grand Rounds Historic District: Canal System plan is appreciated. The MPRB looks forward to finalization of the Memorandum of Agreement so this work might be initiated as quickly as practicable.

The MPRB remains concerned about changes to viewsheds related to the Grand Rounds. The MPRB contends that comments suggested by the Council that establish the character of views with the most vivid feature being the “dense massing of trees bordering the corridor” will be substantively changed by the construction of the Project, and while new planting is planned, it will be years before those plantings achieve a condition matching the Council’s description of a dense massing. However, mitigation measures described in 3.7.4 could be pursued for all viewsheds addressed in the visual quality assessment to address the shortcoming, not merely those where the rating is described as having Substantial or Moderate impacts. It would be desirable to retain as much existing vegetation as practicable, not merely what is appropriate, using the methods described by the Council in the FEIS to do so. Suggestions to restore and replant cleared areas in a timely manner, place new and replacement trees to provide maximum screening of views to and from all viewpoints considered, create landscape plans to partially screen retaining walls, elevated structures, and LRT infrastructure are all appropriate responses to the disturbance of an existing landscape characterized by the Council in its visual quality assessment as achieving vividness through an existing dense massing of trees.

The MPRB understands the Project will result in extensive tree clearing the Kenilworth Corridor, not only related to bridges crossing the channel but throughout the corridor. Replacement plantings will be achieved following a plan created under the guidance of a Kenilworth Landscape Design Committee, but significant aspects of the committee’s recommendations have yet to be confirmed, particularly related to management of a newly planted landscape. Because the visual quality directions are so dependent on the success of the proposed landscape, management of the new plantings is a critical concern—one that is not addressed in the FEIS.

The work of the Kenilworth Landscape Design Committee does not address structures, where a significant change in the landscape occurs. The corridor is generally considered by the public to exist in a natural condition. The introduction of LRT to the corridor will result in features such as “crash walls” and, more significantly, a tunnel portal that significantly change the character of the corridor. The views of dense massings of trees will be replaced by expanses of concrete, with some walls being hundreds of feet in length and more than 12 feet tall. As evidenced by depictions of the westerly tunnel portal, the view for Kenilworth Corridor trail users will focus on an extended and unbroken concrete wall, lacking the vividness achieved by the dense massing of trees in the extant condition. Where trees bordering the corridor are noted in the visual quality assessment as the “most memorable element,” the most memorable element with implementation of the Project will likely be the tunnel portal—a change which the MPRB and

trail users consider to be a substantial change from every viewpoint. It is the MPRB's view that the design of those structures fails to reflect the existing character of the corridor and that work remains to ensure expanses of concrete achieve a vividness reflecting the dense massing of trees that create the corridor's "most memorable element."

3.9.5.2, Public Waters and Surface Water Quality; C. Short-term Impacts on Public Waters and Surface Water Quality

The MPRB previously noted concerns relative to stormwater runoff during construction and, in particular, leaching from curing concrete into public waters. By indicating a Storm Water Pollution Prevention Plan will be prepared for the Project, it is understood by the MPRB that concerns related to "Construction over public waters may directly contribute pollutants" will be addressed by the SWPPP or Project plans intended to direct activities during construction of the Project, and that the period of time required for curing of concrete that may leach and impact public waters will be addressed by the SWPPP or other Project plans.

6.6.1.13, Cedar Lake Park – Temporary Occupancy Exception; A. Property Description

This section notes Cedar Lake Park is a regional park. Cedar Lake Park is not a regional park, but is part of the Minneapolis Chain of Lakes Regional Park.

6.6.1.13, Cedar Lake Park – Temporary Occupancy Exception; C. Determination of Temporary Occupancy Exception; Cedar Lake Junction

The trail intersection at the Cedar Lake Trail and the Kenilworth Trail has fairly described in the FEIS. However, the MPRB remains concerned for the safety of the more than 400,000 annual trail users. The plans describe a way for trail users to negotiate past freight rail and LRT, but the frequency of LRT vehicles at the intersection is a new condition that will not be familiar to trail users. The Council notes in response to comments submitted by the MPRB that a 30 percent of design version of the crossing is included in Appendix G. The MPRB has reviewed the drawings, which provide more detail than those previously provided, along with other information included in Appendix G. We note the response to MPRB comments suggests the "design details of pedestrian and bicycle safety features will be made during Engineering and finalized prior to construction" and look forward to the opportunity to review those details and the ways in which the crossing will reflect current industry standards for trails carrying volumes noted for the Cedar Lake Trail and counts by the Council that reflect the need for 30 to 40 bicyclists in a queue for a freight train passage, a quantity which is likely to increase due to the continued popularity of the Cedar Lake Trail.

6.6.1.14, Bryn Mawr Meadows – De Minimis Determination; A. Section 4(f) Property Description

This section notes Bryn Mawr Meadows Park is a regional Park. Bryn Mawr Meadows is not a regional park, but is part of the MPRB's neighborhood park system

6.6.1.14, Bryn Mawr Meadows – De Minimis Determination; B. Determination of Permanent Section 4(f) Use

The FEIS states "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 local jurisdictions affected by the Project's proposed key

structures.” The MPRB is not one of those local jurisdictions that were involved in discussions regarding the design of key structures. The alignment of trails within the park has been discussed with the MPRB but no approvals have been extended, as the park will be the subject of master planning during 2017. The MPRB views this bridge as a significant visual feature that extends partially onto parkland. The MPRB looks forward to review the design of the bridge and its relation to Bryn Mawr Meadows Park and the potential for its design to be adjusted to reflect its more local context, as indicated in the FEIS.

As stated at the outset of this letter, the MPRB appreciates the continued opportunity to provide input to the Council aimed at delivering the best possible project for park and transit users.

Sincerely,

A handwritten signature in black ink, appearing to read 'Liz Wielinski', with a long horizontal line extending to the right.

Liz Wielinski, President
Minneapolis Park & Recreation Board

From: [Frank Hornstein](#)
To: [swlrt](#)
Subject: EIS Comments
Date: Monday, June 13, 2016 4:51:39 PM
Attachments: [SWLRT EIS Coments.pdf](#)

Hello,

Please see the attached letters for comments on the adequacy of the Final EIS. If you have any questions or concerns please let me know.

Best,

Frank Hornstein

Frank Hornstein

State Representative (61A)
243 State Office Building
100 Rev Dr Martin Luther King Jr Blvd
St. Paul, MN 55155
Phone: 651.296.9281
www.house.mn/61a

Lilly Melander, Legislative Assistant
651.296.5408
elizabeth.melander@house.mn

Minnesota House of Representatives

100 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155



Minnesota Senate

75 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155

June 13, 2016

Ms. 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,

We are writing to express our serious concerns with the freight rail safety sections of the Final Environmental Impact Statement (FEIS) for the Southwest Light Rail project.

Over the past three years we have championed legislation to address safety issues regarding the transportation of crude oil and ethanol in Minnesota. There are specific challenges with hauling ethanol through the Kenilworth corridor and downtown Minneapolis. Our concerns are informed by the particular risks and consequences of transporting these materials in a densely populated area that is colocated with light rail.

Rather than address ways in which the risks associated with colocation can be identified and managed, the FEIS reads like an advocacy document for the freight rail industry, with a clear focus on addressing the needs of the railroads utilizing the corridor.

For example, the FEIS states, *“Moving freight via rail is especially important in moving bulk commodities, such as minerals and agricultural products that help drive Minnesota's economy...for Minnesota a strong rail system supports economic development, enhances environmental sustainability, helps preserve the publicly owned roadway infrastructure and increases business marketability in the state”* (Purpose and Need, 1-14)

The FEIS also asserts that *“it is important that any freight rail modifications to be included in the Project be done in a way that helps to maintain that state's balanced and economically competitive freight rail system”* (Purpose and Need, pg 1-15)

In justifying the document's relative silence on the risks of hauling ethanol in the Kenilworth Corridor in close proximity to residences and light rail trains, the FEIS states, *“Future freight rail operations are subject to a range of market forces and are dependent on the business plans of freight railroad operators, both of which are outside the jurisdiction of the FTA and the Council...and the Final EIS does*

not evaluate potential adverse effects on the human environment related to potential indirect impact of increased freight rail frequency and/or length. (Transportation Analysis and Effects 4-48)

The FEIS claims that there are four factors that impede the Council and FTA from addressing increases in real frequency and length of trains. These include an inability to forecast rail industry trends because of proprietary information, and a lack of *"existing credible scientific evidence or data which can be used to evaluate potential for related adverse impacts on the human environment related to future market demands placed on freight rail cargo in the Project's study area..."* The FEIS further claims that, *"the FTA and the Council are aware of no theoretical approaches or research methods generally accepted in the scientific community to derive information required for this analysis without the cooperation of freight rail operators in sharing proprietary information"* (Transportation Analysis and Effects, 4-48)

Railroads have also claimed that information concerning their level of insurance, disaster planning, and routing criteria are also proprietary, yet we see no evidence of the Met Council requesting this information from the railroads in the corridor. Recent court cases in California and Maryland have successfully challenged railroad's proprietary claims on similar issues.

The FEIS can and should address potential adverse human impacts of likely increased rail operations, particularly as it relates to the transportation of ethanol, crude oil and other high hazard flammable materials.

The FEIS also describes an *Operations Emergency Management Plan* and a *Safety and Security Management Plan*, yet the document claims that *"regulation over the operations and related communications from TC and W to emergency responders are outside the jurisdiction of the Council and FTA."* (Executive Summary ES-9) The EIS then states that these issues are under the jurisdiction of the FRA and PHMSA. Yet there is no discussion of how FRA and PHMSA plan to coordinate with the Council and safety issues, or how the Emergency Management Plan and Security Management Plan will involve the public, first responders and Emergency Managers in its development and implementation.

This issue is particularly important as Emergency Managers testified multiple times to Minnesota legislative committees in April 2016 regarding "significant gaps" in emergency preparedness as related to freight rail safety.

The FEIS describes design criteria to enhance safety to prevent LRT derailments, including guardrails, crash walls and other enhancements. It is unclear to what extent these enhancements will be implemented or are merely advisory. For example the FEIS discusses, *"intrusion detection for possible freight derailment will be installed, where appropriate"* (Executive Summary, ES-8)

There is little specific information in the FEIS on whether or where this safety infrastructure will be installed and its cost.

The FEIS should contain much more specific and substantive information regarding emergency response planning as it relates to freight rail operations along all areas where light rail and freight rail are collocated. In addition the FEIS should contain more precise information on the location of safety related infrastructure and its costs.

We raised serious concerns regarding the colocation of freight and light rail when the Metropolitan Council decided to keep freight rail permanently in the Kenilworth corridor. This decision was made despite the original law requiring the return of freight rail to a westerly alignment. In addition, in a study that we insisted upon, a viable, safe, prudent, cost-effective alternative to do so was identified. This is the MN&S Spur North identified in March 21, 2014 TransSystems' SWLRT Engineering Evaluation of Freight Rail Relocation Alternatives Final Report, stating "*... in our opinion, resolves many of the shortcomings of the other versions previously presented.*"

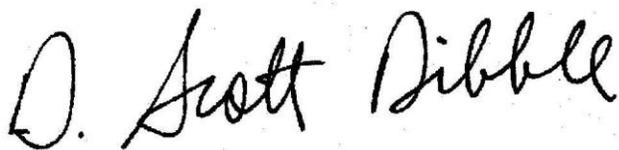
The FEIS should, at a minimum, heed the advice of that report for whichever alignment is chosen: "*Whether the freight rail is transfer red to the MN&S Spur north or remains on the modified Kenilworth Corridor, there are a number of safety improvements that should be included as a part of this overall project. They consist of, but not limited to: (1) Centralized Traffic Control (CTC) to expedite train movements and provide broken rail protection for the route, (2) electronic detection devices such as hotbox and broken wheel detection, and (3) equipment necessary to assure compliance with the yet to be finalized Positive Train Control (PTC) requirements.*"

We had mistakenly anticipated that the Council and FTA would seriously address rail safety concerns regarding colocation during the Supplemental Environmental Impact Statement process. The FEIS falls significantly short of addressing those concerns.

The FEIS should not be deemed adequate until issues related to freight rail safety as discussed above and in citizen and other public sector comments are addressed. If issues pertaining to rail safety cannot be adequately addressed, LRT should not be located in such close proximity to an active freight rail line.

Thank you for your consideration.

Sincerely,



D Scott Dibble
State Senator, Distrcit 61



Frank Hornstein
State Representative, District 61A

From: [Joan Vanhala](#)
To: [swlrt](#)
Cc: maya.sarna@dot.gov; [Russ Adams](#)
Subject: SWLRT FEIS comment from Alliance for Metropolitan Stability
Date: Monday, June 13, 2016 5:17:02 PM
Attachments: [Southwest LRT FEIS AMS comments June 13th 2016.pdf](#)

Dear Metro Transit,

Please accept our attached comment to the Southwest LRT Final Environmental Impact Statement.
Please provide receipt of this comment.

Thank you,

Joan Vanhala, Coalition Organizer
Alliance for Metropolitan Stability
2525 E. Franklin Avenue #200
Minneapolis, MN 55406
612-332-4471; <http://www.metrostability.org/>

"When the power of love overcomes the love of power the world will know peace." - Jimi Hendrix

TO: Ms. Nani Jacobson, Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426

From: Alliance for Metropolitan Stability
2525 E. Franklin Avenue
Minneapolis, MN 55406
Contact: Joan Vanhala, Coalition Organizer
612-332-4471; joan@metrostability.org

Public Comment for the Southwest Light Rail Transit Final Environmental Impact Statement

June 13th, 2016

The [Alliance for Metropolitan Stability](#) (AMS) is a coalition of grassroots organizations that advances racial, economic and environmental justice in growth and development patterns in the Twin Cities region. Our 35 [member groups](#) represent communities of color, low-income communities, housing advocates, faith-based organizations, research and policy organizations, economic developers and environmental, transit and land-use policy advocates.

For the past 9 years AMS has been providing technical and organizing support to Environmental Justice communities along our metropolitan region's planned transitways to ensure that they are included in the decision making and receive community benefits from these major infrastructure investments.

The Southwest LRT FEIS has one major oversight in Chapter 5 Environmental Justice Table 5.2-5 by recording that there is NO low income housing identified at the Louisiana Station – Meadowbrook Manor at 6860 Excelsior Blvd, Minneapolis, MN 55426. This privately owned affordable housing is within the ½ mile station area of the Louisiana Station. The light rail transit project has increased the marketability of these privately owned 350 unites affordable housing at Meadowbrook Manor As quoted in the Star Trib newspaper "Hundreds of families could be forced out of affordable housing in St. Louis Park, as the new owner of one of the Twin Cities' largest apartment complexes begins an upgrade of sprawling Meadowbrook Manor." *"...most of the residents at Meadowbrook work low-income jobs and many hold down more than one. About 40 percent are immigrants from countries including Kenya, Nigeria, Liberia, Tibet and Mexico."* (3/23/16, Star Trib [Hundreds of families could be forced out of Meadowbrook Manor in St. Louis Park](#)).

The concerns of the environmental justice communities are now coming to fruition as the natural occurring affordable housing begins to transition to market rate and displace low income communities of color from the housing units they occupy. The rent is simply no longer affordable to the existing tenants.

TABLE 5.2-5 Location of Affordable Housing Station	Affordable Rental Housing (Total Number of Affordable Units)
SouthWest	1 multifamily low-income development – 70 units
Eden Prairie Town Center	2 multifamily low-income developments – 435 units
Golden Triangle	1 multifamily low-income development – 163 units
City West	1 multifamily low-income development – 280 units
Opus	2 multifamily low-income developments – 367 units
Shady Oaks	5 multifamily low-income developments – 580 units
Downtown Hopkins	4 multifamily low-income development – 167 units
Blake Road	No low-income housing identified
Louisiana	No low-income housing identified
Wooddale	No low-income housing identified
Beltline	No low-income housing identified
West Lake	No low-income housing identified
21st Street	No low-income housing identified
Penn	No low-income housing identified
Van White	No low-income housing identified
Royalston	No low-income housing identified

WEST METRO

Hundreds of families could be forced out of Meadowbrook Manor in St. Louis Park

As upgrade begins, leaders and families prepare for change.

By John Reiman (<http://www.startribune.com/john-reiman/27304387L/>) Star Tribune |

MARCH 23, 2016 -- 8:43PM

Hundreds of families could be forced out of affordable housing in St. Louis Park, as the new owner of one of the Twin Cities' largest apartment complexes begins an upgrade of sprawling Meadowbrook Manor.

New lease agreements are going out to some 350 households, with rent increases of \$100 to \$125 a month. Residents must undergo a criminal record check and prove they have income of at least 2½ times the monthly rent. About two-thirds of the residents at the 551-unit complex are on month-to-month leases.

On Wednesday, nearly two dozen government, community and faith leaders met at City Hall to discuss how they can help families who may be forced to move.

"We want to wrap our arms around those folks so they get the support they need, whether they continue to live at Meadowbrook or not," said St. Louis Park Mayor Jake Spano. "In most communities, that is not what would happen."

Earlier this year, Helen Bigos sold Meadowbrook to her son Ted. Bigos Management, which operates more than 40 apartment complexes in the Twin Cities, declined to comment.

A similar scenario is playing out in Richfield, where the new owner of the 700-unit Concierge apartments is upgrading the complex, raising rents and evicting residents who can't pass background checks and meet income standards.

Meadowbrook has a long and checkered history. When it was built in 1953 by Ben and Helen Bigos, the complex was one of the largest in the Midwest. But by the 1980s and '90s, Meadowbrook had developed a reputation as a trouble spot.

Police calls were frequent, children there regularly missed school and the city was taking the owners to court to get housing and fire code violations fixed.

In response, city and school officials teamed with the Park Nicollet Foundation to form the Meadowbrook Collaborative. An outreach office was set up on site to help residents and children connect with school and community services.

Linda Trummer, who has run the collaborative since its beginning, said most of the residents at Meadowbrook work low-income jobs and many hold down more than one. About 40 percent are immigrants from countries including Kenya, Nigeria, Liberia, Tibet and Mexico.

City officials didn't have a current estimate of the Meadowbrook population, but in the past the complex has housed about 1,700 people.

State Rep. Peggy Flanagan, a DFLer who represents St. Louis Park in the Legislature, worked during and after college at Meadowbrook as a park leader.

"The kids know Meadowbrook Collaborative," Flanagan said. "They know there's a safe place where they can get help with their homework, where they can seek support. I worry about the families that are displaced and won't have those opportunities.

"I think there may be some misperceptions [about Meadowbrook]. It is an asset to our community, and the people who live there are an asset to our community."

From: [Stefonowicz, Rob A.](#)
To: [Jacobson, Nani](#); [swlrt](#)
Subject: EVINE Live Comments on FEIS (SWLRT project)
Date: Monday, June 13, 2016 6:24:12 PM
Attachments: [EVINE Live Comments on Final EIS.pdf](#)

Ms. Jacobson –

Please see attached comment letter on the FEIS, submitted on behalf of our client, EVINE Live.

Thank you.

Rob A. Stefonowicz
Shareholder

direct | 952-896-3254
fax | 952-842-1718

www.larkinhoffman.com



8300 Norman Center Drive
Suite 1000
Minneapolis, MN 55437-1060

CONFIDENTIALITY NOTICE:

INFORMATION IN THIS MESSAGE, INCLUDING ANY ATTACHMENTS, IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE RECIPIENT(S) NAMED ABOVE. This message may be an Attorney-Client communication from the law firm of Larkin Hoffman Daly & Lindgren Ltd., and as such is privileged and confidential. If you are not an intended recipient of this message, or an agent responsible for delivering it to an intended recipient, you are hereby notified that you have received this message in error, and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you received this message in error, please notify the sender immediately, delete the message, and return any hard copy print-outs. No legal advice is being provided or implied via this communication unless you are (1) a client of Larkin Hoffman Daly & Lindgren Ltd., and (2) an intended recipient of this message.

June 13, 2016

VIA EMAIL ONLY (SWLRT@metrotransit.org)

Ms. Nani Jacobson, Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426

Re: SWLRT Comments on the Final EIS
 Our Client: EVINE Live
 Our File No.: 29758.45

Dear Ms. Jacobson:

Our firm represents EVINE Live in connection with the proposed Southwest Light Rail Transit project. EVINE Live occupies two buildings on Shady Oak Road in Eden Prairie that are directly adjacent to the planned Southwest Light Rail Transit alignment and the Golden Triangle Station. We have reviewed the Final Environmental Impact Statement that was published on May 13, 2016 and the 90% plans dated January 2016. We have the following comments and concerns:

1. The 90% plans show the alignment will be within 76 feet of our buildings. Further, a traction power substation will be located under an elevated track structure at this close location. There is no assessment of substation noise or electromagnetic interference for EVINE Live in the FEIS. We are concerned these effects have been overlooked and may negatively impact our live broadcasts.
2. We are concerned the FEIS noise assessment underestimates the impact on our site for the following reasons:
 - a. Train bells were not included in the calculations even though all trains will use bells as they approach and depart from the Golden Triangle Station.
 - b. The calculations appear to include an adjustment for ground attenuation of soft soil or grass, even though there is an asphalt parking lot between the alignment and the EVINE Live properties.
 - c. The calculations appear to use the average number of trains per hour rather than the peak number of trains per hour.
3. We have significant concerns that our outdoor studio, located 100 feet from the alignment, will become useless due to noise from the passing trains and from the train bells. This outdoor studio is used regularly for live broadcasts.

Ms. Nani Jacobson

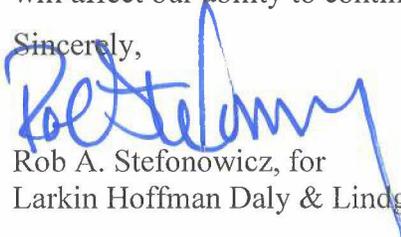
June 13, 2016

Page 2

4. The vibration assessment table contains errors related to the distance of our building to the track. Further, we were unable to duplicate the calculation results. We are concerned about the accuracy of the vibration impact assessment.
5. We are concerned that construction noise and vibration will be very difficult, if not impossible, to coordinate with contractors since we broadcast live from this location. Considering our broadcast needs, alternate construction methods that cause the lowest noise and vibration will be needed in the vicinity of our buildings.
6. As you are aware, the soil conditions are poor in this area of Eden Prairie. Settlement caused by short-term construction and long-term train vibration may cause damage to our facilities. This significant risk should be assessed in the FEIS.

EVINE Live is concerned that the FEIS does not fully address the impacts on our facilities and will affect our ability to continuously broadcast at the quality our viewers expect.

Sincerely,



Rob A. Stefonowicz, for
Larkin Hoffman Daly & Lindgren Ltd.

Direct Dial: 952-896-3254
Direct Fax: 952-842-1718
Email: rstefonowicz@larkinhoffman.com

cc: EVINE Live (via email)

4826-0217-0418, v. 1

From: [Cathy Deikman](#)
To: [J Meath](#); [swlrt](#)
Subject: Re: A response to the FEIS for SWLRT on behalf of LRT Done Right
Date: Monday, June 13, 2016 6:50:36 PM

Thank you Judy!!

[Sent from Yahoo Mail on Android](#)

From: "J Meath" <meath@umn.edu>
Date: Mon, Jun 13, 2016 at 1:40 PM
Subject: A response to the FEIS for SWLRT on behalf of LRT Done Right

Dear Ms. Jacobson,

Attached please find our response to the Final Environmental Impact Statement for the Southwest Light Rail Transit project.

Thank you --

Judy Meath
On behalf of LRT Done Right
2700 Kenilworth Place
Minneapolis MN 55405

From: [strandra](#)
To: [swlrt](#)
Subject: SWLRT error
Date: Monday, June 13, 2016 11:28:00 PM

Hi,

The issue now is State funding BUT the most important issue is flooding. I've read the many pages in the engineering study of the proposed tunnel to learn that it does not prevent or insure puncturing of the water canal that links Cedar Lake to Lake of the Isles. This tunnel soil is soft, movable sand. It shifts and drifts. None of this appears in the engineering study. The proposed 35 foot deep tunnel runs along the Kenilworth corridor beginning at the curve that intersects two trails: Midtown Greenway and Kenilworth. The tunnel ends 40' from the canal. In the report/study, no information exists about a barrier that would prevent a puncture or leak even after the deep rails and electric overhead conduits are installed.

My point is that the excavation of the tunnel could accidentally but predictably puncture the canal thereby draining 4 lakes. That's right - 4: Brownie, Cedar, Isles and Calhoun. They are directly connected.

If you think that \$1.8 billion is a big number, try paying for accidental flooding of 20 square miles. Think this is hyperbole? If you read the engineering report, you'll see glaring gaps in facts or even estimates.

You also may ask, what's my stake in this? NIMBY yes, I live in along the proposed tunnel route and have sold my place as the property values continue to drop.

A final bit of logic may help: if you run two passenger trains underneath a heavy freight line often carrying oil, would you want to ride in the tunnel?

Pending evacuee,

Bob Strandquist

From: [Nance Duffy](#)
To: [swlr](#)
Subject: comment on final EIS
Date: Tuesday, June 14, 2016 12:14:22 AM

The impact loss of trees, water quality and quiet in the Kenilworth Trail and the Cedar, Calhoun and Isles neighborhoods makes this route a dishonorable choice. The noise and light pollution will destroy a dark beautiful contemplative place that must be preserved.

Transit is not served by poor design. The coexistence of LRT and Rail in the area is a foolish gamble.

Nance Duffy
1952 Cedar Lake Pkwy
Mpls Mn. 55416

From: [Tegdesch, Elizabeth \(MPCA\)](#)
To: [swlrt](#)
Cc: [Kromar, Karen \(MPCA\)](#); [Card, Dan \(MPCA\)](#); [McDill, Teresa \(MPCA\)](#)
Subject: MPCA Comment Letter - Southwest Light Rail Transit Project
Date: Tuesday, June 14, 2016 6:31:26 AM
Attachments: [SW Light Rail Transit Proi FEIS Comment ltr.pdf](#)

Attached are the Minnesota Pollution Control Agency's comments on the Southwest Light Rail Transit Project Final Environmental Impact Statement. A paper copy will follow by U.S. mail.

Please acknowledge receipt of this comment letter to Karen Kromar at Karen.kromar@state.mn.us

Thank you.

[Elizabeth Tegdesch](#)
[Environmental Review and EQB Support](#)
[Minnesota Pollution Control Agency](#)
[520 Lafayette Road N](#)
[St. Paul, MN 55155 / 651-757-2100](#)
elizabeth.tegdesch@state.mn.us



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

June 13, 2016

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426

Re: Southwest Light Rail Transit Project Final Environmental Impact Statement

Dear Ms. Jacobson:

Thank you for the opportunity to review and comment on the Final Environmental Impact Statement (FEIS) for the Southwest Light Rail Transit project (Project) located in Hennepin County, Minnesota. The Project consists of construction of a new light rail line from downtown Minneapolis to Eden Prairie. Minnesota Pollution Control Agency (MPCA) staff has reviewed the FEIS and have no comments at this time.

We appreciate the opportunity to review this Project. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this FEIS, please contact me via email at Karen.kromar@state.mn.us or via telephone at 651-757-2508.

Sincerely,

A handwritten signature in blue ink that reads "Karen Kromar".

Karen Kromar
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:bt

cc: Dan Card, MPCA, St. Paul
Teresa McDill, MPCA, St. Paul

From: [Claire Ruebeck](#)
To: [swlrt](#)
Cc: [Frank Hornstein](#)
Subject: Comments on Southwest Light Rail Transit Final Environmental Impact Statement by Citizens Acting for Rail Safety - Twin Cities
Date: Monday, June 13, 2016 11:56:30 PM
Attachments: [Microsoft Word - CARSTC SWLRT FEIS.docx.pdf](#)
[ATT00001.htm](#)

Ms. Jacobson,

Respectfully submitted for your consideration are the comments prepared by CARS-TC on the SWLRT FEIS. Please see the attached file.

Sincerely,

Claire Ruebeck
Representing CARS-TC

Date: June 13, 2016

To: Ms. Nani Jacobson, Assistant Director, Environmental and Agreements
Metro Transit - Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426
Email: SWLRT@metrotransit.org

From: Citizens Acting for Rail Safety – Twin Cities

Re: Comments on Southwest Light Rail Transit Final Environmental Impact Statement

Thank you for the careful consideration of public comments on the Southwest Light Rail Transit (SWLRT) Final Environmental Impact Statement (FEIS). Citizens Acting for Rail Safety - Twin Cities (CARS - TC) is a regional, non-partisan, grassroots advocacy group that works with residents, legislators, and agency officials to improve rail safety to benefit the health, safety, and security of people, wildlife and the environment. CARS-TC formed in response to the exponential growth of oil and ethanol transportation by rail over recent years and strives to bring the citizen voice to bear on issues associated with high hazard freight trains going through our communities.

Light Rail Transit Located with High Hazard Flammable Trains is Incompatible with Public Safety

It is not uncommon for LRT projects to utilize grade-separated, dedicated rights-of-way. However there are LRT projects that share rights-of-way corridors with freight rail, referred to as colocation. Colocation of a LRT project with freight rail is often pursued to contain LRT project construction costs as doing so typically reduces land acquisition costs. Initially colocation of LRT and freight rail operations might appear to be a reasonable, commonsense, and efficient strategy. However given the common carrier obligation of railroads coupled with the advent of high volume shipments of oil and ethanol by rail there are serious dangers associated with collocation of passenger LRT with active freight rail.

When initial planning for the SWLRT began, Bakken oil and ethanol shipments by rail were negligible to non-existent. Currently Twin Cities & Western Railroad (TC&W) operates in the rights-of-way corridor proposed for the SWLRT route and frequently runs trains consisting of approximately 100 tank-cars of ethanol. Ethanol is a Class 3 flammable liquid and is considered to present commensurate dangers as oil trains; see Exhibit I for Partial Listing of Ethanol Train Incidents.

The FEIS indicates that the Federal Railroad Administration (FRA) has been asked to issue waivers to exempt the SWLRT project from certain FRA requirements and jurisdiction. Given the routing of high hazard flammable trains in the SWLRT corridor, abdication of jurisdiction by the FRA does not serve the best interest of public safety.

The U.S. Department of Transportation requires rail carriers to develop a route risk analysis using 28 risk factors; see Exhibit II. It is prudent and reasonable for passenger rail route selection to be informed by the risk factor analysis that is required for freight rail routes. It does not appear that the SWLRT FEIS has taken these relevant factors into consideration.

The SWLRT FEIS does not appropriately address the dangers of collocating passenger LRT with high hazard flammable (i.e., ethanol, oil, etc.) trains.

High Hazard Freight Train Liability Insurance Gaps and Indemnity

There are not U.S. federal or Minnesota state minimum insurance requirements for railroads carriers, shippers or producers of oil, ethanol or other kinds of hazardous cargo. Further there generally are not taxes imposed on the hazardous materials, such a tax could help fund an escrow account to cover casualty loss and cleanup cost associated with hazardous freight rail incidents. The Comptroller of the State of New York has recently called for federal regulations to govern freight rail liability insurance and self-reserve funds.¹ Transport Canada has recently

promulgated specific requirements for rail carriers operating in Canada.² Generally in the U.S. rail carriers are not adequate insurance to cover damage caused by a catastrophic train incident which means that should an incident occur the rail carrier is likely to file bankruptcy.

The SWLRT FEIS does not address the liability insurance and/or self-reserve requirements for railroads/shippers of Class 3 flammable liquids. This is a complicated topic especially when the condition of a shared rights-of-way exists between freight rail and passenger LRT. Goals of a liability insurance/self-funding plan should address:

- Allocating the liability from risks between the freight railroad and the transit agency
- Managing the additional risk of colocation by developing a prudent insurance strategy
- Ensuring the safety of passengers in mixed freight and transit operations
- The willingness of freight railroads to grant access to their rights-of-way for transit operations as applicable. In the case of SWLRT the right-of-way are currently owned by the Hennepin County Regional Rail Authority (HCRRA).
- Providing satisfactory conditions for continuing service to freight customers.
- Providing adequate compensation for property damage, environmental remediation and loss of life.

Statements by Mark Wegner, CEO of TC&W, indicate that the Class III railroad carrier is under-insured should a high hazard flammable train incident occur. If rail carriers operating in the SWLRT route do not have adequate liability insurance or the financial capacity to underwrite losses caused by a train incident the public is exposed to uncompensated losses when freight and transit disasters occur.

The SWLRT FEIS does not address this important operation concern of liability insurance and is silent on the matter of extending indemnity to rail carriers operating in the proposed SWLRT shared rights-of-way corridor which is currently owned by HCRAA who's intent is to transfer track ownership to Metropolitan Council.

Electromagnetic Fields Created by LRT can Impede Transit and Freight Rail Signaling

LRT projects that utilize electrified overhead catenary/pantographic power lines create electric magnetic fields. Electric fields result from the strength of the electric charge, while magnetic fields are generated from the motion of the charge. Together these fields are referred to as EMF, which are invisible, non-ionizing, low-frequency radiation. High-current electronic switches and controls are capable of producing transient signals that can be transmitted along the power supply network to other electronic systems. Magnetic fields can be generated by LRT paralleling and switching stations, as well as traction power substations⁴. These fields could affect the signal systems of the freight rail carrier. EMF can result in electromagnetic interference (EMI), which can cause disruptions and possibly malfunctions in sensitive equipment. Electromagnetic arcing from the pantograph is a commonly observed phenomenon occurring year round but is more pronounced in the winter. Pantograph arcing causes interference in both traction power and signaling systems. Possibilities of radiated interference to the wireless and radio based communication and signaling are also possible to both LRT and freight signaling systems³. Pantograph bouncing caused by discontinuities in the feeding or track circuit systems, are of particular concern, as such scenarios are not addressed by design standards or regulations despite causing significant problems on railways that waste precious time and resources and create dangerous safety conditions due to lapses in signaling⁵ performance. Neither the federal government nor the State of Minnesota has currently set emission standards for EMF.

SWLRT project documents indicate the use of an electrified overhead system thereby increasing sources of electromagnetic fields in the corridor shared with the TC&W rail carrier freight operations. During a 2016 legislative hearing of the Minnesota House Transportation Subcommittee, Brian Sweeney, an executive and lobbyist for BNSF Railway, testified that electric power transmission lines cause interference with the freight rail signaling systems.

The effects of EMF on the SWLRT and freight rail signaling function have not been properly studied or addressed in the FEIS and warrant further evaluation prior to the advancement of the project.

Risks of High Hazard Freight Train Operations During Construction and Operation of SWLRT

TC&W currently operates in a segment of the planned SWLRT route. TC&W regularly hauls high hazard flammable ethanol unit trains in this proposed shared rights-of-way corridor. Based on review of the FEIS and statements made by Mark Wegner, the CEO of TC&W, the rail carrier does not intend to relocate or cease operations during the construction phase of SWLRT. Further TC&W expects to operate in the shared corridor once SWLRT is fully operational. The following conditions have not been adequately addressed in the FEIS and raise concerns of an increased likelihood of a high hazard flammable train incident along the proposed SWLRT route:

- Shallow Tunnel Construction Pit to be Located Adjacent to Active Freight Rail - during construction freight rail including high hazard flammable trains carrying ethanol will continue to operate through the corridor in close proximity to the shallow tunnel construction pit which is described as measuring 35 foot wide and 25-35 foot deep trench with pilings positioned at approximately 50 feet deep. Construction activity may disrupt the safety of freight by disturbing freight tracks, infrastructure and operational protocols. Disturbed soil can be susceptible to embankment erosion and drainage washout issues.
- Lack of Crash Walls and Intrusion Fence - the FEIS does not appear to identify the placement of crash walls or an intrusion fence during the construction phase, which is anticipated to last for a period of two years. Derailment of an ethanol train tank-car into the construction pit would present a significant threat to public safety.
- Construction Site Impediments and Drainage - The construction corridor will be occupied by workers, heavy equipment and typical construction debris, which will heighten the risk of derailments. Analysis of previous derailments indicates that leading causes are operator error and track failures, including track impediments. Construction can displace the supporting structures that bolster rail. On a SWLRT project map, tip guardrails have been indicated, but snow build up along tip guardrails may cause derailments. Inclement weather like snow may mask destabilization of freight infrastructure and rain can washout surrounding already disturbed soils, increasing derailment risk during construction.
- Separation of Adjacent Freight and SWLRT Track - project documents indicate that in some areas of the SWLRT route passenger rail tracks would be separated from the active freight rail tracks by less than the 25 foot minimum set forth by AREMA guidelines and in one location the passenger rail and freight rail appear to be planned as close as 12 feet.
- Operation Times and Speed Restrictions - Nighttime running of freight trains will be perhaps even more dangerous than daytime. People will be asleep in their nearby homes as trains run only feet from a construction trench. Construction debris may be left near or on tracks and may not be visible to the freight train engineer/conductor at nighttime. Final day inspection of track is an imperfect science and human error could easily miss track impediments. Derailments can happen at any speed but case studies indicate that the risk of puncture to train tank-cars carrying hazardous materials is reduced if train is traveling 10 mph or less.

The SWLRT FEIS does not provide a comprehensive rail safety plan that addresses the risks of operating high hazard flammable trains in the corridor during the construction period. The FEIS does not provide a specific safety plan for operating high hazard flammable trains in the shared rights-of-way once SWLRT is operational. Routing risk factors do not appear to have been addressed in the SWLRT FEIS; see Exhibit II.

Emergency Planning and Incident Response Capabilities

- Emergency Planning - The railroad industry is generally exempt from the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986, which was created to help communities plan for emergencies involving hazardous substances. EPCRA requires hazardous chemical emergency planning by federal, state and local governments, Indian tribes and industry. Since rail carriers claim exemption to the federal EPCRA the public

and emergency planners frequently do not have the benefit of rail carriers' hazard analysis data. The SWLRT FEIS does not appear to have developed route and cargo specific emergency planning protocols for the SWLRT route.

- **First Responder Access and Equipment Availability** - In case of any chemical freight derailment, chemical fires must be fought with specialized foam products. Typically these fires are not extinguished with water, which can actually worsen a fire. Water can be used to cool rail cars that have not ignited, but foam is necessary to put them out. Limited foam is available at specific locations in Minnesota and it can take 2 hours or longer to access the necessary quantity of foam to fight a chemical derailment fire. Additionally, if a derailment were to occur during construction, access to fire safety equipment would be extremely limited because of the geometry of the corridor - in some places the only access to the rail tracks is between people's homes and/or through their driveways. In the event of a derailment occurring during construction, the only access for fire trucks may be limited. Fire equipment must be accessible in case of a derailment emergency. An in depth coordination between the fire department, Metropolitan Council engineers, and citizens has not been done.

The SWLRT FEIS does not reflect a coordinated emergency planning and response initiative in the event of a train derailment in the SWLRT route. Further the SWLRT project design does not appear to have integrated relevant safety protocols.

Final Environmental Impact Statement Adequacy Determination and Oversight

The Final Environmental Impact Statement (EIS) indicates that the Council (i.e., Metropolitan Council) will issue an Adequacy Determination for the Final EIS in accordance with Minnesota environmental law. Given that the Metropolitan Council SWLRT project office along with the FTA has prepared the Final EIS, a ***conflict of interest exists with the Metropolitan Council*** being the responsible body to issue an Adequacy Determination. To remedy this conflict of interest an independent third party should be responsible for the Adequacy Determination. In Minnesota the Environmental Quality Board (EQB) provides leadership and coordination across agencies on environmental issues that are multi-jurisdictional, and multi-dimensional, as well as provide for opportunities for public access and engagement. The EQB mission is to lead Minnesota environmental policy by responding to key issues, providing appropriate review and coordination, serving as a public forum and developing long-range strategies to enhance Minnesota's environmental quality. The EQB is an appropriate agency to issue an Adequacy Determination on the SWLRT Final EIS and can alleviate the Metropolitan Council conflict of interest.

Footnotes

¹ State of New York Office of the State Comptroller Letter to Secretary Fox of U.S. DOT regarding reducing risks of high hazard flammable trains, attention drawn to concerns related to the adequacy of rail carriers' liability insurance and/or self-funded reserves (4/25/2016).

http://www.osc.state.ny.us/press/releases/apr16/Foxx_USDOT.pdf

²Transport Canada, Liability and compensation regime under the Safe and Accountable Rail Act (January 2016)

<https://www.tc.gc.ca/eng/mediaroom/infosheets-railway-safety-7683.html>

³ Peninsula Corridor Joint Powers Board (PCJPB). Electromagnetic Fields and Electromagnetic Interference - Settings, Impacts, and Mitigation Measures (2014).

<http://www.caltrain.com/Assets/Caltrain+Modernization+Program/FEIR/3.5+EMF+EMI.pdf>

⁴ Midya, Surajit. Electromagnetic Interference in Modern Electrified Railway Systems with Emphasis on Pantograph Arcing. Uppsala University, Disciplinary Domain of Science and Technology, Technology, Department of Engineering Sciences, Electricity (2008, English).

<http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A290500&dswid=-3322>

⁵Interference Technology. Study Highlights Need to Re-Evaluate Railway EMC Standards (06/24/2014).

<http://www.interferencetechnology.com/study-highlights-need-to-re-evaluate-railway-emc-standards/>

Exhibit I
Partial Listing of Ethanol Train Incidents

There have been notable ethanol train incidents. The high hazard flammable trains involved in these incidents are much like the ethanol unit trains operated by TC&W Railroad in the proposed SWLRT shared rights-of-way corridor. The following selection of train incidents highlights the risks poised by ethanol trains in general and underscores the exacerbated risk created if SWLRT is collocated with high hazard flammable trains:

- Cherry Valley, Illinois (June 19, 2009) - Ethanol train derailment with 13 train tank-cars breached, one human death. Ethanol spill contaminates nearby waterways causing massive fish kills.



- Dubuque, Iowa (Feb. 5, 2015) Ethanol train incident with 14 tank-cars derailed, 3 in the Mississippi River, an estimated 55,000 gallons of ethanol released in to the Mississippi River.



- Alma, Wisconsin (Nov. 7, 2015) Ethanol unit train incident with 32 cars derailed, 5 breached resulting in 18,000 gallons released into the Mississippi River. Environmental monitoring for damage continues.



Exhibit II
U.S. Federal Regulations Requiring Risk Analysis of Rail Route Selection

Federal regulation establishes minimum criteria that must be considered by rail carriers when performing the safety and security risk analyses required by § [172.820](#). The risk analysis to be performed may be quantitative, qualitative, or a combination of both. In addition to clearly identifying the hazardous material(s) and route(s) being analyzed, the analysis must provide a thorough description of the threats, identified vulnerabilities, and mitigation measures implemented to address identified vulnerabilities. ([73 FR 20772](#), April 16, 2008)

In evaluating the safety and security of hazardous materials transport, selection of the route for transportation is critical. For the purpose of rail transportation route analysis, as specified in § [172.820\(c\) and \(d\)](#), a route may include the point where the carrier takes possession of the material and all track and railroad facilities up to the point where the material is relinquished to another entity. Railroad facilities are railroad property including, but not limited to, classification and switching yards, storage facilities, and non-private sidings; however, they do not include an offeror's facility, private track, private siding, or consignee's facility. Each rail carrier must use best efforts to communicate with its shippers, consignees, and interlining partners to ensure the safety and security of shipments during all stages of transportation.

Because of the varying operating environments and interconnected nature of the rail system, each carrier must select and document the analysis method/model used and identify the routes to be analyzed.

The safety and security risk analysis must consider current data and information as well as changes that may reasonably be anticipated to occur during the analysis year. Factors to be considered in the performance of this safety and security risk analysis include:

1. Volume of hazardous material transported
2. Rail traffic density
3. Trip length for route
4. Presence and characteristics of railroad facilities
5. Track type, class, and maintenance schedule
6. Track grade and curvature
7. Presence or absence of signals and train control systems along the route (“dark” versus signaled territory)
8. Presence or absence of wayside hazard detectors
9. Number and types of grade crossings
10. Single versus double track territory
11. Frequency and location of track turnouts
12. Proximity to iconic targets
13. Environmentally sensitive or significant areas
14. Population density along the route
15. Venues along the route (stations, events, places of congregation)
16. Emergency response capability along the route
17. . Areas of high consequence along the route, including high consequence targets as defined in § [172.820\(c\)](#)
18. Presence of passenger traffic along route (shared track)
19. Speed of train operations
20. Proximity to en-route storage or repair facilities
21. Known threats, including any non-public threat scenarios provided by the Department of Homeland Security or
22. the Department of Transportation for carrier use in the development of the route assessment
23. Measures in place to address apparent safety and security risks
24. Availability of practicable alternative routes
25. Past incidents
26. Overall times in transit
27. Training and skill level of crews
28. Impact on rail network traffic and congestion

From: [Frank Hornstein](#)
To: [swlrt](#)
Subject: Re: EIS Comments
Date: Tuesday, June 14, 2016 10:49:58 AM
Attachments: [SWLRT EIS Coments.pdf](#)

Hello,

Please see the corrected version of my letter for comments on the FEIS.

Best,

Frank Hornstein

Frank Hornstein
State Representative (61A)
243 State Office Building
100 Rev Dr Martin Luther King Jr Blvd
St. Paul, MN 55155
Phone: 651.296.9281
www.house.mn/61a

Lilly Melander, Legislative Assistant
651.296.5408
elizabeth.melander@house.mn

>>> Frank Hornstein 6/13/2016 4:51 PM >>>
Hello,

Please see the attached letters for comments on the adequacy of the Final EIS. If you have any questions or concerns please let me know.

Best,

Frank Hornstein

Frank Hornstein
State Representative (61A)
243 State Office Building
100 Rev Dr Martin Luther King Jr Blvd
St. Paul, MN 55155
Phone: 651.296.9281
www.house.mn/61a

Lilly Melander, Legislative Assistant
651.296.5408
elizabeth.melander@house.mn

Minnesota House of Representatives

100 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155



Minnesota Senate

75 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155

June 13, 2016

Ms. 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,

We are writing to express our serious concerns with the freight rail safety sections of the Final Environmental Impact Statement (FEIS) for the Southwest Light Rail project.

Over the past three years we have championed legislation to address safety issues regarding the transportation of crude oil and ethanol in Minnesota. There are specific challenges with hauling ethanol through the Kenilworth corridor and downtown Minneapolis. Our concerns are informed by the particular risks and consequences of transporting these materials in a densely populated area that is colocated with light rail.

Rather than address ways in which the risks associated with colocation can be identified and managed, the FEIS reads like an advocacy document for the freight rail industry, with a clear focus on addressing the needs of the railroads utilizing the corridor.

For example, the FEIS states, *“Moving freight via rail is especially important in moving bulk commodities, such as minerals and agricultural products that help drive Minnesota's economy...for Minnesota a strong rail system supports economic development, enhances environmental sustainability, helps preserve the publicly owned roadway infrastructure and increases business marketability in the state”* (Purpose and Need, 1-14)

The FEIS also asserts that *“it is important that any freight rail modifications to be included in the Project be done in a way that helps to maintain that state's balanced and economically competitive freight rail system”* (Purpose and Need, pg 1-15)

In justifying the document's relative silence on the risks of hauling ethanol in the Kenilworth Corridor in close proximity to residences and light rail trains, the FEIS states, *“Future freight rail operations are subject to a range of market forces and are dependent on the business plans of freight railroad operators, both of which are outside the jurisdiction of the FTA and the Council...and the Final EIS does*

not evaluate potential adverse effects on the human environment related to potential indirect impact of increased freight rail frequency and/or length. (Transportation Analysis and Effects 4-48)

The FEIS claims that there are four factors that impede the Council and FTA from addressing increases in real frequency and length of trains. These include an inability to forecast rail industry trends because of proprietary information, and a lack of *"existing credible scientific evidence or data which can be used to evaluate potential for related adverse impacts on the human environment related to future market demands placed on freight rail cargo in the Project's study area..."* The FEIS further claims that, *"the FTA and the Council are aware of no theoretical approaches or research methods generally accepted in the scientific community to derive information required for this analysis without the cooperation of freight rail operators in sharing proprietary information"* (Transportation Analysis and Effects, 4-48)

Railroads have also claimed that information concerning their level of insurance, disaster planning, and routing criteria are also proprietary, yet we see no evidence of the Met Council requesting this information from the railroads in the corridor. Recent court cases in California and Maryland have successfully challenged railroad's proprietary claims on similar issues.

The FEIS can and should address potential adverse human impacts of likely increased rail operations, particularly as it relates to the transportation of ethanol, crude oil and other high hazard flammable materials.

The FEIS also describes an *Operations Emergency Management Plan* and a *Safety and Security Management Plan*, yet the document claims that *"regulation over the operations and related communications from TC and W to emergency responders are outside the jurisdiction of the Council and FTA."* (Executive Summary ES-9) The EIS then states that these issues are under the jurisdiction of the FRA and PHMSA. Yet there is no discussion of how FRA and PHMSA plan to coordinate with the Council and safety issues, or how the Emergency Management Plan and Security Management Plan will involve the public, first responders and Emergency Managers in its development and implementation.

This issue is particularly important as Emergency Managers testified multiple times to Minnesota legislative committees in April 2016 regarding "significant gaps" in emergency preparedness as related to freight rail safety.

The FEIS describes design criteria to enhance safety to prevent LRT derailments, including guardrails, crash walls and other enhancements. It is unclear to what extent these enhancements will be implemented or are merely advisory. For example the FEIS discusses, *"intrusion detection for possible freight derailment will be installed, where appropriate"* (Executive Summary, ES-8)

The FEIS should contain much more specific and substantive information regarding emergency response planning as it relates to freight rail operations along all areas where light rail and freight rail are colocated. In addition the FEIS should contain more precise information on the location of safety related infrastructure and its costs.

We raised serious concerns regarding the collocation of freight and light rail when the Metropolitan Council decided to keep freight rail permanently in the Kenilworth corridor. This decision was made despite the original law requiring the return of freight rail to a westerly alignment. In addition, in a study

that we insisted upon, a viable, safe, prudent, cost-effective alternative to do so was identified. This is the MN&S Spur North identified in March 21, 2014 TransSystems' SWLRT Engineering Evaluation of Freight Rail Relocation Alternatives Final Report, stating "... in our opinion, resolves many of the shortcomings of the other versions previously presented."

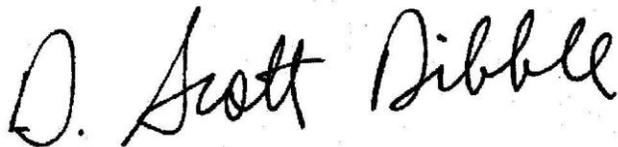
The FEIS should, at a minimum, heed the advice of that report for whichever alignment is chosen:
"Whether the freight rail is transfer red to the MN&S Spur north or remains on the modified Kenilworth Corridor, there are a number of safety improvements that should be included as a part of this overall project. They consist of, but not limited to: (1) Centralized Traffic Control (CTC) to expedite train movements and provide broken rail protection for the route, (2) electronic detection devices such as hotbox and broken wheel detection, and (3) equipment necessary to assure compliance with the yet to be finalized Positive Train Control (PTC) requirements."

We had mistakenly anticipated that the Council and FTA would seriously address rail safety concerns regarding colocation during the Supplemental Environmental Impact Statement process. The FEIS falls significantly short of addressing those concerns.

The FEIS should not be deemed adequate until issues related to freight rail safety as discussed above and in citizen and other public sector comments are addressed. If issues pertaining to rail safety cannot be adequately addressed, LRT should not be located in such close proximity to an active freight rail line.

Thank you for your consideration.

Sincerely,



D Scott Dibble
State Senator, Distrcit 61



Frank Hornstein
State Representative, District 61A

STUARTCO

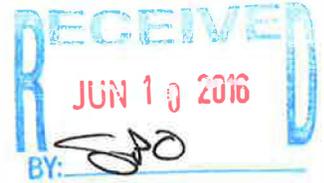
OUR HOME. OUR COMMITMENT.

h Street • Minneapolis, MN 55420-1000



Nani Jacobson
Assistant Director, Environment & Agreements
Metro Transit – SWLRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426

June 8, 2016



Nani Jacobson
Assistant Director, Environment & Agreements
Metro Transit – SWLRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426

VIA US MAIL AND E-MAIL

Re: FEIS: Comments of Stuart Companies Regarding SWLRT FEIS

Dear Ms. Jacobson:

Stuart Companies appreciates the opportunity to comment on the FEIS. We have previously expressed our concern that the earlier EIS studies failed to adequately consider and describe the impacts of the SWLRT project. Unfortunately, the recent FEIS fails to address, or addresses incompletely, numerous matters that may have a significant and adverse impact on the more than 1,000 residents of Greenfield Apartments, Deer Ridge and Raspberry Woods. We will refer to these dwellings collectively as the StuartCo Properties because they are all residential properties and are tied together as one community.

1. **Noise.** The investigation of noise on the StuartCo Properties done in the DEIS and the SDEIS was obviously inadequate and it appears that the FEIS recognized this obvious inadequacy. While recognizing the failure of the DEIS and SDEIS to seriously investigate the noise issues impacting StuartCo residents, it is also apparent that the FEIS has done nothing further to actually investigate those impacts. For example, as best as we can tell from the FEIS, there has been no on-site noise testing by the Council that we are aware of. If such testing has been done, we would like to see the full testing protocol, identification of times, test locations, raw data, conditions, and all results. We would also like to see any calculations and calculated adjustments used by the so-called “modeling” done in the FEIS’s consideration of noise impacts.

Additionally, it appears that in evaluating noise impacts the FEIS used standards other than those stated in the FTA Guidance Manual. Please identify other noise standards that were used in the FEIS noise analysis and provide copies of those standards.

Also, it appears that noise mitigation has been provided for the nearby Claremont property. Please explain why no mitigation is provided for the StuartCo Properties?

**Corporate
Headquarters**

1000 West 80th Street
Minneapolis, MN 55420
☎ (952) 948-9500
☎ (952) 948-9570

www.stuartco.com

With regard to the radius curve on the south part of the property, it is well-known that such curves produce piercing wheel squeal, a severe and adverse noise impact. This is of particular concern because this curve in the tracks is so close to the residences. We would like to see the full analysis of noise impacts considered on this curve, including an analysis showing at what speed wheel squeal can be fully avoided and at what speed wheel squeal appears. We are aware that on LRT installations elsewhere, wheel squeal has required construction of enclosures to protect nearby residential properties. What analysis has been done to determine the need for such structures here?

The projected speed for the LRT as it passes through the property is as much as 55 mph according to the FEIS. This is a significantly greater speed than indicated in the DEIS. What analysis has been done to analyze the noise and vibration impacts of a 55 mph train on elevated structures? This information needs to be provided so that impacts can be evaluated.

There will be significant noise generated by trains on the service tracks at the OMF. The service tracks appear to include numerous tight radius curves which are likely to produce wheel squeal. Please identify all residences within 1,000 feet of the OMF tracks (not measured from the center of the property but from the noise source) and the anticipated noise level from operations on these tracks.

The FEIS noise analysis for the OMF departs from the FTA Manual principle that noise is to be evaluated critically in favor of impacted residents. What is the basis for this departure?

2. **Environmental Releases and Project Impacts.** The FEIS does not identify potential impacts to the closed Hopkins landfill adjacent to the StuartCo Properties of pile driving, sheet driving, vibratory compaction and other heavy construction activities during construction and for continued maintenance and operation of the LRT. Please describe anticipated impacts, worst case impacts, containment plans, and identify who will be responsible for any environmental releases that may be caused by either (a) the construction of the LRT project; or (b) the operation of the LRT itself.

3. **Visual Aesthetics.**

a. **Destruction of Existing Woodlands and Wetlands.** Wetlands and woodlands are an important asset to the Property and its residents. Based on the 90% plans it appears that large area of woods, ponds and wetlands will be clear-cut, bulldozed and/or filled. These are important visual and aesthetic resources for residents of the StuartCo Properties. What will be done to repair this aesthetic loss? What wetland restoration is planned on the property? What woodlands restoration is planned?

b. **Restoration of Destroyed and Compacted Lands.** Use of heavy construction equipment and construction fills will likely make it impossible for any significant vegetative growth or planting following completion of the project. What will be done to restore the site to a condition that will support desirable vegetative growth? What soil restoration will be done?

4. **Light Impacts.**

a. **Direct Impacts from the Train.** How will residents be protected against the powerful headlight beams of elevated trains shining onto residential properties during twilight and evening hours? Or light from moving trains as a continuing nuisance to residents?

b. **Sunlight Reflecting Off the Glass.** How will residents be protected against intense morning sunlight reflecting off the glass surfaces of elevated trains? What plans have been made to address this problem?

5. **Public Safety.** The LRT bridges and supporting structures located within a residential development not exposed to public and police observation may be an attractive nuisance attracting graffiti artists, and children. What steps will be taken to ensure that the track and supporting structures are not misused or covered with graffiti? Who will be responsible for removal of graffiti and at whose cost? What parts of the track and structures will be fenced as they cross the StuartCo Properties for the protection of the public?

6. **Construction Impacts.** We could find no detailed description of how the track and its supporting elevated structures will be constructed. Please explain what construction methods will be used to build the project as it traverses the StuartCo Properties. What investigation has been done as to the damages that may result from the project's physical construction? Is pile-driving anticipated? To what depth? At what location and to what depth will vibratory piling equipment be used? Will de-watering be done either on the site or in the vicinity of the StuartCo Properties? If so, how will StuartCo structures be protected? Will there be winter construction? What will be the daily hours of construction? How will StuartCo structures be protected?

7. **Groundwater Plan.** Construction of the LRT route across the StuartCo Properties appears likely to interfere with ordinary groundwater flow and, if so, may cause flooding, erosion or other subsurface and drainage problems. What investigation has been done by the Met Council of this concern? Please provide information regarding your investigation, including when this was done and conclusions.

8. **Wildlife, Birds and Flora.** Natural wildlife is an important asset to the Property and its residents. What investigation has been done of damage to wildlife habitat and local flora? The wooded and wetland portions of the StuartCo Properties are habited by numerous species of birds and small animals. Have those been inventoried? What efforts will be made to restore this habitat?

9. **Park and Recreation Areas.** The Property has extensive park and recreation areas used by residents. These areas include interconnected trails, tennis courts, pools, ponds, and outdoor gathering places. What were the considerations in the FEIS relating to interference with use of these park and recreation areas? How has the FEIS addressed the interference with the trail system and walking paths?

10. **Fire Safety and Access.** Current plans identify the source of entrance onto the StuartCo Properties for project construction work as the fire safety entrance. Use of the fire safety entrance in any way that blocks full and immediate access to the StuartCo Properties is unacceptable to StuartCo. and will violate local public safety regulations. In addition, construction traffic is inconsistent with both pedestrian and local traffic. How does SWLRT

intend to access the property without interfering with pedestrians, local traffic and the fire safety entrance?

11. Trespass. The proposed construction boundaries will likely result in construction workers trespassing onto the StuartCo Properties outside of any easements shown by the Council in its 90% drawings. What will the Met Council do to ensure that all workers remaining within construction boundaries? Will the construction area be fenced? Will security be hired to protect the StuartCo Properties? What steps will be taken to ensure that construction workers do not park on the StuartCo Properties? What steps will be taken to ensure that commercial deliveries for the SWLRT project do not use StuartCo Properties?

12. 11th Avenue South. The comments in the FEIS indicate that some attention has now been paid to the 11th Avenue Route. When was this analysis done? What engineering studies were done of this route? What studies have been done on travel times for this alternative route? What studies have been done of ridership and usage for this alternate route? What studies have been done of the cost of the alternative route as the FEIS selected route? If these studies have been done, please identify the date of the studies, their conclusions, and where they are located so we can review them.

StuartCo respectfully requests detailed responses to each of these questions and comments.

StuartCo

By: 
Stuart H. Nolan
Founder and Chairman

By: 
Lisa Moe
President and Chief Executive Officer

28. WHEN DID THE COMMENT PERIOD FOR THE FINAL EIS START AND WHEN WILL IT END?

The Notice of Availability for the Final EIS was published in the *Federal Register* on May 13, 2016, and in the *EQB Monitor* on May 16, 2016. Under MEPA, the Notice of Availability provides for submittal of written comments on the adequacy of the Final EIS for a period of not less than ten (10) days. Comments on the adequacy of the Final EIS are being accepted through June 13, 2016. Comments on the adequacy of the Final EIS may be submitted through:

Mail: Nani Jacobson, Assistant Director, Environmental and Agreements
 Metro Transit – Southwest LRT Project Office
 6465 Wayzata Boulevard, Suite 500
 St. Louis Park, MN 55426

Email: swlrt@metrotransit.org

29. WHAT HAPPENS AFTER THE CLOSE OF THE FINAL EIS COMMENT PERIOD?

Following publication of the Final EIS and the written comment period, the FTA will prepare and issue the Project’s Record of Decision (ROD). The ROD will state FTA’s project decision, identify the alternatives considered and selected (including specification of the alternative or alternatives considered to be environmentally preferable), and itemize mitigation commitments. The ROD must be issued by FTA before federal funding and permits can be approved. All comments will be published on the project website (www.swlrt.org) and comments and issues will be responded to in the Project’s ROD. After publication of the Final EIS, the Council will also issue an Adequacy Determination for the Final EIS in accordance with Minnesota environmental rules (Minn Administrative Rules 4410.2800). The Council will notify all persons who received a copy of the Final EIS (see Appendix A of the Final EIS for the list of recipients) of its adequacy decision within five days of the decision, and public notice of the decision will be published in the *EQB Monitor*.



REDSTONE

T 952 404 3334
 F 952 905 3838
 C 612 860 2700
craig@redstonegrill.com

7636 Executive Drive
 Eden Prairie, MN 55344
 Redstone American Grill, Inc.
www.redstonegrill.com

Craig A. Oberlander

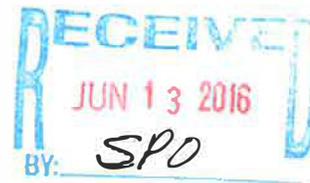


REDSTONE™

AMERICAN GRILL

June 13, 2016

Nani Jacobson
Assistant Director, Environmental and Agreements
Metro-Transit—Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55246



RE: Comments on the Southwest Transitway
Final Environmental Impact Statement (FEIS)

Dear Ms. Jacobson and other Interested Parties:

We write on behalf of Idlewild Properties, LLC and Redstone American Grill, Inc. (together “Redstone”) to comment on the Final Environmental Impact Statement (FEIS) for the SWLRT project.

Redstone owns and operates the Redstone restaurant located at 8000 Eden Road, Eden Prairie. Redstone has completed a review of the FEIS document and continues to believe that the impacts of the project will result in substantial adverse impacts on Redstone’s ability to operate the restaurant and adverse impacts to the value of the property. The impacts include, but are not limited to; the loss of parking, access restrictions, increased noise, visual impacts, safety concerns, vibration concerns to existing retaining walls and buildings plus the public enjoyment of surrounding natural amenities.

The FEIS responses to Redstone’s comments relating to the above listed impacts are generally vague and contradictory and do not provide sufficient information in addressing our concerns as noted in our SDEIS comments. Redstone requests that the project office and the project files record our continued concerns and that the project leaders will make the necessary corrections to alleviate the impacts to our site and surrounding area if the project is to proceed.

Redstone offers the following specific comments concerning the FEIS:

Chapter 2: Alternative Considered

Redstone will be severely impacted by the location of the proposed route and is disappointed that the selection committee recommended the line go across the Redstone property. This decision will likely cause the closure of Redstone along with the displacement of 8 other business for a station that is deferred to possibly 2040. The initial route along Technology Drive would not displace any businesses and provide larger tracts of land for redevelopment opportunities. We continue to recommend that an alternative route be considered.

The FEIS response states that the Town Center Station is still planned to be in place by 2040 and is considered an element of the project.



Chapter 3: Affected Environment, Impacts and Mitigation—Land Use

The FEIS response in this section states that evaluation of environmental impacts for the project **includes reasonably foreseeable future actions** in the evaluation of cumulative impacts for the Project. It continues to state that improvements to city roads and parks as we noted in our comments are generally not included because they are not included in an approved local budget, plan, or policy, and, therefore are outside of the project scope. The road and park that we noted are shown on the Project plans as future road and park. We believe that since they are listed on the project plan that they are a reasonably foreseeable future action of the project. If the FEIS states that the Town Center is a still a planned action then the road and park associated with that plan should be considered.

Parkland, Recreational Areas and Open Spaces

We continue to point out that the trail along Lake Idlewild is designated and planned as a public trail. The FEIS response notes that the city trail map shows the trail as a “general trail” but continues to note that the map does not identify it as public or private. We will point out that this designation is not pointed out on any of the trails within the city trail map. The response then points out the trail is on private property as a defining fact that it is not a trail. Again, we point out that many publically used trails are on private land.

The FEIS response further states that “It is not anticipated that the Project would have any noise or visual impacts to the trail around Lake Idlewild” and that there will be no change to connectivity to the trail. We continue to point out that one of the trail access points is from the eastern side of the Redstone parking lot. With the proposed SWLRT line eliminating access to the eastern parking lot from the sidewalk plus having a train pass every 5 minutes during the day we believe that connectivity will be changed. In addition, the train is proposed to be within 350 feet of the trail with direct views from the trail and limited noise barriers. The bells and whistles at the at-grade crossings will be clearly audible as the noise crosses over the lake and along the trail.

Roadway and Traffic

The FEIS notes that both of Redstone’s existing driveways will be closed and a new access at the far western side of the site will be provided. This new access will include flashing-lights signals, automatic gates, and traffic signal preemption because the trains will be traveling faster than 35 miles per hour when crossing the driveway. It continues to state “Given that the project will maintain driveway access to the property and the property’s main entrance will be at a signalized intersection with an acceptable LOS, the project’s traffic operations are not anticipated to create substantial adverse impacts on Redstone’s ability to operate its restaurant at the property.”

Our comments to the SDEIS clearly spell out the significant impact that the driveway closings will create on the Redstone site, its operations and the safety of the patrons. The use of LOS data for roadway intersections is not applicable to a restaurant driveway. We noted in our comments the traffic impacts and



delays being experienced on the Green Line (Central Corridor) and that more specific analysis needed to be provided to Redstone to fully understand the impacts on our customers.

Parking

Our SDEIS comments were specific on the impact the project will have on Redstone parking. At that time the SDEIS noted the loss of 36 stalls leaving 143 stalls. We commented that more than 36 stalls will be lost due to the need to redesign the parking lot due to the taking, truck maneuvering and the relocation of the driveway while meeting city code requirements. Our preliminary analysis shows that the parking loss will be closer to 80 stalls. The loss of a single stall is significant to the restaurant as it often has limited parking due to its success.

The FEIS response now states that there will only be 10 stalls lost and those lost spaces can be recouped by the 38 new on-street parking that will be created. However, the FEIS does not provide a map or drawing on the specific calculations for this site. An engineered grading plan must be provided to demonstrate how the project will not impact parking. In addition, the on-street parking proposed to recoup the lost parking stalls provides little value to the restaurant. The on-street parking is separated from the restaurant by the LRT tracks and by trains traveling at 35 miles per hour. The only pedestrian access will be the new driveway located at the far western side of the site with a gated crossing. The inconvenience and safety issues related to this plan are unacceptable.

Noise

High noise levels are a very important concern with Redstone as its business operations depend on a relaxing, enjoyable atmosphere for patrons dining in the restaurant and for those using the outdoor patio. With trains traveling over 35 mph every 5 minutes throughout the day only a few feet from the building plus bells and horns at the Flying Cloud crossing and possibly at the Redstone driveway crossing, the noise impact will be substantial.

The FEIS does not appropriately address the noise impact on this site. All the information provided is in generalities and non-conclusive to fully understand the impact to Redstone. Because of the noise created at the at-grade crossings, especially the noise crossing over lake Idlewild, and the removal of trees along Eden Road, a noise analysis must be conducted for this site and for the public using the trail and the lake.

Visual Quality and Aesthetics

We appreciate that the FEIS did recognize that the visual quality in this area is “Moderate” and not “Low” as identified in the SDEIS. This change is in reflection that the boulevard trees will be removed in front of Redstone and Lake Idlewild and replacement trees cannot be put back due to the close proximity of the train track to the parking lot. The boulevard trees will be replaced with LRT tracks, fencing and catenaries. The FEIS properly identifies this impact when it states the “intactness will be reduced by removing trees and by building the **visually intrusive tracks and OCS**, and by revealing the shopping center structures that are now hidden”. It continues to state that because of the amenities in this area there are a substantial number of pedestrians and because of their presence the visual sensitivity of the viewers



in this area is “high”. The Project needs to maintain the present views to protect the amenities already existing.

We disagree with the FEIS statement that visual unity will remain the same because the lineal features of the project will lead the viewer’s eye toward the water tower, which is the focal point of the view. The view of the water tower is only from the people traveling west on Eden Road. The predominate view of the pedestrian, as noted above, is with the amenities in this area including the trees and Lake Idlewild

Safety and Security

The FEIS notes that safety has been addressed by removing Redstone’s eastern drive access and putting gates at the proposed access at the far western side of the site. These safety features do not support Redstone’s patrons as they will have limited access to the site at only one point, creating a dangerous queuing situation. Patrons walking to the site must now walk all the way to the west driveway to enter the site and restaurant and vehicles will back up along onto Eden Road to the south and east plus backing up into the parking lot due to long waits at the gated access. We fear that these features will create even a greater safety issue than the previous plan that provided two accesses and a midpoint sidewalk connection. The Proposed SWLRT alignment simply creates too many conflict points between trains, vehicles and pedestrians in a very small and uncontrolled area.

Vibration Impact to Existing Retaining Walls and Building

The Redstone site contains retaining walls with significant height along the north side of the parking lot adjacent the city trail. As we become more fully aware of vibration impacts to walls due to trains consistently traveling along the same rails over many years, Redstone believes the operation of the LRT will have a substantial impact to the retaining walls on site and the building. We request that the Project includes a stability test of the retaining walls and building prior the construction of the LRT, if it is approved.

Summary

As noted above, and as we pointed out in our SDEIS comments dated July 21, 2015, the SWLRT project as currently designed will result in substantial adverse impacts on Redstone’s ability to operate its restaurant. These substantial adverse impacts include, but are not limited to, the loss of parking, access restrictions, increased noise, visual impacts, safety concerns, vibrations and the creation of obstacles to the public enjoyment of existing natural amenities (e.g, Lake Idlewild) in the immediate vicinity of the Redstone property.

Moreover, the FEIS is so vague, general and conclusory in nature that it cannot form the basis for reasoned analysis of the true environmental, social and economic effects of the SWLRT. Here, the effect of the SWLRT on the “human environment” surrounding the Redstone property will simply be disastrous. It will irreparably disrupt the natural and physical environment in which the Redstone property is currently situated by creating hazards and inconveniences for



REDSTONE™

AMERICAN GRILL

people attempting to enter that environment in order to dine at Redstone. Finally, it will cause substantial economic hardships for Redstone and similarly situated businesses located along the proposed SWLRT route recommended by the FEIS.

We respectfully request that the Project Office take the necessary actions to adequately address the concerns that we have stated. We look forward to working with you on addressing our concerns and finding solutions that benefit the SWLRT project, the City of Eden Prairie, Redstone and the public.

Very Truly Yours,



Craig A. Oberlander
Chief Manager
Idlewild Properties, LLC



Michael O'Leary
Chief Operating Officer
Redstone American Grill, Inc.

Enclosure

c: Bruce D. Malkerson, Esq., Attorney for Redstone
Tom Goodrum and Vern Swing, Westwood Professional Services, Engineering and
Planning Consultants for Redstone



REDSTONE™

AMERICAN GRILL

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

RE: Comments on the Southwest Transitway
Supplemental Draft Environmental Impact Statement (SDEIS)

Dear Ms. Jacobson and other Interested Parties:

We write on behalf of Idlewild Properties, LLC and Redstone American Grill, Inc. (together, “Redstone”)¹ to comment on the Supplemental Draft Environmental Impact Statement (“SDEIS”) for the SWLRT project.

Redstone owns and operates the Redstone restaurant located at 8000 Eden Road, Eden Prairie. This property is located in the Eden Prairie Segment of the SDEIS and has been identified as a property that will be partially taken for the SWLRT project. Redstone has completed a review of the SDEIS document, and it opposes the recommendation stated in the SDEIS to move the location of the SWLRT rail line to Eden Road. The proposed location recommended by the SDEIS will result in substantial adverse impacts on Redstone’s ability to operate its restaurant. These substantial adverse impacts include, but are not limited to, the loss of parking, access restrictions, increased noise, visual impacts, safety concerns, and the creation of obstacles to the public enjoyment of existing natural amenities (e.g, Lake Idlewild) in the immediate vicinity of the Redstone property.

Redstone offers the following specific comments concerning the SDEIS:

Chapter 2: ALTERNATIVE CONSIDERED:

All of the rail alignments recommended in the DEIS showed the SWLRT line located along Technology Drive. This reasonably demonstrates that the route best suited for the SWLRT is along Technology Drive. We understand the SDEIS was authorized with the intent of reviewing this alignment based on requests by the City of Eden Prairie and certain businesses impacted by the proposed Technology Drive route. However, Technology Drive is the best alignment for the efficient operation of SWLRT as originally concluded.

¹ Idlewild Properties, LLC owns the real property located at 8000 Eden Road, Eden Prairie. Redstone American Grill, Inc. leases that real property and operates the Redstone American Grill restaurant located at the site.



Section 2.3.1 of the SDEIS states that the City of Eden Prairie asked the Metropolitan Council to investigate the feasibility of a more centrally located and walkable Eden Prairie Town Center Station that would provide better opportunities for transit-oriented development and redevelopment. The City prefers a station within walking distance of the Eden Prairie Center (a regional shopping mall) which the City believes will promote its long term economic development goals and provide higher ridership due to the station's proximity to existing and future commercial activity centers. These points are driven solely by the expected economic benefit to the City, not by any improvement in the operation of the SWLRT. As identified throughout this review, moving the route from Technology Drive to Eden Road:

- impacts more businesses
- impacts more roads and intersections
- requires the construction of a new road
- requires crossing more intersections
- creates more safety risks
- does not achieve the walkability to the mall that the city desired (1/4 mile to a mall entrance)

The proposed Town Center Station does not correspond to the three proposed station locations (described in the document attached hereto as Exhibit A), that the City had considered during the DEIS process. The closest recommended station location is near the intersection of Eden Road and Singletree Lane. (See attached maps and city location criteria) The desire to have the station more centrally located within the City's Town Center District is referenced in three city documents:

- Comprehensive Guide Plan, Future Land Use Plan (2009)
- Eden Prairie Town Center Design Guidelines (2007)
- Eden Prairie Major Center Area Study (2006)

Through the 4-step evaluation process conducted for the SDEIS selection of alternative alignments, there are two alignments along Singletree Lane compared to a single alignment along Eden Road. The final step of the evaluation identified two finalist routes for this section of the line:

- Option 1 is the proposed route (comprehensive plan)
- Option 3 is the Singletree Lane route

Both routes are very comparable in their listed advantages to the LRT system. However, it is noted the Singletree Lane route (Option 3) received a Very Good rating for walkability to the Eden Prairie Mall while Option 1 only received a Good (Table F.3.7 from Appendix F). This noted because it reflects a key criteria from the City of Eden Prairie in its request to move the line away from the DEIS recommended route along Technology Drive.

In light of the new announcement that the SWLRT alignment is being amended due to budget constraints and that the Town Center Station is being deferred for cost savings, we demand a new review of the SDEIS alignment be conducted to re-evaluate if the Technology Drive or the Singletree Lane alignment and the proposed Town Center Station are better suited elsewhere to stay on budget for the project.

Chapter 3: AFFECTED ENVIRONMENT, IMPACTS and MITIGATION

Section 3.1.2.1 (Land Use) of the SDEIS states that there is no significant change in land use from the DEIS alignment and the SDEIS alignment. The SDEIS review evaluates which alignment can support higher density or mixed use development. There are no specific federal regulations guiding land use, so the SDEIS relies on local zoning and comprehensive plans to guide their assessments.

There is a significant difference in existing land uses between the Technology Drive alignment and the City's Comprehensive Plan alignment. Although the guiding and zoning of the lands are similar, the actual existing land uses and impacted properties are significantly different. The proposed alignment will impact at least six more businesses than would be impacted on the Technology Drive route. Moreover, the large vacant land areas and under-used land within the larger developed lots along Technology Drive can support future redevelopment better than the smaller parcels along Eden Road. For these reasons as well as the additional reasons identified above, we demand that the Project Office re-evaluate the potential redevelopment of this area in relation to a Town Center Station that will be built (if at all) several years in the future. During that time, the City can plan and construct improvements that will make a station along Technology Drive a viable destination for people to live, work, and play. A road connecting Singletree Lane to Technology Drive and a Town Center Park on the existing Emerson property are currently being considered. These planned projects can be catalysts in supporting a station on Technology Drive.

Section 3.1.2.4 (Parklands, Recreation Areas, and Open Spaces) of the SDEIS notes that land within 350 feet of the proposed SWLRT rail line was considered for potential impacts and that no parks, recreational areas or open spaces exist along this segment of the SWLRT line. The SDEIS therefore concludes that there are no long-term impacts. The SDEIS is simply incorrect on this point, and a new evaluation must therefore be undertaken. The new evaluation must include Lake Idlewild, which is well within the 350 feet limit identified in the SDEIS and, in fact, is only 150 feet from the proposed SWLRT rail line at the east side of the Redstone property. The SDEIS evaluation failed to consider any impacts at all, either, direct, indirect, long-term or short-term to Lake Idlewild. The City of Eden Prairie's 2013 trail map shows the trail around Lake Idlewild as a public trail, and the City's 2007 Comprehensive Plan identifies a future Town Center Park on the vacant land eastern edge of the land owned by Emerson Process Management Educational Services adjacent to Lake Idlewild. These impacts should and must be

considered. It is obvious the noise and scenic disruption caused by the SWLRT will have a long-term impact on these existing and future recreational areas.

We demand that this existing trail and future park be incorporated into the SDEIS document and be given the same consideration provided to Purgatory Park by the SDEIS. In section 3.2.1.4 of the SDEIS, there is a great amount of detail concerning how the SWLRT line will impact Purgatory Park. The SDEIS lists several ways Purgatory Park would be indirectly impacted by the SWLRT including impacts to access into the park, amenities that would require relocation to avoid the rail line, and the visual intrusions that would be experienced by park users as a result of the proposed rail structures. These changes in the Purgatory Par setting would disrupt a visitor's visual experience, resulting in a moderately-low to low impact upon views into and from the park. A solution to avoiding the existing trail and the future park will be to move the proposed rail line to the other finalist alignment along Singletree Lane (Option 3).

Chapter 3.2 EDEN PRAIRIE SEGMENT

This section provides a summary of the potential environmental impacts within the area between Mitchell Road and Flying Cloud Drive, which includes the Redstone property. Our comments relating to this section will be focused on the direct impacts that the recommended SWLRT line would have on Redstone and on its ability to successfully operate the existing restaurant business at the property. In our review of the SDEIS, it is clearly evident that the recommended SWLRT line route would result in substantial adverse impacts on Redstone's ability to operate its restaurant at the property.

Subsection 3.2.4.2 (Roadway and Traffic) of the SDEIS notes that the SDEIS was analyzed using a preemption strategy for LRT traffic signals, as opposed to the Traffic Signal Priority (TSP) operation that was used for the traffic study in the DEIS. In theory, the preemption strategy would represent the worst-case scenario for vehicular traffic. However, this strategy does not analyze the possibility of increased delays caused by the arrival of trains at the very end of the green cycle for the main line movement, the extension of the green light to service the train, and the transition back into that main line green before transitioning to service the minor driveway approaches. In other words, the analysis employed by the SDEIS does not accurately model the traffic signal delays caused by SWLRT that may be experienced by vehicle traffic seeking to enter or depart from the Redstone property. Delays of this sort occur frequently on the Green Line (Central Corridor Light Rail). Given the operational history of LRT in the Twin Cities Metro area, there is a significant potential for Redstone customers to have to wait up to three traffic signal cycles before being given the right-of-way. The analysis conducted for the SDEIS failed to address this situation and how it will impact the minor approaches at signalized intersections.

The intersections of Eden Rd/Eden Rd and Glen Rd/Eden Rd are not expected to meet vehicular signal warrants without the presence of the LRT. The traffic impact study states that driveways were included in the analysis. However, there is no evidence to support this claim. This

information must be provided to allow businesses to evaluate SWLRT impacts. Based on observations of the Green Line (Central Corridor), which also operates with TSP, phases are skipped and excessive delays on the side streets are experienced. Significant delays are not conducive to long term customer relations for a business. Redstone must be presented with the analysis showing the change in delay values from the No Build to the Build scenario to determine true impacts to customers entering and exiting the restaurant.

The traffic impact analysis presented in the SDEIS fails to accurately reflect traffic operations consistent with other LRT lines operating with TSP. It was also not included in the air quality section. With increased delays present on the minor approaches, there will be an increase in emissions along the corridor. This must be addressed.

Subsection 3.2.4.3 (Parking) of the SDEIS includes a chart that shows the Redstone property currently having 179 parking stalls. As a result of the SWLRT project as currently proposed, Redstone will lose 36 stalls due to the acquisition of part of the Redstone property, leaving only 143 stalls remaining. This loss of parking raises several issues that are inadequately addressed in the SDEIS.

We disagree with the number of lost parking stalls predicted by the SDEIS at the Redstone property and believe that the actual number of lost parking stalls will be much higher. The Redstone parking lot will need to be reconfigured as a result of the SWLRT project to provide adequate maneuvering space for delivery vehicles and to accommodate the relocation of the western parking lot access. This reconfiguration will eliminate several additional stalls currently unaccounted for by the SDEIS. Reconfiguring the parking lot will require City of Eden Prairie site plan approvals. The reconfigured parking lot must satisfy City setback requirements and may require variances from the City's zoning ordinance.

The loss of any parking stall is critical to the Redstone property. The Redstone parking lot is continuously full, and Redstone's patrons currently struggle to find parking spots. Redstone employees even now must park off-site to free spaces for Redstone customers. The loss of even a few parking stalls would be detrimental to Redstone's business operations. Based on our review, Redstone will have only 97 parking stalls remaining after construction of the SWLRT project, note the 143 parking stalls identified in the SDEIS. Redstone cannot accept additional stalls that are off the current Redstone property, especially to the east, as this would create too great of a distance for Redstone customers to walk to the restaurant's front door.

We believe that the acquisition of additional parking stalls along the southern edge of the Redstone parking lot adjacent to Eden Road and the proposed rail line will be necessary in order to construct the SWLRT. The engineered plans fail to show grading limits or cross sections to adequately account for grading impacts to our site. This must be addressed in the SDEIS.

Review of the engineered plans show there is only one to two feet between the parking stalls and the side of a train. This does not take into consideration vehicle overhang from the curb stop.

Furthermore, the SDEIS ignores the safety of Redstone's patrons parking and exiting their vehicles so close to the passing LRT. The safety of those patrons, especially those with small children and those visiting Redstone at night, is of great concern to Redstone. Redstone notes that, for approximately six months of every year, the majority of Redstone's patrons visit the restaurant after sunset. Redstone also notes that approximately 130 of its employees park off-site and therefore will be required to cross the SWLRT tracks when walking to and from their vehicles each workday. Current plans for the SWLRT do not provide for any sort of physical barrier between the Redstone parking lot and SWLRT rail line. These conditions are simply not safe, and they are not adequately addressed by the SDEIS.

Redstone's driveways will also be drastically impacted by SWLRT trains creating unsafe conditions at the access into and out of the Redstone property. The traffic impact study did not include any discussion regarding how the driveways at the Redstone property would be controlled in coordination with the associated train crossings. Will gate arms be provided for the driveways? Will the trains have the right of way through Redstone's driveways? What will be the speed of the LRT through the Redstone property? Redstone has concerns about the answers to these questions based on the frequency with which vehicles stop at rail crossings within the Twin Cities Metro area on or beyond the painted stop bar at those crossing combined with the proposed volume of LRT crossings expected across the driveways at the Redstone property. We have significant concerns regarding the safety of Redstone patrons entering and leaving the Redstone property. According to the traffic impact studies prepared for the SDEIS, there is an expectation of 10 minutes headway between train vehicles in the p.m. peak hour, consistent with the Blue Line and Green Line operations. "A 10 minute headway corresponds to 12 trains in the peak hour (six in each direction) which equates to one train approximately every five minutes." Redstone customers would be subject to delays, close encounters with the trains, and confusion maneuvering between the tracks and Eden Road, especially in the later hours. This will create a sense of fear and will cause potential customers to avoid the Redstone site, which will have significant negative impacts to the operation of Redstone's business operations.

Subsection 3.2.2.3 of the SDEIS notes that permanent noise impacts would not affect the area around Redstone. It does state that there is a moderate noise impact at one hotel, and moderate or severe noise impact at other nearby hotels. There were four sites where noise monitoring was conducted. The two monitoring sites closest to Redstone were N4 and N25, as identified on table 3.2-8 and Appendix H. Site N4 was conducted at the Lincoln Park Apartments in July-August of 2013 as part of SDEIS, and site N25 was conducted at the Homestead Hotel across from Lake Idlewild in 2010 as part of DEIS. Site N4 measured for 24 hours near the water tower and is representative of the ambient noise conditions at the Lincoln Park and Water Tower apartments plus Singletree Lane. According to Table 3.2-9 of the SDEIS, the Summary of Noise Impacts for Residential Lane Use is as follows:

Excerpt from SDEIS Table 3.2-9
 Summary of Noise Impacts for Residential Lane Use – Eden Prairie Segment

Location	Distance from near LRT Track Centerline (ft)	Existing Noise Level (dBA)	Project Noise Level, LRT (dBA)
Lincoln Park Apartments	138	62	57
Water Tower Apartments	113	62	58
Residence Inn	44	61	65

Noise levels at 59 dBA are considered moderate, and noise levels over 64 are considered severe. With projected noise levels at 58 dBA, one level below a moderate level impact, further studies are needed to fully understand the noise impact in this area. How are the projected noise levels shown to be lower than the existing noise levels? The last few pages of Appendix H are a SWLRT Noise Fact Sheet which includes a table of Typical Maximum Noise Levels. According to this table, an LRT vehicle traveling at 45 mph at a distance of 50 ft from the noise source generates noise volumes in the range of 71-76 dBA. The noise analysis reported in the SDEIS does not have results consistent with the associated fact sheet and must be accurately addressed.

Furthermore, the noise impacts become more concerning with the numerous bells and horns that are emitted at intersections and stations are included. The SDEIS does not consider these impacts. Appendix H lists the dBA levels for the bells and horns used along train corridors (see below). The train speed will be at 45 mph when crossing the at-grade intersection at Flying Cloud Drive, and the use of LRT horns are therefore necessary. Bells are expected to be used at the Redstone driveway crossings if gates are provided, and will be used at the Town Center Station 750 feet away.

- LRT bells are sounded for 5 seconds as Light Rail Vehicles approach at-grade crossings
- Grade crossing bells will ring for 20 seconds for each train
- LRT horns would be sounded at an at-grade intersection when traveling 45 mph
- Bells would be sounded twice when entering/exiting a station
- Crossing bells have a sound exposure level of 106 dBA
- LRT bells have a sound exposure level of 88 dBA
- LRT horn have a sound exposure level of 99 dBA

The SDEIS states that LRT vehicles speeds are expected to range between 20 to 55 mph. The SDEIS fails to study the noise associated with an LRT vehicle braking as it approaches a station. The volume of noise from a braking train will be higher than the train noise itself, thus increasing the noise of an LRT vehicle approaching a station and at the Redstone property significantly more than what is described in this section of the SDEIS.

The SDEIS further fails to address noises associated with accessible pedestrian signals that will be installed at the proposed traffic signals near Redstone. While we recognize and support the need for such devices, they produce noise, are subject to noise pollution, are loud, and emit constant beeps and tones which will also have an impact on the dining experience at Redstone.

High noise levels are a very important concern with Redstone, as its business operations depend on a relaxing, enjoyable atmosphere for patrons dining in the restaurant and especially for those using Redstone's outdoor patio. With noise from the trains directly in front of the restaurant plus noise carried across Lake Idlewild from other areas of the SWLRT line, intense focus on the study of noise at Redstone is necessary to protect Redstone's business. The SDEIS only analyzed noise impacts associated with a residential area and did not take into consideration other types of uses, such as restaurants with outdoor patios. There are many such businesses in the area with outdoor facilities in addition to Redstone, such as Champps and Old Chicago. Redstone will lose the ambiance that its customers have come to know and expect with the relative quiet that is provided in Redstone's existing setting adjacent to a nature park, lake, and suburban environment.

Subsection 3.2.1.5 (Visual Quality and Aesthetics) of the SDEIS notes that viewpoint 9 was taken at the eastern end of the Redstone property looking west along Eden Road. That view shows the line of boulevard trees along the parking lot edge of Redstone. Due to the boulevard trees, the existing view score was Moderately Low while the anticipated change in visual quality and aesthetics scored Low due to the loss of those trees. In accordance with the SDEIS findings, the SWLRT project may reduce visual unity of the view unless design and landscape measures are taken. The visual quality of the view will be reduced because of the removal of vegetation and the introduction of the SWLRT tracks, which will reduce the visual intactness and visual unity for this view. The overall level of change in the visual quality of this view is Moderate, not Low as inaccurately stated in the SDEIS.

In review of the engineered plans there will not be enough space to plant trees between Redstone and the tracks nor along the sidewalk. The existing views from Redstone will be altered from trees to a LRT train and tracks with no space for screening. The removal of trees along the boulevard and the inability to screen the trains from our patrons and the public is a substantial negative impact to our business. We are a fine-dining establishment that promotes ambiance and a natural aesthetics atmosphere for our patrons.

Another objection to the SDEIS review of the visual quality and aesthetics near Redstone is the absence of any consideration of the view looking over Lake Idlewild and the trees that surround it. Lake Idlewild provides an aesthetic backdrop for the businesses in this area and is clearly

visible to the public driving on Eden Road or walking among the surrounding shops. We demand that further analysis be conducted on the view-sheds near Redstone so that the analysis includes views to the north across Lake Idlewild.

Subsection 3.2.4.5 (Safety and Security) of the SDEIS reviews the long-term direct and indirect safety and security impacts. Redstone is outraged by the newly introduced potential for violent train-vehicle or train-pedestrian conflicts that will be present at the at-grade crossing of roadways or driveways at and around the Redstone property. The SWLRT trains will be crossing not only Redstone's two driveways but also the intersection of Glen Road and Eden Road. There will be numerous Redstone patrons trying to get into and out of the Redstone property by vehicle or on foot. With SWLRT trains crossing in front of the Redstone property with unknown measures for public safety, Redstone may face potential liability arising from accidents caused by the SWLRT crossings near its property. The proposed SWLRT alignment simply creates too many conflict points between trains, vehicles and pedestrians in a very small and uncontrolled area.

The SDEIS identifies a sidewalk section for pedestrians that would require pedestrians to traverse a parking lot and use a sidewalk currently associated with another business (Brunswick Zone Bowl). This is unacceptable to Redstone. Easements are required to use a private walk for public use and liability will perpetually be an issue. Moreover, requiring pedestrians to walk through the middle of an existing parking lot creates considerable safety concerns. A safer alternative is to provide sidewalks along public roads. If the Town Center Station were located east of the intersection with Eden Road, then a sidewalk could be provided adjacent to Eden Road south to Singletree Lane. The SWLRT's blatant disinterest in the safety of its riders and Redstone's patrons requires correction and further study.

Summary

As noted above, the SWLRT project as currently designed will result in substantial adverse impacts on Redstone's ability to operate its restaurant. These substantial adverse impacts include, but are not limited to, the loss of parking, access restrictions, increased noise, visual impacts, safety concerns, and the creation of obstacles to the public enjoyment of existing natural amenities (e.g, Lake Idlewild) in the immediate vicinity of the Redstone property.

"The adequacy of an environmental impact statement is subject to challenge on both procedural and substantive grounds." *Minnesota Public Interest Research Group v. Adams*, 482 F. Supp. 170 (D. Minn. 1979). An environmental impact statement is substantively inadequate when an agency's "actual balance of costs and benefits" is arbitrary and when the agency gives "insufficient weight to environmental values." *Minnesota Public Interest Research Group v. Butz*, 541 F.2d 1292, 1300 (8th Cir. 1976). An EIS is likewise inadequate if it does not contain sufficient information to permit a reasoned choice of alternatives. *Id.* Moreover, an EIS "must not be so vague, general and conclusory that it cannot form the basis for reasonable evaluation and criticism." *Id.*

The SDEIS prepared for the SWLRT here is both substantively and procedurally inadequate. The costs and benefits set forth in the SDEIS are arbitrary and give insufficient weight to the environmental values that underlay NEPA and MEPA. Moreover, the SDEIS is so vague, general and conclusory in nature that it cannot form the basis for reasoned analysis of the true environmental, social and economic effects of the SWLRT

As such, the SDEIS prepared for the SWLRT here fails to fulfill the fundamental purposes of the National Environmental Policy Act, 42 U.S.C. 4432, et seq. or the Minnesota Environmental Policy Act, Minn. Stat. § 116D.01, et seq. “[T]he overall purpose of NEPA is to establish ‘a broad national commitment to protecting and promoting environmental quality.’” *Sierra Club v. United States Army Corp of Engineers*, 446 F.3d 808, 1126 (8th Cir. 2006), quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989). An EIS prepared pursuant to NEPA and MEPA must consider the “social and economic effects of [a] proposed agency action must ... once it is determined that the proposed agency action significant affects the physical environment.” *Id.* NEPA and MEPA require government agencies to evaluate environmental impact of a proposed government action and possible alternatives to that action before the agency takes any action that will “significantly affect the quality of the human environment.” *Id.* Notably, the term “human environment” must be interpreted “comprehensively to include the natural and physical environment and the relationship of people with that environment.” *Id.*

Here, the effect of the SWLRT on the “human environment” surrounding the Redstone property will simply be disastrous. It will irreparably disrupt the natural and physical environment in which the Redstone property is currently situated. Moreover, it will create hazards and inconveniences for people attempting to enter that environment in order to dine at Redstone. Finally, it will cause substantial economic hardships for Redstone and similarly situated businesses located along the proposed SWLRT route recommended by the SDEIS.

Redstone recognizes that there have been many changes to the SWLRT project since the release of the SDEIS. The Metropolitan Council has recently supported the elimination of the Mitchell Station and the deferment of the Town Center Station along with many other cost saving adjustments. To support cost reductions and a more efficient LRT operation, Redstone encourages the Project Office to act upon its request to re-examine the many issues raised in this letter and consider if past options or new options can provide a better alignment for the SWLRT. The Eden Prairie Segment carries numerous costs and environmental impacts that must be investigated further. The widening and extension of Eden Road is just one example. A second is the ability to avoid the wetland south of Costco if the line is realigned. As noted earlier, the Technology Drive and Singletree Lane alignments were considered viable options and deserve to be reconsidered now. We ask that the Metropolitan Council do so.

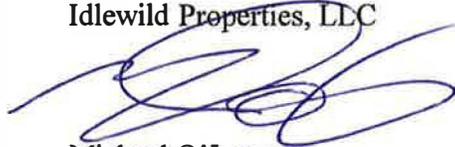
We look forward to working with you on addressing our concerns and finding solutions that benefit the SWLRT project, the City of Eden Prairie, Redstone and the public.

Very Truly Yours,

SWLRT SDEIS Comments
Idlewild Properties, LLC/Redstone American Grill, Inc.
July 21, 2015
Page 11



Craig A. Oberlander
Chief Manager
Idlewild Properties, LLC



Michael O'Leary
Chief Operating Officer
Redstone American Grill, Inc.

Enclosure

c: Bruce D. Malkerson, Esq., Attorney for Redstone
Tom Goodrum and Vern Swing, Westwood Professional Services, Engineering and
Planning Consultants for Redstone

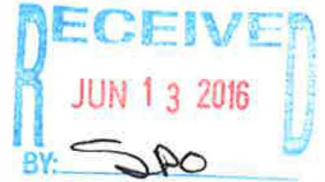
RECEIVED
JUN 13 2016
BY: SAO



FELHABER LARSON 220 South Sixth Street | Suite 2200
Attorneys at Law Minneapolis, MN 55402-4504

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit - Southwest LRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, Minnesota 55426

Christopher S. Hayhoe
612-373-8575
Fax: 612-338-4608
chayhoe@felhaber.com



June 13, 2016

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit - Southwest LRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, Minnesota 55426

**RE: Final EIS -- Southwest Light Rail Transit Impact on Calhoun-Isles Condominium
Our File No. 25274.004**

Dear Ms. Jacobson:

We represent Calhoun-Isles Condominium Association (the "Association"), which consists of 143 residential units and a large, multiple-story parking structure. The Association's residential and parking structures are located immediately adjacent to the easterly right-of-way for the Kenilworth Corridor. The current plan for the construction of the Southwest Light Rail Transit Line provides for the construction of a shallow tunnel which will be located literally within two feet of the exterior walls of the Association's high-rise structure, as close as six inches to the foundation for the Association's parking ramp and within 43 feet of a row of single-family townhomes. We are greatly concerned about the failure of the final EIS to address accurately the likely impacts of the construction of the line in the shallow tunnel upon the Association's buildings and the homes of our residents, and submit that the analysis is faulty and fails to account for necessary mitigation. In short, the final EIS is inadequate and should not be approved.

We cannot afford, as a residential community, to wait for the Metropolitan Council to develop a "Construction Plan" and a "Mitigation Plan" to protect our properties against damage. Please recognize that the current plan provides for trains to run through the shallow tunnel on rails located approximately 12 feet from the footings of the residential high rise and parking ramp, and some 15.5 feet from their exterior walls. Vibration and noise will certainly affect the habitability of these homes in material ways. The final EIS provides no assurance whatever that operation of 225 trains per day in a shallow tunnel only 12 feet from the foundations of the Condominium's residences and parking structure will not materially undermine their integrity and safety. The final EIS does not provide any mitigation plans and, in fact, misstates material facts that relate to the impact of the Project on Calhoun-Isles.

220 South Sixth Street
Suite 2200
Minneapolis, MN 55402-4504

Phone: 612.339.6321
Fax: 612.338.0535

Ms. Nani Jacobson
June 13, 2016
Page 2

The Association lacks the expertise to review and understand the final EIS as it relates to the Calhoun-Isles properties. As a result, the Association found it necessary to engage Itasca Consulting Group, Inc., a geotechnical consulting firm well-versed in vibration, noise and geotechnical design issues. Enclosed with this letter is Itasca's Executive Summary of its expert analysis of the final EIS, together with Itasca's supporting Technical Memorandum which identifies significant deficiencies in the final EIS as it relates to Calhoun-Isles.

We believe that the Metropolitan Council should reimburse us for the cost of obtaining Itasca's expert advice on the inadequacy of the final EIS. This request for reimbursement is for the sum of \$10,000.00. We also respectfully request that the final EIS be determined to be inadequate unless and until it properly protects Calhoun-Isles.

Yours very truly,


Christopher S. Hayhoe

June 13, 2016

Board of Directors
Calhoun Isles Condominium Association
3151 Dean Court
Minneapolis, MN 55416

Dear Board of Directors:

The Calhoun Isles Condominium Association (CICA) retained Itasca Consulting Group (Itasca) to assess possible impacts of the Southwest Light Rail Transit (LRT) project on CICA residents, structures, and property. The assessment is based on the project's Final Environmental Impact Statement (EIS)¹, and our findings are presented in the attached Technical Memorandum. Throughout this letter and the memorandum, the acronym "CICA" is used to represent the CICA residents, structures, and property. The terms high rise and condominium are used interchangeably throughout the document to represent the converted grain silo structures.

The potential for impacts on CICA are based on several factors:

1. Proximity—The CICA high rise and parking ramp are immediately adjacent to and less than two feet from proposed construction activity, which includes the installation of a sheet pile wall and construction of a cut and cover tunnel. CICA townhouses are within approximately 43 feet of the proposed construction activity.
2. Susceptibility—Pile driving for a residential development approximately 150 ft southeast of CICA was a nuisance to residents and caused damage. Since the distance is beyond the limits commonly thought to produce pile driving damage, the CICA high rise appears to be susceptible to vibration impacts.

We have identified the following potential impacts to CICA: 1) vibration impacts during construction; 2) vibration impacts during LRT operations; 3) noise impacts during construction; 4) noise impacts during LRT operations; 5) adequacy of the geotechnical site investigation and the potential for settlement; and 6) sheet pile wall constructability.

Our findings are summarized below.

¹<http://metro council.org/Transportation/Projects/Current-Projects/Southwest-LRT/Environmental/Final-EIS.aspx?source=child>

1. **Construction Vibration Impacts:** Under FTA guidance, the construction vibration damage criteria listed in Table 2.2-4 of Appendix K of the Final EIS should be used during the environmental impact assessment to identify problem locations that must be addressed during final design. Construction vibrations will impact the CICA structures and residents. The Final EIS does not identify the susceptibility category of the CICA structures and does not consider the evidence that the CICA high rise is susceptible to vibration impacts. The CICA high rise should be identified as a Building Category IV structure based on recent experience with damage induced by construction vibration. Due to the high potential for vibration impacts during both construction and operation, a detailed vibration susceptibility analysis of all CICA structures is necessary.
2. **LRT Operational Vibration Impacts:** The FTA guidance manual states that: *“For operation in subway, the ground-borne vibration is usually a significant environmental impact.”* A review of the force mobility input, line source transfer mobility function, distance from the LRT track centerline, LRT speed, design mitigation magnitudes based on FTA guidelines, the effects of efficient vibration propagation, possible track conditions, and possible wheel conditions results in estimated vibration magnitudes significantly higher than the FTA vibration impact criterion. Even assuming a “best-case” scenario, which considers excellent track condition, excellent wheel condition, and inefficient vibration propagation, the vibration levels are still estimated to exceed the FTA vibration impact criterion. Furthermore, the Final EIS does not consider the evidence that the CICA high rise is susceptible to vibration impacts. The Final EIS statement that “the Project will result in no vibration impacts for residential land uses” is inaccurate as it pertains to CICA structures. The Final EIS must address the mitigation of these operational vibration impacts.
3. **LRT Operational Noise Impacts:** The Southwest LRT will be underground in the vicinity of the CICA property; therefore, the Final EIS correctly concludes that airborne noise impacts are unlikely. However, ground-borne noise from the LRT train will likely exceed Minnesota Pollution Control Agency (MPCA) noise standards. The Final EIS must address the mitigation of these operational noise impacts.
4. **Geotechnical Site Investigation:** The Final EIS proposes open cut and cover construction for the Kenilworth Tunnel. The excavation support (a sheet pile wall) will be installed two feet from the CICA condominium and within about six inches of the parking garage. Cone Penetration Tests (CPT) and Standard Penetration Tests (SPT) next to the condominiums and garage do not extend deep enough to provide characterization of the ground below the tunnel in the critical tunnel reach adjacent to the condominiums and garage. In fact, boreholes 1050ST, 1049ST and 1138CT barely reach the bottom elevation of the tunnel and should have been advanced to the same depth as 1139CT. It is

critical that the material below the tunnel and adjacent to the condominium and garage are adequately characterized due to the weak clay layer observed in borings 1156ST and 1139CT. This weak clay layer (if present near the condominium and garage) will have design implications with regards to the passive reaction of the embedded portion of the sheet pile wall. It is therefore recommended to perform an additional three to four CPTs using a seismic cone in order to be able to measure shear wave velocity. Shear wave velocities are essential for evaluating soil deformability at small strain from which, depending on the constitutive model adopted for the design, the operational soil modulus can be properly evaluated.

5. **Sheet Pile Wall Constructability:** The standard vibratory driving method for sheet pile wall installation is not applicable near the CICA condominium and garage due to the close vicinity of sensitive buildings. The most promising alternative outlined in the Final EIS is the press-in method where the sheet pile is pushed into the ground without vibratory hammers. Depending on the soil type and strength it may be necessary to utilize techniques to facilitate the penetration of the sheet pile wall to the desired depth. Boring 1138CT shows layers with strength as high as 6,200 psi (43 MPa) or higher for which the Super Crush method would be necessary. Boring 1137CT shows a strength of about 1,800 psi (12 MPa) for which the water jetting technique would be sufficient.

Sincerely,



Augusto Lucarelli
Principal



D. Lee Petersen
Principal

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature:



Typed or Printed Name: Ryan L. Peterson

Date: June 13, 2016 License Number: 44953

Enclosure
Ref. 2-5717-01

Technical Memorandum



Date: June 13, 2016
To: Calhoun Isles Condominium Association
From: Ryan Peterson, Lee Petersen, Augusto Lucarelli
Re: Southwest LRT Impacts on Calhoun Isle Condominiums
Ref: 16-2-5717-01-28TM

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature:

A handwritten signature in black ink, appearing to read "Ryan L. Peterson".

Name: Ryan L. Peterson

Date: June 13, 2016

License Number: 44953

1.0 INTRODUCTION

The Calhoun Isles Condominium Association (CICA) retained Itasca Consulting Group (Itasca) to assess possible impacts of the Southwest Light Rail Transit (LRT) project on CICA residents, structures, and property. The assessment is based on the project's Final Environmental Impact Statement (EIS)¹. Throughout this technical memorandum, the acronym "CICA" is used to represent the CICA residents, structures, and property. The terms "high rise" and "condominium" are used interchangeably throughout the document to represent the converted grain silo structures.

The potential for impacts on CICA are based on several factors:

1. Proximity—The CICA high rise and parking ramp are immediately adjacent to and less than two feet from proposed construction activity, which includes the installation of a sheet pile wall and construction of a cut and cover tunnel. CICA townhouses are within approximately 43 feet of the proposed construction activity.
2. Susceptibility—Pile driving for a residential development approximately 150 ft southeast of CICA was a nuisance to residents and reportedly caused damage. Since the distance is beyond the limits commonly thought to produce pile driving damage, the CICA high rise appears to be susceptible to vibration impacts.

We have identified the following potential impacts to CICA: 1) vibration impacts during construction; 2) vibration impacts during LRT operations; 3) noise impacts during construction; 4) noise impacts during LRT operations; 5) adequacy of the geotechnical site investigation and the

¹<http://metro council.org/Transportation/Projects/Current-Projects/Southwest-LRT/Environmental/Final-EIS.aspx?source=child>

potential for settlement; and 6) sheet pile wall constructability. This technical memorandum presents our assessment of these potential impacts.

2.0 VIBRATION IMPACTS

Vibration impacts to CICA are separated into four categories, including:

- vibration impacts causing damage to structures during construction;
- vibration impacts causing nuisance to residents during construction;
- vibration impacts causing damage to structures during LRT operations; and
- vibration impacts causing nuisance to residents during LRT operations.

The vibration impact criteria used in the Final EIS are based on the information contained in Chapter 8 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment manual². The following sections summarize the Southwest LRT construction vibration impacts and long-term LRT vibration impacts.

2.1 Construction Vibration Impacts

As noted in the Introduction, CICA has reportedly experienced recent impacts (nuisance and damage) due to ground-borne vibrations from the Trammel Crow project (located approximately 150 feet southeast of CICA). The distance between the source (vibratory pile driving) and receiver (CICA high rise and townhouses) was significant and it is surprising that these impacts, which extended to the upper floors of the high rise, were experienced given the source-receiver separation distance. The immediate conclusion is that CICA is susceptible to vibration impacts, which could be due to some or all of these factors:

1. the geologic conditions promote efficient vibration propagation;
2. the soil-to-building foundation attenuation is very low; and
3. the floor-to-floor attenuation is very low.

The construction vibration damage assessment herein is based on values in the FTA guidance manual and is listed in Figure 1. Typically, structures similar to the CICA would be classified as Category I buildings. However, based on recent experience, the CICA structures are significantly susceptible to construction vibration. The Final EIS does not identify the building category of the CICA structures. In lieu of a detailed analysis, we recommend that the Calhoun Isles be identified as Building Category IV structures based on recent experience with damage induced by construction vibration. The building category should be identified in a supplement to the Final EIS and should be based on a susceptibility field study.

² https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

TABLE 2.2-4
 FTA Vibration Damage Criteria from Construction

Building Category	PPV (in/sec)	Approximate Lv ¹
I Reinforced-concrete, steel or timber (no plaster)	0.5	102
II Engineered concrete and masonry (no plaster)	0.3	98
III Non-engineered timber and masonry buildings	0.2	94
IV Buildings extremely susceptible to vibration damage	0.12	90

¹ RMS velocity in VdB re 1 micro-inch/second

Figure 1 *Vibration damage criteria from construction (Appendix K of the Final EIS).*

2.2 Long-Term (Operational) LRT Vibration Impacts

The FTA guidance manual states:

“For operation in subway, the ground-borne vibration is usually a significant environmental impact.”

Hence, the vibration estimates in the Final EIS have been reviewed and independent vibration estimates have been performed using FTA guidance procedures.

Comments regarding vibration estimates in the Final EIS follow.

- The Final EIS uses force mobility inputs from an earlier study to estimate vibrations impacted by the project. It is unclear whether the force mobility input (reference speed = 40 mph) was adjusted for train speed near the CICA property (estimated speed = 45 mph). Adjusting for train speed increases the estimated vibration.
- A line source transfer mobility function was developed by the Metropolitan Council from field measurements taken roughly 450 ft north of the condominium (at Dean Court and W 28th Street). The field measurements were made on the ground surface, so the transfer function may not adequately represent subsurface propagation of vibrations from tunnel depth.
- The Final EIS lists the horizontal distance from the centerline of the LRT track to the condominium as 43 ft. This value is representative of the distance to townhouses, not the condominium. Actual horizontal distance from the centerline of the eastbound LRT track to the condominium is 13 ft (see Figure 2). Adjusting the distance to the actual value results in a significant increase in estimated vibration.
- The Final EIS identifies two design elements for mitigating operational vibrations.
 - The first design element is highly resilient fasteners. The resulting vibration reduction attributed to these fasteners could be interpreted as being effective at reducing vibrations by 5 VdB above 80 Hz and not effective at reducing vibrations

Exhibit 4.2-5 in Appendix K of the Final EIS shows the estimated vibration levels 50 feet from an at-grade embedded track source (reproduced here as Figure 3). Site V8 represents the line source transfer mobility function from the measurements at Dean Court and W 28th Street. This transfer function is used to independently estimate the vibrations at CICA locations.

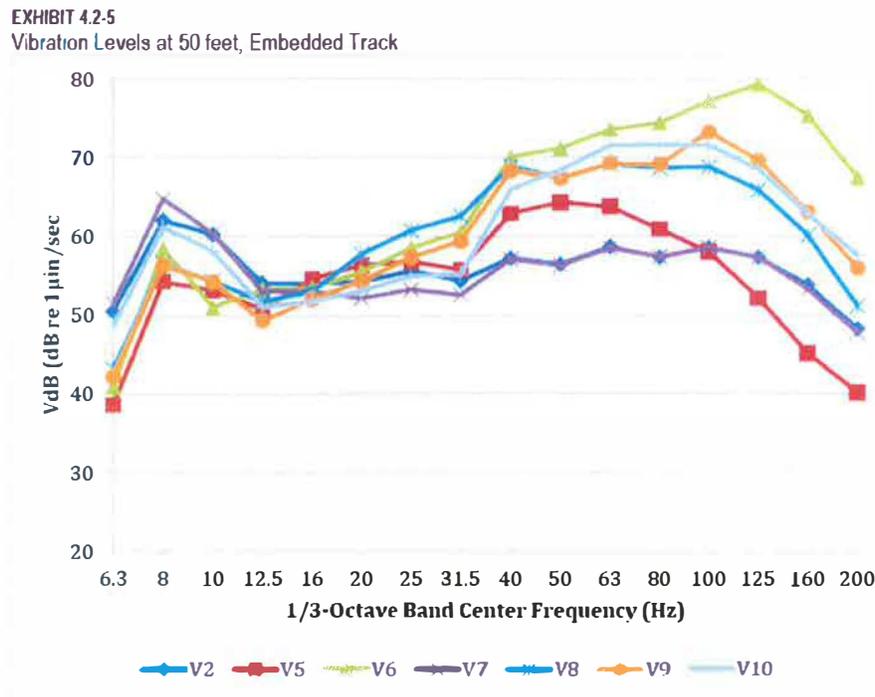


Figure 3 Estimated vibration levels 50 feet from an at-grade source.

The blue line in Figure 4 is a reproduction of the Site V8 line shown in Figure 3 (corrected to a speed of 45 mph). At 50 feet from an at-grade embedded track configuration, the estimated vibration levels will be slightly below the residential nighttime criteria. At 50 feet from a subsurface embedded track configuration (grey line), the estimated vibration levels are reduced due to the cut and cover tunnel structure and the highly resilient fasteners, as proposed in the Final EIS. However, the CICA condominium is only 13 feet from the east bound track centerline (not 43 feet as listed in the Final EIS). Three vibration estimates are shown for a distance of 13 feet and are discussed below.

The first estimate of vibration level (yellow line in Figure 4) assumes a “best-case” scenario based on the data provided in the Final EIS. The force mobility has been corrected to a speed of 45 mph. The line source transfer mobility function has been calculated using a distance of 13 feet. Mitigation measures (highly resilient fasteners and tunnel slab) have been incorporated. This “best-

case” scenario predicts that nighttime criterion is exceeded between 50 and 160 Hz and that daytime criteria is exceeded between 50 and 125 Hz.

The “best-case” scenario does not account for the possibility of efficient propagation. Efficient propagation is likely based on the Trammel Crow experience. It is also likely considering that the distance between the condominium and the sheet pile wall is roughly two feet. LRT vibrations need only travel two feet through geotechnical material (the properties of which may be modified during sheet pile installation) to reach the condominium. The second estimate (dark blue line in Figure 4) considers the efficient propagation of vibrations through soils. An adjustment factor of +10 VdB was used for efficient propagation through soil based on the FTA manual. This second estimate can be considered an “average-case” scenario. This “average-case” scenario predicts that nighttime criteria is exceeded between 20 and 160 Hz and that daytime criteria is exceeded between 40 and 160 Hz.

The best- and average-case scenarios do not consider the effects of worn wheels, wheel flats, corrugated track, or mill scale on new track, all of which have the potential to impact the CICA properties. Therefore, a third “worst-case” scenario (green line in Figure 4) was estimated to incorporate these vehicle and track parameter effects, which can increase vibrations as much as 10 VdB according to the FTA manual. This “worst-case” scenario predicts that nighttime criteria is exceeded between 8 and 200 Hz and that daytime criteria is exceeded between 20 and 160 Hz.

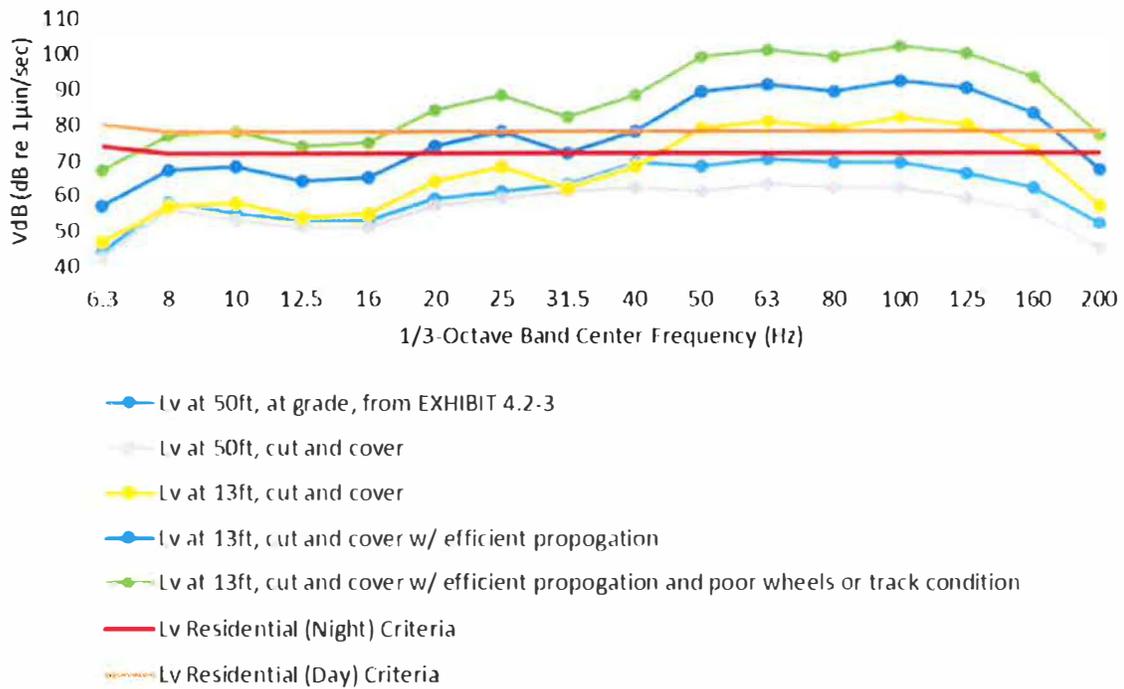


Figure 4 *Estimated range of vibration impacts to the existing CICA condominiums (Lv at 13 ft) relative to FTA day and nighttime criteria and estimates at 50 feet.*

In summary, the preceding calculations indicate that the operational vibrations will significantly exceed FTA guidelines. A susceptibility study is necessary to provide a better estimate of impacts, from which the appropriate additional mitigation measures may be determined.

3.0 NOISE

Noise impacting CICA is subject to Title 3, Chapter 59 of the Minneapolis Code of Ordinances and the Minnesota Pollution Control Agency (MPCA) (Minnesota Rules Chapter 7030). The City of Minneapolis requires an after-hours work permit for any construction occurring on weekends, federal holidays, and before 7:00 am and after 6:00 pm on weekdays. The MPCA noise standards are listed online (<https://www.revisor.leg.state.mn.us/rules>) and in Appendix K of the Final EIS.

MPCA noise standards and long-term (24-hours) measurements of existing noise levels at CICA are listed in Table 4.1-2 of Appendix K of the Final EIS and reproduced in Table 1. Note that only peak levels (presumably daytime values) were reported in the Final EIS. Nighttime levels were measured, but not reported.

Table 1 Comparison of MPCA Noise Criteria and Noise Measurements

Description	Daytime		Nighttime	
	L ₅₀ (dBA)	L ₁₀ (dBA)	L ₅₀ (dBA)	L ₁₀ (dBA)
MPCA Noise Area Classification 1 Standard	60	65	50	55
Existing Noise Measurements (Appendix K of the Final EIS)	55	67	Not Listed	Not Listed

It is important to differentiate between noise impacts due to construction and due to long-term operations of the Southwest LRT. The following sections include summaries of the review of the Final EIS construction noise impacts and operational noise impacts.

3.1 Construction Noise

As the Final EIS correctly states, construction noise levels are, to a degree, unavoidable for this type of project. Construction noise mitigation measures can be implemented to lessen the impact. The impact of construction noise appears to have been adequately addressed in the Final EIS.

3.2 Operational Noise

The Southwest LRT will be underground in the vicinity of the CICA property; therefore airborne noise impacts are unlikely. The FTA guidance manual provides a method to estimate ground-borne noise based on estimated vibration levels. Figure 5 shows estimated ground-borne noise for the best, average and worst cases above. Although the ground-borne noise estimate is not in terms of L₁₀ dBA (basis of the MPCA criteria), it does suggest the possibility that ground-borne noise could exceed MPCA noise standards.

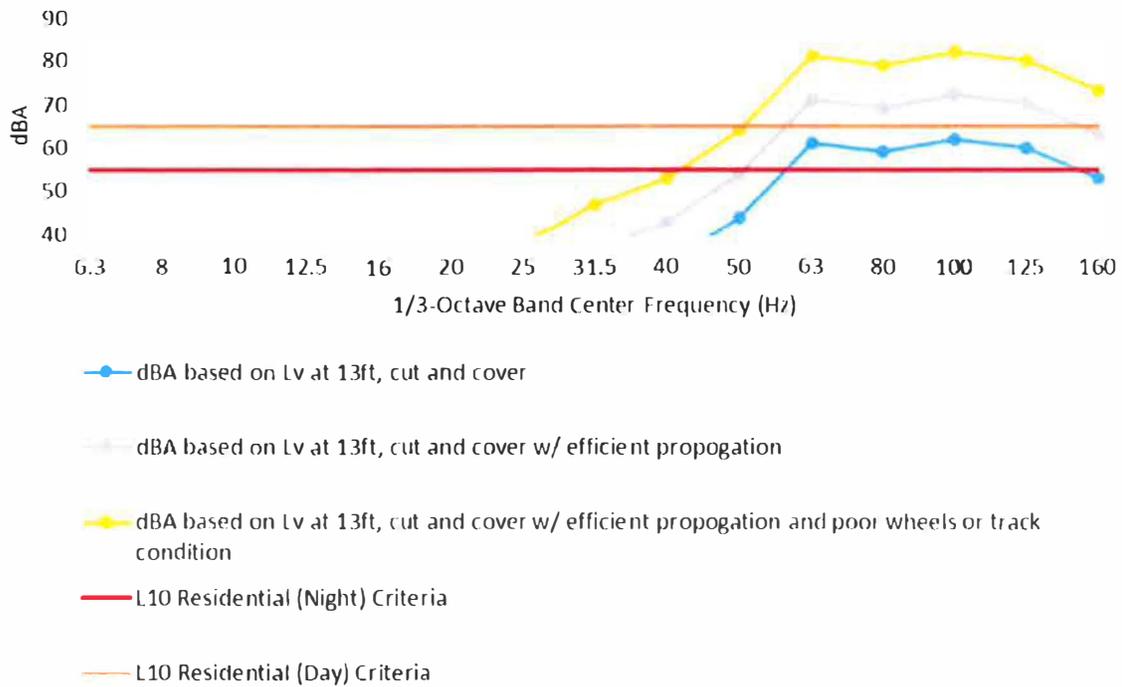


Figure 5 *Estimated ground-borne noise impacts relative to MPCCA noise criteria.*

4.0 SITE INVESTIGATION

The CICA structures and their foundations are very close to the planned LRT tunnel construction, with some garage foundations within six inches of the back of the sheet pile wall. In addition, the foundations are relatively shallow compared to the bottom of the tunnel, and so are more sensitive to movements of the sheet pile wall.

The geotechnical conditions in the vicinity of the Calhoun Isles Condominium have been investigated with standard penetration test borings (SPT) and piezocone penetration test borings (CPT). Figure 6 shows the location of each investigation (SPT borings have the suffix ST and CPT borings have the suffix CT).

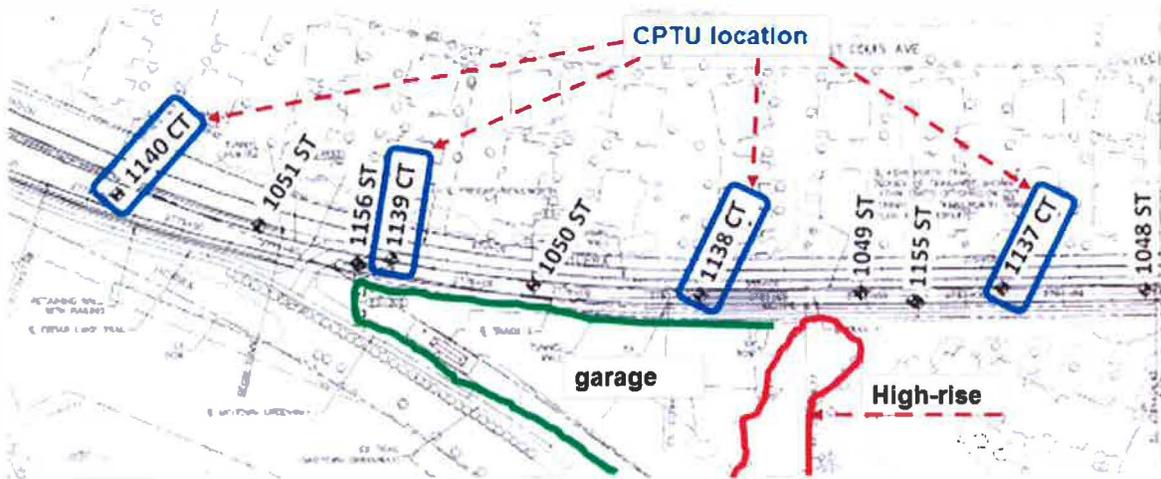


Figure 6 Location of SPT and CPT borings.

There are four CPT borings (1140CT, 1139CT, 1138CT, and 1137CT) and six SPT borings (1051ST, 1156ST, 1050ST, 1049ST, and 1155ST). A CPT test consists of pushing a cone with standardized dimensions at a constant velocity into the ground. The force necessary to push the cone is continuously monitored, providing very detailed information about the local soil stratigraphy and strength. Figure 7 provides a schematic view of the cone along with the parameters that are monitored during the test.

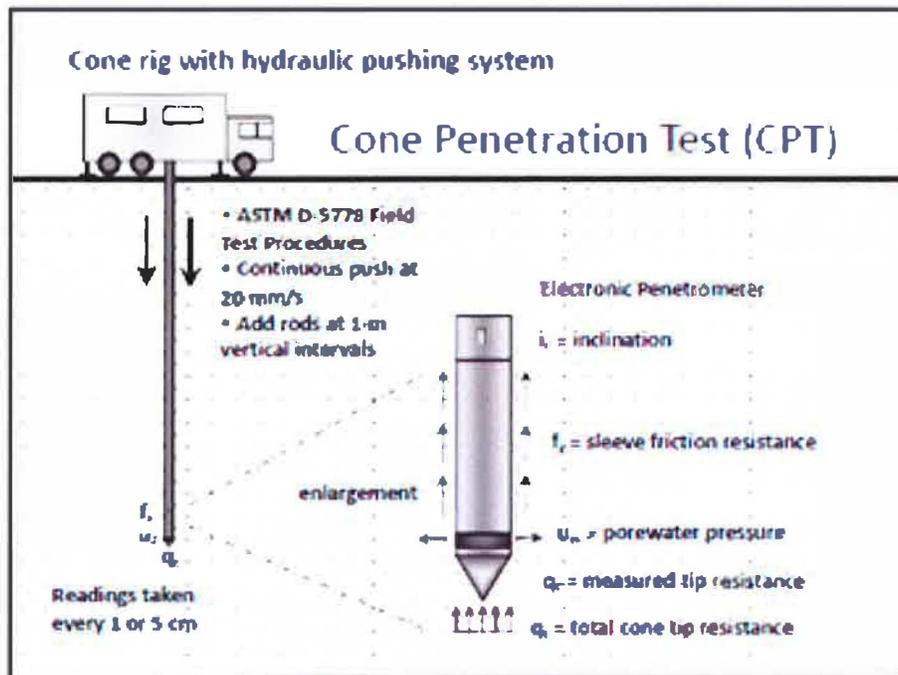


Figure 7 Schematic view of the piezocone

Whenever the soil conditions allow, like in this case, CPT are the preferred test due to speed, cost, and higher quality data.

The geotechnical longitudinal profile is usually an effective way to represent subsurface conditions allowing for an immediate understanding of the geotechnical unit correlations, weak and strong zone alternation, pore pressure distribution, and so on. Figure 8 shows the subsurface conditions adjacent to CICA.

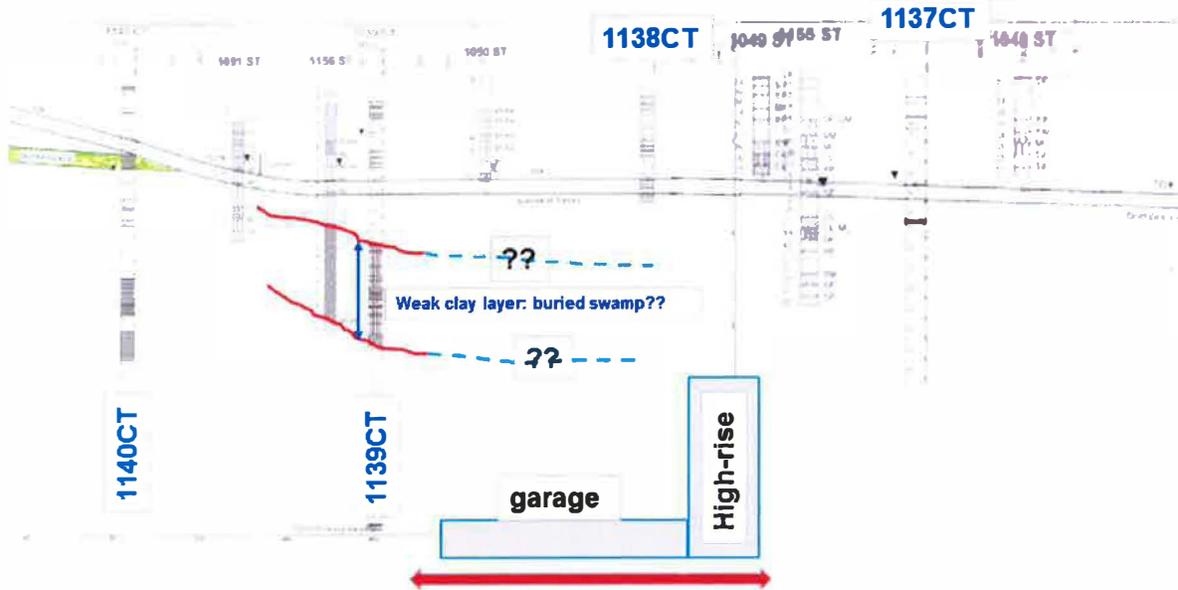


Figure 8 Geotechnical profile adjacent to CICA.

As we can see from the profile, some borings are too short to be able to provide useful information in front of the CICA high rise and garage. Borings 1050ST, 1049ST, and CPT 1138CT barely reach the bottom of the tunnel. These borings should have reached the same depth as test 1139CT. The reason for doing so is that the soil condition below the excavation bottom plays a very important role for the stability of the sheet pile wall (SPW) and for the potential settlements induced to adjacent structures during excavation.

Another important observation comes from the 1139CT results in Figure 9. There is a weak clay layer in the close vicinity of the excavation bottom where the passive reaction of the embedded part of the SPW is supposed to develop. Unfortunately, because test 1050ST, 1138CT, and 1049ST are too short, it is impossible to evaluate the extent and geometry of this weak layer.

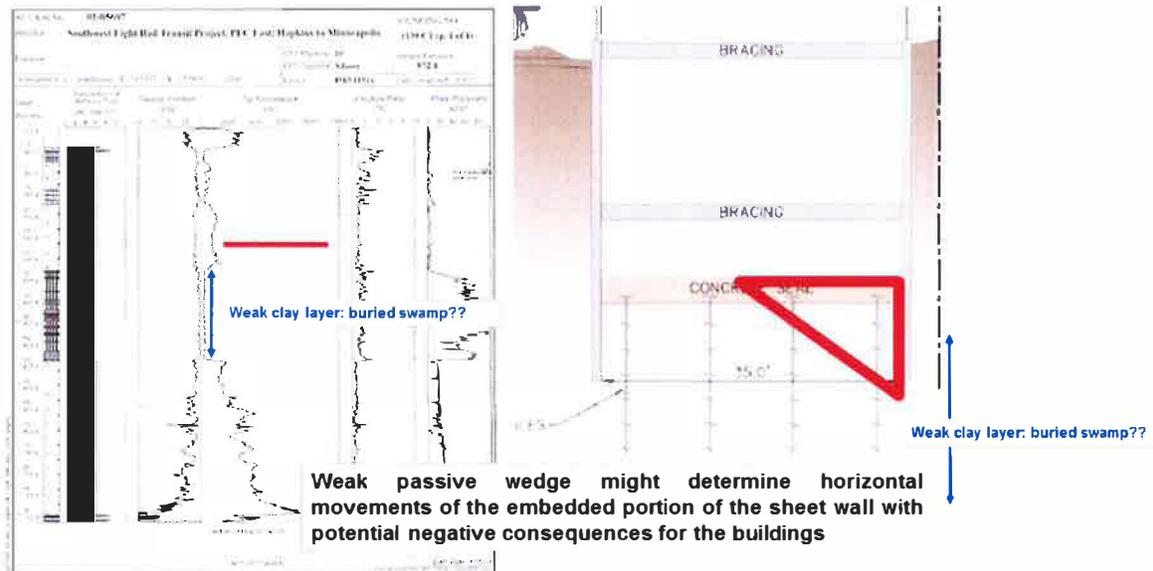


Figure 9 CPT 1139CT profile details.

The presence of the weak layer in 1139CT and the absence of deep borings between 1139CT and 1137CT represent a significant risk to CICA. We consider the site investigation to date to be inadequate in the vicinity of CICA. At least three or four additional CPT borings are necessary—additional CPT borings may be necessary if the subsurface conditions are complex.

The risk to CICA arises because the strength and deformability of the soil below the excavation bottom plays a vital role on the deformations induced behind the wall where the CICA high rise and garage are founded. These structures may be vulnerable to differential settlements.

In addition to future site investigation, the risk to CICA may be mitigated by improving the soil condition just below the excavation bottom. One possible way to achieve the improvement is to realize a jet-grouting strut below the excavation bottom as shown in the following Figure 10. The soil treatment can be realized locally in front of the high-rise and the garage, especially if the new soil investigations confirm the presence of a weak layer below the excavation bottom. The great advantage of such treatment is that it will be immediately effective while other internal contrasts require soil excavation first (and therefore producing deformation first) before they can exert any reaction. Moreover, the second lower internal strut may not be necessary.

Regarding the additional CPT borings, it would be desirable to use a seismic cone in order to be able to measure shear wave velocity. Shear wave velocity of the soils is essential to evaluate soil deformability at small strain from which, depending on the constitutive model adopted for the design, the operational soil modulus can be properly evaluated.

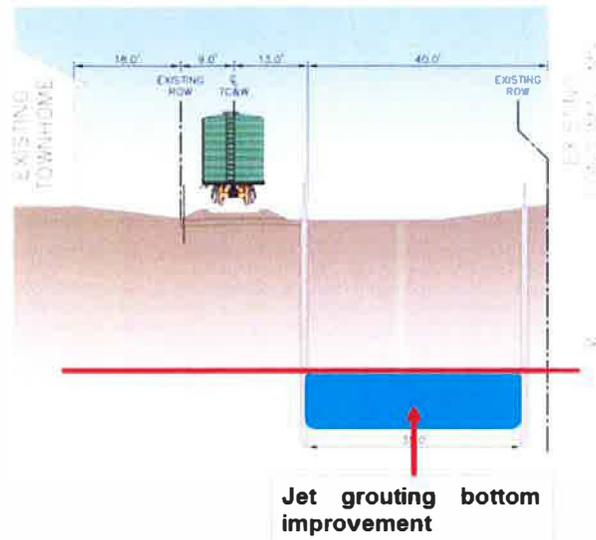


Figure 10 Excavation bottom improvement.

5.0 SHEET PILE WALL CONSTRUCTABILITY

Construction of the sheet pile wall (SPW) adjacent to CICA has the potential to negatively impact CICA. This SPW, which is within six inches of some foundation elements, is necessary to support the soil during construction of the cut-and-cover tunnel. The standard driving method is not applicable in this case due to the close vicinity of the CICA high rise. The most promising alternative is the press-in method where the SPW is pushed into the ground without vibratory hammers. Depending on the soil type and strength, it may be necessary to adopt helping techniques to facilitate the penetration of the SPW at the desired depth.

Subsurface conditions show soils that will require supplemental techniques for pile installation. Figure 11 shows the potential strength variability, with 1138CT showing layers with strength as high as 6,200 psi (43 MPa) or higher and 1137CT showing strength of about 1,800 psi (12 MPa).

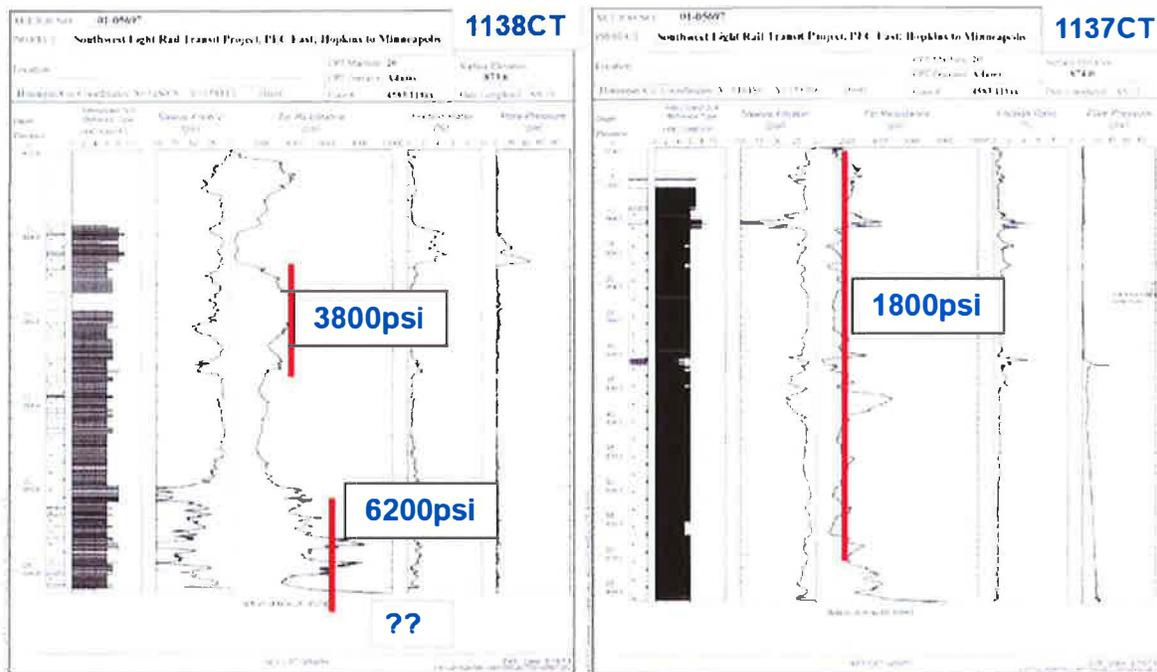


Figure 11 Soil strength variability from CPT borings.

Figure 12 shows a diagram that relates the strength of the soil and the SPW length to the recommended helping technology for successful driving. It is quite evident that, at a minimum, the water jetting technique will be necessary. The conditions encountered in 1138CT show that the Super Crush helping technology may be necessary.

More soil investigation is necessary to fine tune the final choice, which should be corroborated by a field test performed in different locations along the alignment monitoring all the mechanical parameters during the operation.

Comp Penetration Testing
1) Granular Soil

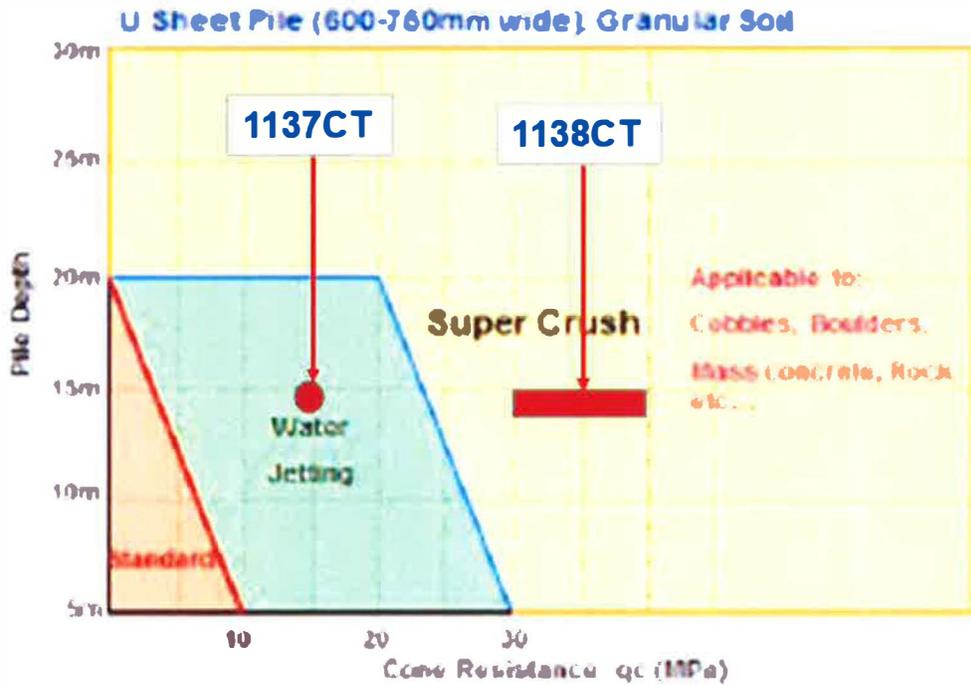


Figure 12 SPW press-in chart: helping techniques.



Attn: Nani Jacobson
SWLRT Project Office



Kenwood Isles Area Association

Southwest Light Rail FEIS response

June 8th, 2016

Introduction to SDEIS Comments by the Kenwood Isles Area Association

The Kenwood Isles Area Association (KIAA) represents the neighborhood that extends, on its west side, from the proposed SWLRT Penn Avenue station to the Kenilworth Lagoon.

KIAA has participated in the SWLRT planning process in the spirit of cooperation and compromise for approximately nine years. For most of this time, we were assured verbally and in planning documents that freight rail in the Kenilworth Corridor was a temporary condition and would be moved to make way for LRT. The 2012 Draft Environmental Impact Statement clearly recommended that the best course of action was to relocate freight out of the Kenilworth Corridor.

As you are all well aware, this position was reversed in 2013, and the Metropolitan Council's policy is now to "co-locate" freight and light rail in the Kenilworth Corridor, which we continue to oppose. As we stated in our SDEIS response, we continue to consider this a significant breach of public trust and the low point of a deeply flawed planning process.

In our SDEIS response, we noted that it failed to assess the impact of co-location in the Kenilworth Corridor on many levels: safety, vibration, noise, environmental damage, Section 106 assessments, etc. We were told that these would be fully addressed and to wait for the FEIS. While we have waited, again in the spirit of cooperation, we are dismayed that many of these concerns remain unaddressed, or ambiguously addressed.

We are a volunteer organization and were only given only one month to respond to a 17,000 page FEIS document, with an extension requested by our state legislators denied. We are therefore responding to only some of the most critical disagreements and yet unaddressed questions in the FEIS.

Further, we are not comfortable that the Met Council is the body charged with ultimately determining the FEIS for adequacy. We feel that this is a conflict of interest since they are reviewing the documentation of their own work. We strongly support a review of this FEIS by the Environmental Quality Board.

FEIS Comments: New Concerns/Questions/Issues

The Need for the Project includes: "the need to maintain a balanced and economically competitive multimodal freight system." (page ES-2)

This so-called need has never been discussed over the 20+ years of SWLRT planning. It is included here only because Hennepin County and the Metropolitan Council failed to fulfill a fundamental assumption – that freight rail would be moved in the Kenilworth Corridor to make way for light rail.

“LRT 3A and LRT 3A-1 are also referred to in the Draft EIS as freight rail “relocation” and “co-location,” respectively. As noted in the Draft EIS and Supplemental Draft EIS, LRT 3A and LRT 3A-1 would provide the same transit service, with differing freight rail options, therefore the LPA is incorporated within both LRT 3A and LRT 3A-1. “ (page ES-4)

At the time of the presentation of the LPA recommendation the LPA did NOT include freight co-location. Addressing freight rail was to be, according to Hennepin County, a separate project with a separate (undetermined) funding stream. It was only just before the DEIS got underway that the FTA required the county to include freight rail in the study. The DEIS studied and presented 3A and 3A-1 as two separate alternatives. Neither the community nor, it is our belief, the Minneapolis City Council understood the LPA to include freight co-location when the City Council selected the Kenilworth route in January 2010. As discussed in a Minneapolis City Council Resolution, the City Council understood that it was choosing the Kenilworth route with freight relocation. If they had not been assured that freight would be relocated, the process and the decision would likely have been quite different.

“The Project is making minor infrastructure modifications to freight rail for very limited areas, mainly to facilitate the movement of light rail transit.” (p. ES-8)

Moving freight rail 45 feet to accommodate Light Rail and upgrading the infrastructure is inconsistent with the use of the word “minor” as it greatly expands the footprint of the rail presence in the corridor and adds to the adverse effects of co-location in the corridor. Further, the FEIS, in the explanation why freight is treated as an existing condition in the corridor, is faulty because it only measures incremental adverse effects rather than the total adverse effect of freight and light rail. This minimizes and understates the adverse effect of co-location.

While the Project will provide for the continuation of freight rail operations within the Kenilworth Corridor with relatively minor adjustments to freight rail facilities and operations, freight rail operations, including oversight of freight rail cargo, is outside of the scope and Purpose of this Project and outside of the jurisdiction of the Council and FTA. (p. ES-8)

KIAA names this statement as a convenient way to excuse the FTA and Met Council from culpability for fully considering the impacts of co-location. Further, we see this as an excuse to NOT EVEN CONSIDER the possibility of working harder to find alternatives to co-location, to which we stand opposed. While it is acceptable that the existing freight rail operation be included in the No Build alternative, and that *in theory* freight rail operations are outside the scope of the project, the fact is that decisions by Hennepin County and the Metropolitan Council related to freight in the Kenilworth Corridor mean that *in reality* not relocating freight means the Project makes it permanent in Kenilworth. In addition to plans to move and upgrade freight rails, the Project plans to spend approximately \$165 million to accommodate co-location with an environmentally questionable tunnel. Taxpayers would be surprised to learn that we’re spending \$165 million on something that’s only temporarily necessary. Freight rail has been in the Kenilworth Corridor for 20 years ONLY because MNDOT did not follow a Minnesota State law to relocate it out of the corridor years earlier. We strongly assert that the build alternative should include the impacts of keeping freight rail on a permanent basis in Kenilworth even though KIAA does NOT WANT freight to be kept on a permanent basis in Kenilworth.

Further, stating that safety programs are in place does nothing to assure the Kenwood neighborhood that the only plan, should there be a derailment and subsequent ethanol explosion, is to allow the fire to burn out, taking much of Kenwood with it. The June 3, 2016 derailment of a Bakken Oil train in Oregon is proof (<http://abcnews.go.com/us/wirestory/oregon-train-derailment-spills-oil-sparks-fire-39597168>).

Here are comments from officials in response:

"Fire Chief Jim Appleton says the usual amount of wind in Mosier could have turned this incident into a major disaster, destroying the town and sending flames across state lines.

"My attention was focused on the incident that didn't happen," Appleton said. "It probably would have burned its way close to Omaha, Nebraska. That's how big it would have been."

Mayor Arlene Burns said the people of Mosier were "incredibly lucky."

"I count myself lucky that we dodged a bullet," Burns said, after noting that her own child was at school within a few blocks of the derailment. "We hope that this is a wake-up call."

"Justin Jacobs, a spokesman for Union Pacific Railroad, "We want citizens to feel safe," Jacobs said. "We want the oil out of Mosier."

The only difference between the described details is that it is in Oregon and not Minnesota, and oil instead of ethanol. Ethanol is even more explosive/flammable than oil and runs downhill, into groundwater and sewer. We demand to see specific plans for "the worst case scenario": a derailment of an ethanol train that causes a spark-induced explosion within Minneapolis City Limits.

We also demand to understand what organization(s) would have liability in case of a crash, derailment, explosion, etc. prior to the FTA awarding federal funding. It is our current understanding that Hennepin County will transfer land in the corridor to the Met Council, who will then negotiate the terms of liability in secret with the freight rail operators. This not only hides the full cost of LRT operations in Kenilworth from the public, but also does not give adequate assurance to neighborhoods that freight rail companies will have every incentive to operate in the interests of the public when profits may be at stake.

(Re Section 106 NHPA Process), as noted in the table, there will be an adverse effect on the Kenilworth Lagoon as a result of the Project, and thus there will also be an adverse effect on the GRHD.

This is "new" information to the EIS process, but it has been well known that there would be adverse visual and environmental effects to the defined Section 106 properties. This supports public perception that other, less-damaging routes were not properly considered. We remind the FTA and Met Council that predetermining a route is a violation of federal law. It is disappointing that these findings have happened at a point of advanced planning.

Additionally, FEIS states that it is reasonable to expect to find undocumented ground water or soil contamination, without determining what the extent of those are. This is inappropriate for an FEIS because it is supposed to be "FINAL" and thus a complete assessment of the risks.

Because the Kenilworth Corridor lies between Cedar Lake and Lake of the Isles, and above a high water table, it is dismissive of the FTA and Met Council to state that there will not be adverse effects to the Chain of Lakes. It is well known that the Kenilworth Corridor north of 21st St is an old rail yard with significant contaminants that will be disturbed by construction, and put into both the air and water.

Further supporting the position that this alignment is highly environmentally damaging are the ecosystem adverse effects in table ES-4 3.10, where it is clearly referenced that habitat will be removed or degraded, and wildlife foraging, nesting, and breeding habitats will be disturbed. KIAA objects strongly and demands mitigation measures to prevent this from happening. Such damage degrades Cedar Lake and Lake of the Isles and contradicts the section 106 findings.

Given the many mistakes and adjustments we have seen throughout the EIS process, it would be more responsible to investigate and identify construction and operational issues and address them proactively.

The Project will not result in vibration impacts for any residential or institutional land uses. The Project would, however, result in 54 ground-borne noise impacts for residential land uses without mitigation. These impacts would be directly adjacent to and south of the proposed light rail tunnel in the Kenilworth Corridor.

We wholeheartedly disagree with this statement. The fact is that vibration can already be felt by freight rail in homes on both sides of the proposed tunnel as well as throughout the Kenilworth Corridor. Since the FTA and Met Council admit that freight operation is out of scope or control of this project, the statement that vibration is minimized by low speed of freight trains does not reassure us that speeds will not increase when freight infrastructure is upgraded.

Furthermore, there are homes that have close proximity to the Channel and to the proposed light rail line, yet for some reason are excluded from mitigation. KIAA submitted documentation during the DEIS scoping process showing that extra deep footings were required for residential construction near the channel within the last 10 years. This was due to the nature of the soil, its transference of vibration, and the need for greater stability.

Table ES-4.

Short-term: • Develop and implement a Construction Mitigation Plan and a Construction Communication Plan that will address short-term impacts to land use related to temporary construction easements and other construction activities; strategies may include:

- **Conduct public meetings**
- **Establish a 24-hour construction hotline**
- **Prepare materials with information about construction**
- **Address property access issues**
- **Assign staff to serve as liaisons between the public and contractors during construction**

If the past attempts to address impacts are the best predictor of the future, KIAA is concerned as to the overall responsiveness of the Southwest Project Office; there needs to be a more definitive plan to handle concerns. Community Advisory Committee meetings have been unexpectedly cancelled, responsiveness to inquiries has been slow or non-existent, liaisons have made statements at public meetings that “there will not be any discussion.” We would like some specifics as to the frequency of meetings and level of personnel that will be conducting public engagement.

Short-Term/Groundwater:

- **Adhere to permit requirements related to groundwater pumping and discharge from pumping**
- **Employ proper BMPs associated with groundwater removal during construction, to minimize the risk of building settlement**
- **Within Minneapolis, send groundwater discharged to the sanitary sewer system to the treatment plant on the Mississippi River**

The extra burden on the sanitary sewer system because of the extra groundwater being pumped out of the tunnel will likely become another financial burden on the City of Minneapolis and ultimately, its residents. KIAA states that this cost should be known so it can be included in the operating and maintenance costs and not borne by the City. Costs to the City of Minneapolis are of significant concern to Kenwood taxpayers.

Development

As we surfaced in the SDEIS response, the FEIS also lists “station area development” as an item to be addressed through continued consultation. This is inconsistent with numerous statements that have been made that development is not anticipated at the 21st Street Station. For example, the Southwest Community Works website and documents state: “Future development is not envisioned around this station....”

<http://www.swlrtcommunityworks.org/explore-corridor/stations/21st-street-station>

The discussion of development potential at the Penn Station does not relate to the Kenwood Parkway side:

<http://www.swlrtcommunityworks.org/~media/SW%20Corridor/Document%20Archive/investment-framework/ch-4-penn.pdf>

We request a written explanation about what development is being referred to throughout the FEIS as it relates to the 21st St Station area.

Comments on Table 3.3-16, p. 3-84

“Property acquisition and displacement: The Project will result in the partial acquisition of multiple parcels used for the Kenilworth Trail. The Project will not displace the trail or have a long-term effect on trail users because all existing trail connections, access points, and roadway crossings will be maintained.”

Hennepin County plans to transfer land adjacent to Cedar Lake Park to the Met Council for the SWLRT project in order to move freight rail to the west. This land has functioned as part of the park for many years; this will clearly have an impact on the park and the users’ experience. Furthermore, this land was thought to be donated by BNSF to the Minneapolis Parks and Recreation Board. The required documentation for MPRB ownership was not created or maintained, however. No taxes were paid on it for around 50 years.

“Noise and vibration impacts: No adverse impacts after mitigation”

While we appreciate that some efforts have been made to mitigate noise in a very quiet area, we have no confidence that noise from the station area will not be disruptive to the neighborhood. We realize that there are guidelines relating to decibel levels and frequency, but these do not coincide with the real-world experiences of residents and trail users. Furthermore, the SWLRT project, which spends approximately \$165 Million to co-locate freight and light rail, ignores the impacts of freight rail noise – especially with regard to additional noise that will be generated by freight in the 21st Street station area.

“Considering these mitigation measures, the Project will not adversely affect the overall visual quality of the neighborhood.” Table 3.3-16, p. 3-84

“Viewpoint 18 – View Toward the Kenilworth Corridor Crossing of West 21st Street”[...] “The visual impact of the Project will be a slight improvement in the quality of the view.” p.3-145,146

The Kenilworth Corridor is an important element of the Kenwood neighborhood. This project, even after mitigation, will clearly adversely affect the visual quality of this area. The Project plans to fill a well-used urban green space with concrete and steel, fences and walls, ballasted tracks and overhead wires with large structural supports. You are not replacing freight rail infrastructure as promised, but adding substantially to it. While we appreciate landscaping efforts and efforts to mask the power substation and

freight rail utility sheds with greenery, it is simply absurd and insulting to say the level of visual impact in this area will be low.

“New at-grade light rail crossings of roadways and pedestrian/bicycle facilities: One new at-grade light rail/roadway crossing, which will be controlled by flashing lights and gates to allow for safe crossings by pedestrians and vehicles and to maintain acceptable traffic operations.” Table 3.3-16, p. 3-84

KIAA has consistently expressed concerns about light pollution, including and especially flashing lights at intersections, which could be a real problem for nearby homes.

“New physical barriers: Light rail alignment will be located adjacent to the existing Kenilworth Corridor, which is an active freight rail corridor (refer to Exhibit 2.1-5). All existing sidewalk, trail, and roadway crossings of the Kenilworth Corridor will be maintained, and, because the existing freight rail alignment is currently a physical barrier, the Project will not create a new physical barrier.” Table 3.3-16, p. 3-84

As pointed out in our DEIS response, LRT will create a new barrier to east-west bicycle and pedestrian travel. The topography of the area (lakes, valley, bluffs) limits east-west travel along the corridor, but there are many important informal east-west crossing points along the Kenilworth Corridor across the railroad tracks. Though these may be formally considered trespassing, it is a fact of most communities that people cross train tracks in places other than the designated areas, especially if a train maintains a reasonable speed limit through a residential area. The existing informal crossings are a germane means of community cohesion.

Summary of Concerns expressed in past responses that remain inadequately addressed in this FEIS:

Co-location ignores rapidly increasing concerns about rail safety and creates a dangerous alignment in Minneapolis.

The FEIS does not provide any details on proof of liability insurance by freight Rail Company because it is “out of scope.” But, it also fails to include any detail on emergency responder training, requirements to provide frequency of trains to responders, implementation of positive train control technology, speed reduction in the corridor, or any adequate measures to prevent the interaction of electrical sparks and volatile freight cargoes. In essence – you are going to put a mouse next to a cat, and hope for the best because it is “out of your scope.”

The cost is too expensive and is underestimated. We have no confidence that the project is budgeted correctly; more and more funding will be necessary. The FEIS clearly states that it expects to find undocumented contamination, and there is very little margin for error in the current budget. Perhaps the FTA and Met Council are hoping that at that point, cost overruns will be acceptable because ground will have been broken, literally.

KIAA was told by the Met Council that we needed to wait for the FEIS for responses to our DEIS and SDEIS concerns, and the FEIS falls short of addressing questions on the complete and total disruption of the park-like setting of the Kenilworth Corridor, environmental impacts, ridership questions, and a safety plan for co-location in case of a worst case scenario. And now we only have 30 days to respond, and were previously informed by Chair Duinick that there is no process for unresolved issues. This means that the

only appropriate course of action is to withhold federal funding for SWLRT via this FEIS process until these issues can be resolved.

Because the FEIS falls short on critical components, we expect to see construction damage to historic and non-historic properties and infrastructure along the alignment beyond what has been specified.

There is a significant unresolved lawsuit by the Lakes and Parks Alliance that may halt construction now because the Met Council did not halt planning at the appropriate time to consider other routes. While KIAA is not participating in the lawsuit, we understand why Minneapolis residents and other organizations have been frustrated by the planning process and are compelled to take this action.

We do not trust the Met Council's role in determining adequacy of the FEIS. We support having a neutral third party, such as the EQB, determine adequacy to address this conflict of interest.

Finally, it is incomprehensible to KIAA that this enormously expensive project prioritizes a relatively small number of "choice riders" over the goal of more equitable access to transit. The Met Council sold this line as an "equity train" in Minneapolis, but this alignment and most of the rest of the selected route bypasses low-income areas and areas of heavy transit dependence. This plan provides no honest evidence of equity of access for those needing it in Minneapolis: low income, seniors, youth, or disabled communities.

With so many serious questions and flaws in the FEIS, why are we not being better served? Federal funding should not be allocated to Southwest Light Rail until we have real answers to our questions, not vague assurances. Our constituents deserve better when \$1.8B (and climbing) is going to be the bill to taxpayers.

Neatly/
done Right

NANI JACOBSON
Assistant Director, Environmental & Agreements
Metro Transit - Southwest LRT Project Office
6465 Wayzata Blvd. Suite 500
St. Louis Park, MN

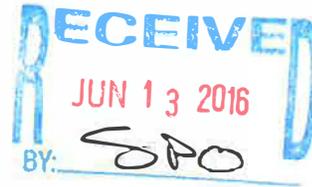


LRT-Done Right

2700 Kenilworth Place
Minneapolis, MN 55405

June 13, 2016

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:

LRT-Done Right is a grassroots organization of approximately 500 Minneapolis residents and taxpayers who have conducted exhaustive research and advocacy on the effects of light rail transit and freight lines on community well being. We hereby submit to you our comments on the Southwest LRT Final Environmental Impact Statement (FEIS). These comments are the product of many volunteer hours of research, analysis, and writing. As citizens of Minneapolis and the Metro area, we hope and expect that they will receive due attention and response.

We must enter into the public record our consternation with the inadequacy of a 30-day response period for lay citizens processing a 17,000 page technical document. Our comments here would be much more extensive had our state legislators' request for an extension been granted.

In our detailed response to the SDEIS, LRT Done Right noted that the SDEIS failed to assess the multiple impacts of co-location in the Kenilworth Corridor in terms of many factors including safety, vibration, noise, environmental damage, Section 106 assessments, etc. We were assured that these issues would be comprehensively dealt with in the FEIS. And yet we find in the FEIS that many of our critical concerns are either not addressed or inadequately addressed.

Finally, we perceive a conflict of interest in the Met Council's responsibility for determining the adequacy of the FEIS, since it is the work of the Met Council. Therefore we strongly encourage that the Met Council seek the Environmental Quality Board's review of the FEIS.

A handwritten signature in black ink that reads "Judy Meath". The signature is written in a cursive, flowing style.

Judy Meath

On behalf of LRT-Done Right

LRT-Done Right response to Southwest Light Rail Final EIS

From FEIS Executive Summary:

2. WHAT IS THE PURPOSE AND NEED FOR THE PROPOSED PROJECT?

The Purpose and Need provides the foundation for the proposed Project. The Purposes of the proposed Southwest LRT Project are summarized below:

- *Improve access and mobility to the jobs and activity centers in the Minneapolis central business district and the expanding southwest suburban employment centers*
- *Provide a competitive, cost-effective travel option to attract choice riders to the transit system, in an area of the region experiencing congested roadway connections between corridor cities and downtown Minneapolis*
- *Be part of an efficient system of integrated regional transit-ways serving the Twin Cities*

The Need for the Project is summarized as follows: Since the late 1980s, the Council has identified that the Southwest Corridor warrants a high level of transit investment to respond to increasing travel demand in this highly congested area of the region. This area of the Twin Cities experiences daily congestion on the roadway network, speed and use limitations within shoulder bus operations, and capacity constraints in downtown Minneapolis. Four primary factors make the Southwest LRT Project important for people who live and work in the southwest metropolitan area: (1) declining mobility; (2) limited competitive, reliable transit options for choice riders and people who rely on public transportation, including reverse-commute riders; (3) the need to maintain a balanced and economically competitive multimodal freight system; and (4) regional and local plans calling for investment in additional LRT projects in the region.

LRT Done Right Comment: Purpose and Need for SWLRT

“Since the late 1980s, the Council has identified that the Southwest Corridor warrants a high level of transit investment to respond to increasing travel demand in this highly congested area of the region.”

Purpose of Proposed Project: An Investment in Suburbanization

In line with the national post - war pattern of suburban growth, per Minnesota Compass, the core cities of Minneapolis and St. Paul experienced a 38% drop in population while the suburbs grew 380% from 1950 to 1980. From 1980 until very recently, the core cities’ population remained unchanged, while the exurban and suburban population rings rose by over 50 %. ¹ Eden Prairie, the SWLRT southwest terminus located 12 miles from Minneapolis , provides an example of this suburban

¹ Rebecca Sohmer, David Jackson, Bruce Katz, Amy Liu and David Warren, “Mind the Gap: Reducing Disparities to Improve Regional Competitiveness in the Twin Cities,” (Brookings Metropolitan Policy Program) 2005, p.4.

growth with its population rising 300% from 16,000 to 50,000 from 1980 to 2000 (SWLRT DEIS, 2012) and another 12,000 by 2013.

The Civil Rights Project at the Harvard Center for Community & Change described post-war suburbanization in *Moving to Equity* and linked income inequality and racial segregation to growth and development of suburbs located increasingly farther away from central cities.² It was in this context of ongoing suburbanization in the late 1980's that the Met Council first chose the Southwest Corridor as warranting a "high level of transit investment."

At the time that planning for SWLRT began in earnest in the mid-2000's, the Brookings Institution Metropolitan Policy Program issued *Mind the Gap: Reducing Disparities to Improve Regional Competitiveness in the Twin Cities*. The report found that while the Twin Cities have many assets that make them strong and competitive, "Underneath these broad regional successes are some disturbing social and economic disparities, demonstrating that progress is not widely shared."³ The report identified and called for the reduction of three sets of "gaps" or areas of disparity: among racial and ethnic groups, among different income groups, and between the central cities and the suburbs — that show that the region's prosperity does not benefit all residents or communities.⁴

These areas of disparity are interrelated and intersect in the gap between central cities and suburbs:

Place disparities, or differences between cities and suburbs (and among suburbs), result from uneven development that has led to concentrations of poverty in the regional core and concentrations of relative wealth in the outer suburbs.⁵

The two central cities have markedly different demographic patterns than the rest of the metropolitan area. While some older, inner ring suburbs are beginning to resemble the central cities in some respects, the region still displays a fairly traditional pattern of poorer, more diverse central cities surrounded by wealthier, whiter suburbs.⁶

As SWLRT planning unfolded in 2005, the *Mind the Gap* study found:

Concentrated poverty—neighborhoods where the poverty rates are 40 percent or higher—is solely found in Minneapolis and St. Paul. In other words, there are no extremely poor suburban neighborhoods, only extremely poor central city neighborhoods. *According to a*

² Sanchez, Stolz, Ma, "Moving to Equity" (The Civil Rights Project at the Harvard Center for Community & Change), 2003, p.17.

³ Sohmer, Jackson, Katz, Lui, and Warren, "Mind the Gap," p.3

⁴ Ibid, p.3,4

⁵ Ibid, p.9

⁶ Ibid, p.20

study done by the DC Fiscal Policy Institute, the Twin Cities has the second starkest differential between city poverty rates and suburban poverty rates in the country. The central cities' poverty rate is 4.5 times higher than the suburban poverty rate, which is a higher ratio than the Baltimore, Detroit, Cleveland, and Philadelphia metro areas (emphasis added).⁷

SWLRT as an answer to “increasing travel demand in this highly congested area of the region” was conceived and planned in this stark context of Twin Cities’ metro suburban and urban disparity.

- LRTDR rejects the following FEIS justification of SWLRT: This area of the Twin Cities experiences daily congestion on the roadway network. Provide a travel option to attract choice riders to the transit system, in an area of the region experiencing congested roadway connections between corridor cities and downtown Minneapolis.
- The SWLRT project enacts the stark metro place disparity by prioritizing the most costly public works project in state history for the purpose of providing “a travel option to attract choice riders” who have caused the congestion produced by southwestern suburbanization.

Furthermore, the move to affluent and distant suburbs has been accompanied by an unacceptable and extraordinarily low carpool rate during commute hours between the Southwest suburbs and Minneapolis. An efficient use of the existing transit and transportation resources must be required of “this area of the Twin Cities.”

The FEIS ridership table 4.1-2 on p. 4-18 shows that SWLRT is expected to take only 6500 vehicles off the road by 2040. Attaining a 9% carpool rate among southwest metro drivers over SWLRT planners' time horizon of 25 years – only 520 new carpoolers per year - would achieve the same congestion relief at very little, if any, cost. A 9-10% carpool rate is typical for other metropolitan areas. This area of the Twin Cities and the entire metro should be expected to match what is achieved in other metropolitan areas.

SWLRT Planning: Performance of Place Disparity

SWLRT planning history can be seen as a repeated performance of the stark differential between city and suburb documented in *Mind the Gap*. A representative enactment is the “diagonal route,” described in the FEIS as a positive characteristic of SWLRT. However, the diagonal route is not equally shared by city and suburb. On the one hand, the diagonal route was insisted on in Minneapolis by SWLRT planners as the fastest way into downtown jobs for suburban commuters, though key characteristics of that route were that it missed urban density, insulated suburban riders from major Minneapolis commercial areas and neighborhoods, and limited the opportunity for urban development.

⁷ Ibid, p.21

On the other hand, the diagonal route was abandoned at the southwest suburban end to serve business needs there. Early Southwest LRT plans had the train remaining to the north on the existing railroad right-of-way it will use for most of its route from Minneapolis. “We pushed hard to get it down into our core jobs and commercial districts,” says Mayor Tyra-Lukens⁸

In 2007, Minnetonka and Eden Prairie made it clear that routing SWLRT through the Hennepin County-owned recreational trails in their communities, comparable to the Kenilworth Trail in Minneapolis, would limit development and economic opportunities and be detrimental to their cities’ quality of life. Eden Prairie and Minnetonka were not allocated mitigation of a poor route. They “pushed hard” and got a better, more valuable alignment for their suburban cities.

Eden Prairie Mayor Nancy Tyra-Lukens described the purpose and need for the SWLRT and its alignment in Eden Prairie as follows: “One of the largest software companies in the Twin Cities, HelpSystems, just told me it can’t fill jobs out here. We don’t want these businesses moving. It’s a competitiveness issue for us.”⁹

According to Mayor Tyra-Lukens, the SWLRT reroute out of the HCRRA trail was needed *to keep* businesses in Eden Prairie. This suburban economic strategy is directly contrary to the FEIS statement of Purpose and Need to “improve access and mobility to ... the *expanding* southwest suburban employment centers.”

SWLRT as a strategy to *keep or attract* businesses to the southwest suburbs, *rather than to provide needed transit* to “expanding southwest suburban employment centers,” is reported in a recent Mpls/St.Paul Business Journal article (3/18/16), “*The Great Minneapolis Migration: As employers head downtown, suburbs play catch-up to add amenities to hold onto tenants.*” It reported that over the past two years, more than 15 companies have announced relocations to downtown Minneapolis. A consequence of the shift by businesses from suburban to downtown office locations is a drop in demand for suburban office space. An office broker specializing in the southwest suburbs at Cushman & Wakefield/NorthMarq predicts the drop in demand for southwest suburban office space will improve with the proposed SWLRT line. He is cited as expecting “a bump in suburban office demand as light rail transit along the southwest corridor gets closer to opening in 2020,” echoing Eden Prairie Mayor Tyra-Lukens’ description of the need for SWLRT as “a competitiveness issue for us.”

- *LRTDR rejects the FEIS depiction of SWLRT Purpose and Need “to improve access and mobility to ... expanding southwest suburban employment centers.”*
- *SWLRT as routed is a public investment in an amenity for the competitive position of private southwest suburban business. It is desired by Southwest suburbs and implemented as a strategy to retain their employment centers, not a public transit need to access expanding southwest suburban employment centers.*

⁸ Adam Platt, “Transit Showdown in Southwest Metro,” (Twin Cities Business) October 30 2015).

⁹ Ibid

Thus, the proposed SWLRT route hooks at its southwest suburban end rather than continuing the diagonal route along the HCRRA-owned right-of-way. Prior to the route change in Eden Prairie, there was a citizens' activist group there, Trails not Rails.¹⁰ Also, citizen activism occurred early in SWLRT planning to preserve areas near the HCRRA Trail in Eden Prairie occurred early in SWLRT planning.¹¹ The Trail is now a valuable recreational greenspace surrounded by high-end homes and a golf course.

Therefore, in addition to the reroute achieved as a strategy to enhance its business competitiveness, Eden Prairie has obtained an increase in its recreational green space with the HCRAA- purchased rail corridor. Eden Prairie and Minnetonka have roughly 2 to 3 times more open space acreage per person than Minneapolis. Hence, southwest suburban SWLRT routing enacts and worsens another element of urban and suburban disparity, which will be repeated by the adverse and degrading impact of SWLRT on the Minneapolis Chain of Lakes. Eden Prairie was publicized in Money Magazine's "Best Places to Live" in September 2012. The magazine promoted the high quality of life in the suburb, listing \$116,000 as the median household income and a coming "commuter rail project" as a reason to live there.

The *Mind the Gap* study strongly argued for reducing the "stark differential" of place and poverty between metro suburbs and the core cities on the bases of social equity and regional economic growth.¹² Nonetheless, due to planners' priority to improve the alignment in Eden Prairie and Minnetonka, \$300 million in project costs were added, thereby increasing the overall SWLRT project budget from about \$900 million to about \$1.2 billion. The 30% suburban budget increase occurred at the beginning of planning and caused enormous and unrelenting pressure thereafter to keep costs down for the SWLRT alignment in Minneapolis. The improvement in the southwest suburban alignment thus may be said to have played a causal role in determining a poor route in the city.

The new alignment out of the HCRRA Trail in Eden Prairie and Minnetonka also meant SWLRT must be built through wetlands there. The additional financial (as distinguished from environmental) cost of doing so was not made public until the spring of 2015 and then portrayed as part of \$300 million of engineering "surprises" to SWLRT planners.¹³ Significantly, the Met Council will not break down the most recent additional \$300 million project costs by municipality. Therefore, information is not available regarding the total public transit dollar investment for Eden Prairie's and Minnetonka's SWLRT strategy as "a competitiveness issue for us." However, we do know that the environmental cost to wetlands is steep, and in fact, cannot be mitigated. As stated in the FEIS, the Met Council must purchase wetland mitigation bank credits to offset the damage caused by the route.

Minneapolis Disenfranchised from Alignment Selection: No SWLRT in Urban Density

¹⁰ http://fbiw.net/old_site/Trail/LRTGuide.pdf p.17

¹¹ http://fbiw.net/old_site/News/

¹² Sohmer, Jackson, Katz, Lui, and Warren, "Mind the Gap," p.26

¹³ <http://www.mprnews.org/story/2015/06/22/video-choo-choo-bob-explains-southwest-light-rails-newest-woes>

Former Minneapolis Mayor R.T. Rybak's office supported an alignment that would serve Uptown and dense neighborhoods to the east in South Minneapolis. After \$300 million was prioritized and frontloaded for the southwest suburban alignment, SWLRT planners decided the financial leeway to consider routing through urban density was gone, and the potential cost of providing transit for the urban core was seen as unaffordable as well as unnecessary to obtain federal funds. In addition to the pressure created by the suburban routing to keep costs down in Minneapolis, as the City of Minneapolis states in Resolution 2014R-362 and included in its FEIS response:

The decision about where to route the Southwest LRT line was made when the Bush-era transit funding formula was still in effect. That formula said that only new transit riders should count. If you were already a transit rider, you didn't count towards projected ridership. That formula was inherently biased against urban neighborhoods where lots of people already ride transit. That formula was inherently favorable to suburban areas where it is easier to find potential riders not currently taking transit. The Bush-era formula created an incentive for transit planners and policy-makers to avoid, rather than serve, dense neighborhoods where many people already take transit.

The routing of Southwest LRT was not designed around serving disadvantaged populations or serving the greatest number of Minneapolis residents. It was designed to achieve the fastest route between suburban and downtown destinations (emphasis added.)

Mayor R.T. Rybak said of the route, "The history on this is clear. The county pushed the idea of the Kenilworth Corridor over our objections."¹⁴ Minneapolis did not want the Kenilworth alignment, but agreed to it on the condition and promise that the freight rail that had been temporarily placed there would be moved.

LRTDR endorses the City of Minneapolis FEIS Staff comment on regarding SWLRT project history:

The development of the project including route selection differs significantly from the recounting outlined in the FEIS ...

There were serious mistakes made during the development of this project: failing to secure a binding agreement with St Louis Park, failing to secure a binding agreement with the railroads, failing to follow up with MNDOT to ensure they were following the law requiring a binding agreement before disbursing funds for the Golden Auto site, failing to design a new version of a freight reroute to reflect changes in industry practice, failing to hire an independent engineering firm like TranSystems years earlier, and when a new viable reroute was finally identified, an unwillingness to bring that plan to the STB for approval.

Regarding the failure of SWLRT planning in Minneapolis, Gov. Mark Dayton commented, "While Hennepin County has been blamed for not resolving the potential conflict between light-rail and freight trains, it could easily have been foreseen by Met Council staff, the planners and the like, at

¹⁴ MinnPost 10/15/2013

least five years if not 10 years ahead of now.”¹⁵ *The poor performance of SWLRT planners has not lessened Gov. Dayton’s advocacy for the project.*

This failure in planning meant that Minneapolis was disenfranchised from the alignment selection process as the unviable Kenilworth option distorted and eclipsed real planning and options. The routes through density favored by the City could not be and were not fairly or accurately evaluated.

- LRTDR rejects the FEIS statement that SWLRT fulfills the Purpose and Need: Be part of an efficient system of integrated regional transit-ways serving the Twin Cities.
- SWLRT will not improve the efficiency of regional transit-ways serving the Twin Cities. FEIS ridership data on table 4.1-2 on p. 4-18 shows Total System-wide Transit Trips will increase by a barely measurable 200 trips by 2040.
- The lack of improvement in efficiency of the regional transit-way is reflected in the outcome that SWLRT as routed will actually increase GHG. FEIS Environmental Analysis p. 3-204 concludes: The Project operation will increase the Green House Gas emission in the Twin Cities area by approximately 2,000 metric tons per year in 2040 compared to No Build Alternative.

When Mayor Hodges voted against the co-location plan on April 2, 2014, she underscored the preemption of Minneapolis’ participation in alignment selection:

“This would not be the route that Minneapolis would have supported for light rail. We would’ve had a clarion call ... we need to find another alternative here because our support is predicated on the reroute of freight.”¹⁶

Enactment of suburban and urban place disparity continued in the SWLRT planning process. Though a safe engineering method to reroute freight was established by TranSystem, all suburban cities on the Corridor Management Committee (CMC) voted instead in favor of retaining co-location in the Kenilworth Corridor in Minneapolis. (Though Edina would have no SWLRT stations within its borders, it is included on the CMC and has a vote equal to Minneapolis.) The suburban cities without exception prioritized their own municipalities and unanimously overrode past promises and fairness for Minneapolis. The Minneapolis FEIS Staff comment recounts:

Of the government agencies represented at the CMC, only the City of Minneapolis, was willing to re-route freight out of the corridor by going to the STB. Mayor Hodges was outvoted at the CMC by all the cities along the corridor as well as Hennepin County and Metropolitan Council representatives. Opponents of rerouting the freight expressed concern that opposition to the

¹⁵ *Star & Tribune, April 9, 2014*

¹⁶ MinnPost, Betsy Hodges, “LRT remarks: ‘This is about a fundamental failure of fairness,’ ” 4/3/14

freight re-route by TC&W at the STB would result in unacceptable delays, even if it were ultimately approved.

Since the TranSystems report is still unrefuted by any credible source, the City does not concede that Freight could not be re-routed safely from the corridor.

The deep tunnel option to retain the freight was estimated at \$250-300 million, an amount that had been and is still viewed as credible and acceptable by planners for the reroute from the HCRRRA Trail into the business district in Eden Prairie and Minnetonka. With the suburban spending prioritized and growing, great pressure continued on Minneapolis by suburban dominated project planners to keep costs down. Both a route through urban density that would provide transit and support development and the deep tunnel to protect the City's signature and economically invaluable Chain of Lakes were rejected on the basis of cost.

The northern portion of the shallow cut and cover tunnel was also eliminated in a closed-door meeting between Met Council Chair Adam Duininck and Mayor Betsy Hodges. In addition to the realistic expectation of incompetence and betrayal, there are many practical reasons to conclude that the improvised engineering of the shallow tunnel plan will not be feasible and the southern shallow tunnel will never be built. Time does not permit discussion in this section of the many serious issues related to the tunnel.

Nonetheless, co-locating freight operations through much of the Kenilworth Corridor in addition to building a southern cut-and-cover shallow tunnel added a significant \$130- 160 million to the SWLRT budget, making the new, co-locating version of the LPA almost as expensive as the options favored by the City through urban density. Nevertheless, the decision on the part of the Met Council and suburban members of the CMC that any delay to revisit the SWLRT alignment in Minneapolis or reroute the freight was unacceptable resulted in their choice of a costly but still unacceptable plan for a failed LPA.

Though a pivotal actor in bringing about the LPA with co-location in the Kenilworth, Met Council Chair Adam Duininck stated two months ago that SWLRT and Bottineau "didn't go down perfect routes, in my opinion, through the city of Minneapolis."¹⁷

In addition to extremely low urban utility and the danger of building and co-locating electrified LRT in proximity to unit trains carrying highly flammable ethanol in the Kenilworth Corridor, the Minneapolis Parks and Recreation Board strongly objected to the impact of SWLRT on the Chain of Lakes and Grand Rounds. In an attempt to preserve rare and historically significant urban parkland, the MPRB initiated a legal challenge to the Met Council's plan for crossing the historic Lagoon that created the Chain of Lakes, the body of water whose completion was celebrated by a boating trip by Theodore

¹⁷ Star&Tribune, 4/19/16

Wirth himself. The Park Board challenge was ended not based on legal standing, environmental or urban planning goals, but due to steps taken by the Gov. Dayton to defund \$3 million from the Minneapolis Park System unless their legal challenge was dropped.

In a thoroughly consistent performance of SWLRT planning as suburban/urban place disparity – as the Minneapolis Park Board, Met Council, and southwest suburbs well knew – SWLRT will adversely impact the Kenilworth Lagoon and the Grand Rounds in the City of Minneapolis.

Section 1.5, Purpose and Need: Limited Competitive, Reliable Transit Options for Choice Riders and Transit Dependent Populations including Reverse Commute Riders

This section includes discussion of characteristics of bus operations such as orientation toward peak direction travel and frequent stops that result in longer travel times, apparently as a justification for the expenditure of \$1.8 billion for SWLRT. However, Table 1.5-1 appears to considerably overstate transit times from Eden Prairie to Minneapolis: it should reflect the SouthWest Transit (SWT) express *bus* service offering rush-hour travel time of just 23 to 25 minutes from Eden Prairie to its first stop in the center of the CBD at 12th & Hennepin (and 4 minutes more to the next CBD stop at 2nd Avenue and 11th St.). It runs every 5 minutes at peak rush hour, compared to every 10 minutes planned for SWLRT. Furthermore, if there is demand for reverse-commute service then SW Transit could easily and efficiently provide it. This bus system, extremely popular in the suburbs, has found demand for only 7 reverse-commute trips from the Minneapolis CBD to Eden Prairie each morning.

As Metro Transit knows, because it just opened the Rapid Bus A line in St. Paul and has plans for other similar lines, an alternative to expensive fixed-rail construction is limited-stop rapid bus service, which addresses many of the shortcomings of bus service noted in the FEIS, for a fraction of the cost of SWLRT, enabling a more equitable and effective use of transit funds. The cost of constructing the A line was merely \$27 million.

This section also states that the people most affected by limited bus service are those who don't own a car. It states that [only] 14% of the households in the major activity centers along the line do not own a vehicle and then admits that Minneapolis drives up the percentage of households without a vehicle. Ironically, SWLRT would not serve the transit dependent populations of Minneapolis, as it travels into the city through sparsely populated areas – primarily park-type land (which has limited transit-oriented development potential.) This section mentions Hopkins as having a “slightly” higher average of households without a car: Hopkins has a relatively small population, so the number of households without a car is only 1,248 (Table 1.5-2). Surely this cannot be sufficient justification for the need for this Project. This section also points to the senior population in the corridor as a justification for the project. Not all seniors are transit dependent. Does the FEIS quantify the numbers of seniors who would use SWLRT, and where they would be going? Historically the vast majority of the projected ridership of SWLRT has been “home-based work” trips.

This section cites the Scoping Report as supporting the need for this Project. That report was done in 2009 based on a 2007 Alternatives Analysis. These reports should be redone to reflect dramatic changes in the Project, including co-location of freight rail and light rail in the Kenilworth Corridor, requiring the addition of a shallow tunnel, other routing changes in the western portion of the route,

and the discovery of unfavorable soil conditions. By adding freight rail to the project after the LRT alignment was selected, the Met Council improperly limited the study and choice of reasonable SWLRT routing alternatives. Such a fundamental change and substantial cost increase should warrant new review of routing alternatives.

The Project rationale of “needing to maintain a multi-modal transportation system” – i.e. including freight – was suddenly introduced with the publication of the SDEIS. This is circular reasoning: now that freight is not being relocated, leaving it in place and spending hundreds of millions along the line to improve it, is now a purpose of the project? The last in the list of four reasons given that this Project is needed is that regional/local plans call for investment in additional light rail transit projects in the region. Again, circular reasoning: the fact that the Met Council is planning for this project cannot be used, at the same time, as justification for need.

It is not even until page 4-19 that ridership is mentioned, and even then in a circumspect way. It appears that the number of rides will increase by 32,600 in 2040 for the Green line if the Project is built, and 33,600 for total rail system. This appears to be lower than previous projections of over 34,000 rides for SWLRT: why is projected ridership less than previous estimates? Also, most importantly, the forecast is that only 13,015 for 2040 of those rides are new to transit, so assuming round trips, only 6,507.5 new transit users. This is too low to justify the expenditure of \$1.8 billion.

Chapter 3: Environmental Analysis

Section 3.3: Neighborhood and Community

Table 3.3-16 (Impacts to Community Facilities, Community Character, and Community Cohesion) states:

“New physical barriers: Light rail alignment will be located adjacent to the existing Kenilworth Corridor, which is an active freight rail corridor (refer to Exhibit 2.1-5). All existing sidewalk, trail, and roadway crossings of the Kenilworth Corridor will be maintained, and, because the existing freight rail alignment is currently a physical barrier, the Project will not create a new physical barrier.” Table 3.3-16, p. 3-84

As stated on page 3-83 of the FEIS, Visual change in the Kenilworth Corridor from the Project will include “substantial level of impact on multiple representative viewpoints within this area.

Visual impacts associated with the Project include those related to vegetation removal, relocation of the existing freight rail tracks, relocation of trails, and the addition of an LRT station. The crossing of the Kenilworth Channel will require construction of new bridge structures. In the transition areas between the at-grade and below-grade segments, there will be substantial visual impacts because of the extensive tree clearing required to accommodate the Project and the visual dominance of the trenches and the concrete retaining walls they will require.”

Other sections describe the crash walls that will be constructed whenever the separation between freight rail and light rail is too narrow to be safe.

In light of these impacts, it is absurd to conclude that the Project will not create a new physical barrier, especially in comparison to slow-moving, infrequent freight trains that travel there now, or adversely affect the visual quality of the neighborhood.

The FEIS claims there will be no changes to vehicle parking or adverse effects on traffic in the vicinity of the 21st Street station, including to the historic properties in the area. This is absurd, given that the Met Council is projecting 2,000 people getting on and off the train at that station.

Section 3.11 Air Quality and Greenhouse Gases

3.11.3.3 Greenhouse Gas

Implicit in public support for LRT as a general transit concept is significant concern regarding climate change. Green House Gas (GHG) is linked to climate change, and human-made GHG is linked to several different sources, one of which is carbon based fuel. Gasoline fueled vehicles emit *tailpipe* CO₂, a GHG. Light rail, as well as electric cars, trucks, subways, or buses, do not emit *tailpipe* CO₂.

However, LRT, as well as electric cars, subways, or buses, use electricity that produces CO₂ as part of its generation process, unless it is produced via solar, wind, or water, etc. That is, CO₂ associated with electricity generation (“upstream energy emissions of raw materials energy consumption” p. 3-205 FEIS) and depends upon the fuel used to create the electricity. In Minnesota, 42% -50% of XCEL electricity is produced from coal, and the majority of the remainder is produced by nuclear power plants and from natural gas piped in from Colorado, obtained by fracking.

Energy sources vary in their political support by affiliated businesses. The political support for ethanol in Minnesota is high – by state law gasoline sold within the state must be 10% ethanol. Ethanol comes from corn, a crop grown in Minnesota and other neighboring Midwestern states. Major ethanol producers have production plants located by railways in, for example, South Dakota, and from there ethanol is shipped by rail to Minnesota.

Ethanol, a Class 3 liquid, is as volatile as oil. Within environmental circles, the actual benefit of ethanol, though deemed a renewable energy source, is highly controversial due to energy costs and GHG involved in massive corn production for ethanol, as well as the utilization of land available for plant based food crops to raise corn for ethanol. Nonetheless, the 10% ethanol gasoline requirement is state law. At the same time, state support for solar energy and independent solar energy production has been inconsistent. Conflict has arisen between XCEL Energy and independent solar producers. From an environmental point of view, overall reduction in demand is indicated for both electricity and carbon based fuels.

The above is simply to review that concern for climate change can be and has been misused on a large scale to support a variety of related businesses, while not positively impacting GHG. It is unfortunate that the same process is involved in some LRT projects. That is, support is elicited from the public on the basis of concerns about climate change, though the LRT project provides little to no benefit for precisely that metric.

SWLRT is an example of an LRT project that increases, rather than reduces, GHG. The FEIS states:

The Project operation will increase the GHG emission in the Twin Cities area by approximately 2,000 metric tons per year in 2040, compared to No Build alternative (FEIS, p 3-2004).

The actual increase in GHG, if SWLRT is constructed, is minimized in the FEIS:

“If amortized over the life of the Project, the GHG emission from this project is minimal. In addition, the Project is included in the regional RTP and TIP, which consider climate change mitigation, adaptation and resilience for sustainable development of the region. Therefore, GHG emissions from the proposed Project will not hinder the region’s emission reduction efforts.” (P. 3-205).

Though from the point of view of the Metropolitan Council’s FEIS, SWLRT will not “hinder” the region’s emission reduction efforts, in fact, if built, SWLRT will add to the GHG that requires those efforts. Without SWLRT, that is *the No Build condition*, the total annual metric tons of GHG will be 2000 tons *less than under the Build condition*. As such, under No Build, the benefits of state GHG efforts would be increased. Further, the cited “adaptation and resilience for sustainable development” considered in the regional RTP, is an extremely vague and elastic phrase, capable of interpretation as desired by a variety of interests not focused on providing the best environmentally, equitably, or cost-effective transit. These interests seem already to have been over represented in the planning of SWLRT.

In terms of GHG, it will be a net benefit to the State of Minnesota not to build SWLRT (FEIS Table 3.11-3). That is, per the FEIS, Southwest LRT adds to the annual total of GHG.

Put another way, even with the projected, very minimal 6500 cars off the road noted in the FEIS, in 2040, *there would be a net GREATER increase of GHG annually with SWLRT than if the 6500 cars stayed on the road.*

From the point of view of GHG, it is better not to build SWLRT and to shift to less GHG intensive modes of transportation. Though not uniformly pursued by transportation planners within the Metro, car pools lanes are an additional means to reduce single occupancy vehicle usage, and are utilized on

those freeways that have them. Carpooling means more than one passenger per vehicle and is a more GHG efficient use of vehicle transport than single passenger vehicle use.

It is noteworthy given the expressed dissatisfaction with congestion and the commute time periods in the Southwest suburbs, that carpooling is not more in evidence, even without a car pool lane, since it is both environmentally beneficial and shares the burden of both driving and parking among driver and passenger in each car.

“The proposed project construction may require removal of a limited number of trees and disturb some vegetated areas along the rail corridor. Trees and vegetation sequester CO₂ through the process of photosynthesis and store the gas as carbon in their biomass. When trees and vegetation are removed, some of their stored carbon may be released as CO₂ into the atmosphere, although the quantity and rate of CO₂ that is emitted may vary, depending on the amount of removal and how the biomass would be handled afterwards. Because the number of trees and the area of vegetation disturbance would be limited during Project construction, the effects on the sequestered CO₂ or the loss of carbon stored in the removed trees or vegetation would be minimal and are not further analyzed.” (FEIS p 3-204)

It is erroneous to describe tree removal as a possibility that SWLRT “may require” and as “limited.” Significant tree removal has already been identified as part of the co-location construction process for SWLRT in the Kenilworth Corridor. As such, this type of “analysis” makes a mockery of the environmental regulations with which this FEIS is purportedly complying, reducing the EIS process, intended to protect the environment that is being considered for an LRT construction project, to simply another piece of paperwork.

Previously, SPO staff minimized the value of the trees that would be removed by referring to them as mostly Buckthorn. Informal citizen survey found that the majority of trees were not Buckthorn. In terms of being CO₂ sequesters, referred to as ‘sinks’ in the world of GHG reduction, trees are “sinks,” regardless of the tree species. That is, trees remove CO₂ from the atmosphere. In urban areas, they are even more important, as they mitigate against the heat increasing effects of asphalt and concrete. The impact of tree loss is not simply the release of carbon caused by tree removal, but the loss of tree “sinks” in the urban environment for ongoing CO₂ sequestration.

3.11.3.2 Mobile Source Air Toxics Analysis

“Project operations will have the potential effect of increasing MSAT emissions in the vicinity of nearby homes, schools, and businesses; therefore, under the Project there may be localized areas where ambient concentrations of MSATs will be higher than under the No Build Alternative. The localized increases in MSAT emissions will likely occur near the proposed light rail stations, the park-and-ride lots, and OMF; however, as discussed in the Technical Memorandum, the magnitude and the duration of these potential effects cannot be reliably quantified due to incomplete or unavailable

information in forecasting project-specific health impacts. In addition, even if these increases do occur, they will be substantially reduced in the future due to implementation of EPA's vehicle and fuel regulations." (FEIS p 3-203)

In terms of air toxics, that which is most well known as 'smog', such toxics will increase due to congestion around SWLRT stations and Park and Rides. Not included in the FEIS analysis is the increased congestion associated with the frequent LRT crossings of urban roadways. Increased congestion at intersections has already occurred for both the Hiawatha and Central Corridor LRTs. To omit a known source of increased air toxics associated with LRT routes is both poor science and poor environmental analysis. Congestion and therefore air toxics will occur and will increase at roadways impacted by the SWLRT route. Further, SWLRT will add to air toxics at precisely those locations where people will congregate: at LRT stations, at Park and Rides, and at any planned TOD in the vicinity of those areas. Mobile Source Air Toxics are associated with the increase in asthma in urban areas, a significant public health concern.

Per the FEIS, this should not be a concern, as federal regulations regarding vehicle emissions, not SWLRT, will continue to reduce air toxics in the future.

3.12.1 Noise Regulatory Context and Methodology

The erroneous definition in the SDEIS of the baseline condition of noise levels in the corridor is not altered or corrected in the FEIS. In the SDEIS, the baseline condition of noise levels in the corridor included the freight line, though its placement in the corridor was on a temporary basis. The freight placement was changed to a permanent basis by the Metropolitan Council when it decided not to move the freight out of the corridor.

This decision was made by the Metropolitan Council, yet framed as though it was "not possible" to move the freight, though the independent freight rail expert hired by the Metropolitan Council to evaluate moving the freight determined that it was, in fact, possible to move the freight, and possible to do so safely.

Again, to review factual history rather than Metropolitan Council rewrite, moving the freight was the condition upon which the City of Minneapolis accepted the route through the corridor. Several years later, after the City of Minneapolis' agreement has been obtained, rather than moving the freight, its location through a residential neighborhood has been made permanent, and over a hundred million dollars in public transit funds has now been allocated, as part of the proposed SWLRT project cost, to enhancing the rail track, for the benefit of private railroad companies using the corridor.

For the clear reasons stated above, the freight noise is now a permanent condition of the corridor only because the project planners decided it would not be moved, and, further, dedicated additional transit monies to its infrastructure. As such, permanent freight rail noise is a new feature of the

corridor, caused by the SWLRT project plan, and should not be included in the baseline noise condition when measuring noise impacts of the proposed project.

3.12.1.2 Noise Criteria

“FTA noise criteria are based on the land use category of the sensitive receptor:

Land Use Category 1 Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet.

Land Use Category 2 Residences and buildings where people normally sleep.

Land Use Category 3 Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, theaters. Places for meditation or study ...campgrounds and recreational facilities can also be considered to be in this category. Certain historical sites and parks are also included.” (FEIS p 3-208)

The determination of impact is a combination of 2 factors: The Land Use Category, and the Environmental Noise assessment. “The standards include both daytime and nighttime limits for three different categories of land use or noise area classification” (FEIS, p 3 -210). In other words, depending on the Land Use Category, the same Environmental Noise level may be rated as no impact, moderate impact, or severe impact.

“As shown in Table 3.12-6, the Project will result in one moderate noise impact at the Kenilworth Channel. The Kenilworth Channel was assessed as a Category 3 land use, which represents parks and other similar uses. The lagoon bank at the Kenilworth Channel was assessed as a Category 1 land use, which represents locations with very high sensitivity to noise.” (FEIS p 3-219)

In spite of a classic depiction of serenity being a kayak gliding on a quiet lake – such a photo of a kayak in the Kenilworth lagoon recently was published in the Minneapolis Star and Tribune --the lagoon has been classified as Category 3 land use. As such, the impact of noise from 12 LRT trains per hour overhead are put in a lower category than the impact of the same noise on a “sensitive receptor” sitting on the lagoon banks, looking at the same Kayak floating in the water. Since the “sensitive receptor” on the banks is at a further distance from the LRT trains overhead than the Kayak in the lagoon, the noise impact, though reaching a “sensitive receptor” in a location designated as a Category 1 land use and having a very high sensitivity to noise, is rated as having no impact whatsoever, and therefore not requiring mitigation.

Remarkably, the Project Noise Level impact for the Lagoon Bank, 54 Leq (dBA) is exactly the same as the Existing Noise Level Leq (dBA), 54, for the Lagoon Bank. Per the FEIS, the addition of 12 LRT trains

per hour overhead does not add any additional noise to the area designated as a location with very high sensitivity to noise. While the “sensitive receptor” in the Kayak on the lagoon, though even closer to trains crossing the lagoon overhead, is deemed only to suffer a moderate impact, as the lagoon location is not deemed an area with a very sensitivity to noise. And therefore, the threshold to reach criteria for severe noise impact is higher, and not met.

Mis-categorizing the Lagoon as an active recreational area, and then using the misleading category to downgrade impacts to the Lagoon as moderate, does not fulfill the purpose of EIS regulations to protect environmental areas.

In spite of public testimony as to the nature of the recreational use of the Lagoon, and that the waterways of Lake of the Isles permit only non-mechanized watercraft, the FEIS maintains the category 3 designation for the Lagoon and defines the resulting impact on the park as moderate.

Further, when sound travels over water, the reverse is closer to the reality of impact on “sensitive receptors.” From the point of view of the science of sound on water, sound travels further, and is amplified, over water. That is, sound will be experienced as louder on the Lagoon by the “sensitive receptors” in kayaks and canoes.

On calm lakes, bays, creeks, or in restricted visibility, sound carries exceptionally well. If ever went camping around a lake, knowledgeable campers often would tell you to keep the noise down at night, since cool air, and a flat-water surface amplified the sound you were making, so that everyone on the lake heard you.

According to Howard Shaw, Ph. D. and Cheryl Jackson Hall, Ph. D., "Experience suggests that sound, like light, travels (more or less) in straight lines. However, to the contrary, sound actually tends to curve downwards over a lake's surface.

Sound traveling along straight lines would disperse quickly into the space above the lake. Instead, sound that "should" rise up and be lost typically curves back down to the lake/ground level. Therefore, it sounds louder than it "should." This is a well-known and easily demonstrated observation, measurable out there on real lakes (American Boating Association, 2016).

FEIS Table 3.12-7 Summary of Mitigation Measures and Residual Impacts for Residential and Institutional Locations

From the FEIS Table 3.12-7:

Minnetonka: Claremont Apartments Noise Impacts: Moderate Impacts without Mitigation
Noise Level Increase (dB)a 3.7 Mitigation Measure: 8 foot high noise barrier extending 1,800 feet.

Hopkins: Monroe Avenue Noise Impacts: Moderate Impacts without Mitigation
Noise Level Increase (dB)a 3.2 Mitigation Measure: 3 foot high parapet barrier extending 500 feet on elevated structure over Excelsior Boulevard

Minneapolis: Kenilworth Channel Noise Impacts: Moderate Impacts without Mitigation
Noise level Increase (dBa) 7.2 Mitigation Measure: 2 foot high parapet wall and rail dampers, 300 feet.

To mitigate the “moderate impact” of 12 trains an hour over the lagoon, the FEIS and SPO has determined that a 2 foot high parapet wall is sufficient to mitigate a 7.2 Noise Level increase in urban parkland that is a rare and unique resource within urban borders. Given the need for areas of tranquility in urban settings, increasingly validated by new research on the impact of noise on health and cognitive functioning, it would seem that every effort, including an 8 foot high sound wall to effectively wall off LRT noise from the Lagoon, would be made to mitigate the noise impacts on this sensitive environmental area. However, it be that any parapet wall higher than 2 feet would block the view of the Lagoon by suburban SWLRT passengers commuting into the city.

The impact of noise in urban areas is coming under increasing scrutiny by urban planners. Rather than the old-fashioned belief that the urban environment is simply one of skyscrapers and industrial areas that urban dwellers are and should be able to adapt to, it is becoming more apparent that human beings need areas of quiet to function adequately, for learning, sustained cognition, and for regular physiological restoration in a built environment. Though receiving renewed attention by urban planners now, this fundamental understanding was the impetus that spurred the foundation of the Minneapolis Park System. Community leaders who founded the Minneapolis Park System as a separate entity from Minneapolis City Government, witnessed firsthand the destructive impact of industrialization on neighborhoods in places such as Chicago, and did not want the same degradation of quality of life to be created in Minneapolis.

Parkland is always threatened by development, and urban parkland exponentially more so. Yet urban residents are faced with higher and more constant levels of noise than their suburban counterparts, from commuter traffic, trains, airports, and industry, and consequently have greater needs for the quiet and green space provided by urban parks.

Researchers report in the Southern Medical Journal that sustained growth in highway, rail, and air traffic are especially concerning, in a way that is analogous to second-hand smoke, second-hand noise is an unwanted airborne pollutant produced by others; it is imposed on us without our consent, often against our wills, and at times, places, and volumes over which we have no control. Researchers found that it took only 30dB to disturb sleep and cardiovascular

effects are seen after exposure to 65dB (CityLab 2012, Benfield, “Just How Bad is Noise Pollution for Our Health?”).

Further, noise is correlated with public health risks:

Laboratory studies carried out on humans have shown that the exposure to noise affects the autonomous nervous system and the endocrine system. Heart rate, blood pressure, cardiac output, blood flow in peripheral blood vessels and stress hormones (including epinephrine, nor-epinephrine, cortisol) are affected. At moderate environmental noise levels such acute reactions are found, particularly, when the noise interferes with activities of the individuals (e.g. concentration, communication, relaxation). Noise-induced instantaneous autonomic responses do not only occur in waking hours, but also in sleeping subjects even when they report not being disturbed by the noise (“Cardiovascular Effects of Noise on Man,” Wolfgang Babisch, presented at the 2015 Acoustical Society of America annual meeting).

Even moderate noise impacts increase stress hormones, not only in adults, either when awake or sleeping, but children as well. When an old airport closed near a school and opened at a distant site, the students near the former airport site demonstrated improved tests on memory and reading, while students near the new airport site showed a decline in scores after the new airport opened (Weiss, cited in CityLab 2012, op cit).

3.15.3.1: Electromagnetic Fields and Electromagnetic Interference

The SWLRT FEIS, Section 3.15.3, does consider the effects of electromagnetic fields (EMFs) on public utilities, but the effects of EMF on riders and residents is cursory and incomplete. Not addressed in the FEIS is the fact that EMFs created by pantographic/catenary power lines have been associated with detrimental impacts on human health. Pantographs/catenary lines will run close to residences along the SWLRT route. Some studies link EMF exposure with childhood leukemia (Ahlbom, IC, Cardis E, Green A, et al. Review of epidemiological literature on EMF and Health Environmental Health Perspectives, 2001; 109 Suppl 6:911-933) and while controversial, there is a duty to protect members of the public (including pregnant women, infants, the unborn, children and the infirm) from short-term and long-term exposure to EMF. Further analysis is needed.

3.17: Cumulative Impacts

We don't see evidence that safety concerns raised by co-location are adequately understood or addressed. LRT Done Right fully supports the comments submitted by Citizen's Acting for Rail Safety - Twin Cities.

Chapter 7: Financial Analysis

Table 7.1-3 sets forth the various sources of funds for the local share of the Project. Language should be added to reflect that the 2016 Legislature adjourned sine die without making any provision for the remaining local funding needed for the Project. The missing funds are part of the \$165 million listed as the State's contribution. The Met Council has been able to obtain some of the funds the State has decided not to appropriate so far (and make up for the \$30 million the legislature actually rescinded last year) by taking funds from a reserve fund and making it up with some MVST revenue not intended for SWLRT.

The \$165 million listed for HCRRA's contribution does not include the value of the land that HCRRA is transferring to Hennepin County who will donate it to the Project. This should be clarified.

The Met Council should disclose who will be financially responsible for the cost of any derailment or other incident arising from the close proximity of freight rail and light rail, and include that cost as a Project cost.

The public should be informed that according to Table 7.2-2, both the State AND CTIB are shown as having to increase their Metro Transit subsidies by \$18.93 in 2040 if the Project is built compared to the No Build scenario. Please explain these figures, compared to the \$20.8 million total operating cost of SWLRT shown on the New Starts rating summary description from November, 2015.

The public should also be aware that Table 7.2-2 shows an increase in the annual subsidy needed for SW Transit in the amount of \$14.88 million in 2040, without having an identified source to make up for that loss. Please disclose how many SW Transit Express bus riders the Met Council is projecting will change to SWLRT, and how much of the additional subsidy noted above is the result of the commitment to maintain SW Transit, with reduced ridership.

Please explain to the public what is meant by this statement in section 7.3: "Across all scenarios, it is noteworthy that the financial structure of the Metropolitan Council Transportation Division and the Southwest LRT Project are dynamically resilient."



LIBERTY
PROPERTY
TRUST

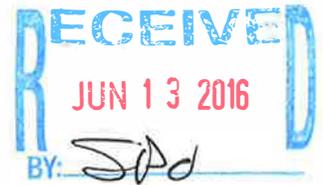
10400 Viking Drive, Suite 130 | Eden Prairie, MN 55344

Ms. Nani Jacobson
Assistant Director, Environmental & Agreements
Metro Transit – SWLRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426





LIBERTY
PROPERTY
TRUST



June 10, 2016

Ms. Nani Jacobson
Assistant Director, Environmental & Agreements
Metro Transit—SWLRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426

Via Email & U.S. Mail

RE: FDEIS Comments – Liberty Properties, Hopkins and Eden Prairie, MN

Dear Ms. Jacobson;

Liberty Property Trust is the owner of a number of properties which will be impacted by the SWLRT corridor. These Properties include:

1515 Sixth Street South, Hopkins
1600 Fifth Street South, Hopkins
10301 70th Street West, Eden Prairie
10321 70th Street West, Eden Prairie
10333 70th Street West, Eden Prairie
10349 70th Street West, Eden Prairie
6901 Flying Cloud Drive, Eden Prairie
7075 Flying Cloud Drive, Eden Prairie
7246 Flying Cloud Drive, Eden Prairie
7400 Flying Cloud Drive, Eden Prairie

We have previously made comments in response to the DEIS regarding our Eden Prairie and Hopkins sites and in response to the SDEIS regarding the anticipated adverse impacts of the proposed OMF site. For your convenience, these earlier letters are attached.

In review of the FEIS we continue to have significant concerns regarding the issues noted in our previous letters and, in addition, we make the following comments based on information provided by 90% plans and the FEIS.

HOPKINS SITE

OMF Site 9A Selection Evaluation

We continue to have concerns regarding the method used for evaluation of the SDEIS sites. Sixteen environmental resource categories were not considered in the OMF selection criteria. We are specifically concerned regarding visual quality, open areas and noise. We own several properties in this area and we are committed to minimizing adverse impacts to the businesses, employees, and residents in this area. In particular, we are concerned about noise that will be

Nani Jacobson
June 10, 2016
Page 2

generated by the OMF and about the possibility of environmental releases from construction near the Hopkins landfill. Can you tell us why these concerns were not addressed?

Total Taking of the Liberty Properties in Hopkins

We need clarification on the taking of our properties at the OMF site. The FEIS notes that our property at 1515 Sixth Street South is a total take, but the 90% plans shows it as a partial take and will become a remnant lot. What is the Council's intent with respect to the remnant lot?

It is evident that relocation of certain tenants in these properties will require extensive planning and cannot be done quickly. It is important that our tenants' business operations not be disrupted by the project. It is also important that the tenants be treated fairly and fully compensated for their relocation costs. How will relocation and relocation compensation be handled for our tenants? What is the expected timing for completing relocation of these tenants?

EDEN PRAIRIE SITES AT THE GOLDEN TRIANGLE STATION

Our DEIS comments were submitted in December of 2012. These earlier issues continue to be of concern. Several new concerns have arisen that must be addressed.

Remnant Parcels

7400 Flying Cloud Drive – The property at 7400 Flying Cloud Drive is being bisected by the final alignment creating two remnant parcels that would become non-conforming to city codes and undevelopable. The alignment shows the tracks being bridged across the site, and the addition of a traction power substation on the site. This alignment will destroy this property for commercial use.

7246 Flying Cloud Drive – The property at 7246 Flying Cloud Drive will lose all of the land on the east side of the site except a few feet of road frontage. The limited road frontage is situated at a curve in the road thus restricting acceptable access. The taking will leave a remnant non-conforming parcel with no opportunity for commercial use.

Liberty Plaza, Outlot A – Outlot A has been changed from a full take to a partial take. The remnant piece to be left or sold back to Liberty Property Trust has no road frontage and constitutes mostly wetland, leaving no effective developable area and no commercial use.

Liberty Plaza, Outlot B – Outlot B will be bisected leaving two remnant parcels, again creating non-conforming undevelopable lots. The LRT alignment in this area calls for extensive grading and retaining walls. The impact of the wall and placement of the tracks in association with the loss of views, additional noise impacts, and vibration impacts of the building tenants needs to be further reviewed.

Partial Takings

10301 70th Street West – The taking of land at 10301 70th Street West may create non-conformance conditions to city setback standards for building and parking lots and impair development opportunities. Please clarify the Council’s investigation of this concern.

7075 Flying Cloud Drive – The taking of land at 7075 Flying Cloud Drive will reduce parking spaces due to the placement of a traction power substation and may create non-conformance to building setback standards at the southwest corner of the building. It will adversely impact use of the property. How will the Council address these impacts?

We have raised our concern regarding the noise and vibration impact of the tracks so close to the southwest corner of the building at 7075 Flying Cloud Drive. As noted above, the taking of land may be creating a setback issue due to the close proximity of the rail. The proximity of the tracks and high levels of noise from train and crossing operations will be disruptive to the office tenants of that building as the part of the building closest to the tracks contains company offices. In particular, the track crossing located directly in front of this property will produce severe noise and vibration impacts. This track crossing should be moved to a different location without development where it will not impact 7075 and other nearby Liberty buildings. Why is it necessary to locate the track crossing at its present location adjacent to an intensive commercial use? Does the Council recognize how noisy this track crossing will be?

Liberty Plaza: Wetland/Road Access

We have been recently informed that in building the Golden Triangle Station SWLRT will be taking the upland adjacent to an existing wetland east of the station. We currently have an access drive in this upland area that will service our approved development project, Liberty Plaza, a major office project. The existing access road was required by the City as a condition of the development approval process. The municipal approvals remain current and in force. However, with the taking of the upland there is no room for the access drive without impacting the adjacent wetland. Why is it necessary to bump Liberty from high land onto wetland? Why doesn’t SWLRT mitigate the wetland loss and either build on the mitigated land or provide mitigated land to Liberty? What guarantees does Liberty have that the road will be permitted in a different location to serve Liberty Plaza? The Project Office informed us that they will not provide a replacement access as part of this project due to wetland impacts. This access is imperative for Liberty to conform to the City’s approvals for the site. Why has no provision been made to provide necessary access to this property?

The proposed LRT alignment may also impact wetland and buffer areas that Liberty has already made long term commitments to manage and maintain. If there is any overlap in responsibility due to the LRT development Liberty would need to be released from their current commitments on any of the wetland or buffer areas.

Traction Power Substation

Since the DEIS the Project Office has located a large traction power substation in the parking lot at 7075 Flying Cloud Drive near a 70th Street entrance. The substation must be placed as not to interfere with visibility of cars or trucks entering or exiting the parking lot and must be designed or landscaped appropriately for the site. We understand that the traction power substation was moved onto our site to avoid locating it on a public trail west of the rail line. Locating the traction station on the 7075 property will adversely impact that property and interfere with its use. We understand that the City of Eden Prairie SDEIS comments also reflect the need to appropriately locate and screen these power stations. Why was no effort made to place the traction station at a location that would not impact Liberty? What screening will be provided?

In addition, it appears that the traction power substations will cause the loss of parking. Please confirm the number of parking spaces that will be lost.

70th Street Impacts and Pedestrian Trail

Liberty Property Trust with the City of Eden Prairie recently improved 70th Street near the station location. This was done at significant expense to Liberty Property Trust in order to complete the city project in coordination with ongoing tenant leasing. The FEIS notes several improvements and changes to 70th Street and an adjacent pedestrian trail. These changes must be done in coordination with Liberty to ensure that they do not negatively impact our tenants or future development. Any such change must take in consideration the truck circulation needs of our sites, the locations of the loading docks and overall circulation patterns.

Vibration

We have notified SWLRT about properties currently tenanted by Savillex, 3M, Bluestem, Best Buy as well as other Liberty tenants. These properties are well suited for high-tech uses. They will be artificially restricted and their value diminished if vibration from the operation of SWLRT is not reduced. As noted above, the presence of a track crossing near these buildings significantly increases the presence of ground carried vibration and will interfere with the operation of clean rooms, computer-assisted machining equipment, and other sensitive high-tech devices. This track crossing should be moved to a location where the noise and vibration it generates will have no impact on use of the Liberty properties. Additionally, we are aware from other LRT projects that more effective protection against vibration is available in the commercial market than is being used for the tracks adjacent to the developed Liberty properties. Why aren't such methods and devices being used for the Liberty properties?

Nani Jacobson
June 10, 2016
Page 5

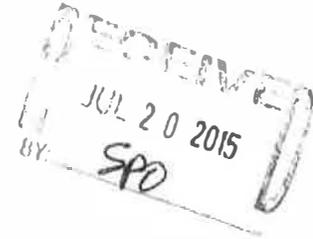
SUMMARY

Liberty is concerned that the FEIS fails to address the full impacts to its properties. Liberty urges SWLRT to (1) take all steps possible to maintain necessary commercial access to its properties, particularly the Liberty Plaza development; (2) remove sources of noise and vibration – in particular the track crossing – that will reduce the utility of its properties; and (3) to use the best available mitigation devices to reduce ground borne vibration and noise that will adversely impact the current and future best use of its properties.

Sincerely,

A handwritten signature in blue ink that reads "Richard A. Weiblen". The signature is written in a cursive style with a large initial 'R'.

Richard A. Weiblen
Vice President Development



July 17, 2015

Nani Jacobson
 Assistant Director, Environmental & Agreements
 Metro Transit – SWLRT Project Office
 6465 Wayzata Boulevard, Suite 500
 St. Louis Park, MN 55426

Re: Comments of Liberty Property Trust Regarding OMF to be Located at Site 9A

Dear Ms. Jacobson:

Liberty Property Trust is the owner of the developed industrial properties at 1515 Sixth Street South, and 1600 Fifth Street South, Hopkins Minnesota, which will be taken for the proposed Operations and Maintenance Facility (OMF), Site 9A, Hopkins K-Tel East. As a property owner that will suffer the loss of two important industrial investment properties, we are deeply concerned about how this taking will impact us. We have reviewed the SDEIS and have the following comments on that document.

1. OMF Site 9A Selection Evaluation:

Our review revealed that Site 9A was not part of the original DEIS review and was only added as part of the SDEIS process and not subject to the same site selection evaluation that was done during the DEIS review. We understand that as part of the SDEIS analysis for a preferred OMF site a four step process was conducted that initially identified approximately 30 sites and through each step dismissed potential sites until site 9A was the final selection.

It appears to us that SDEIS failed to fully or properly evaluate the OMF site (identified in the SDEIS as site 9A) against comparable sites that were also being considered. We believe that additional information should be provided that will explain why site 9A was preferred over a number of others.

2. A Total Taking of the Liberty Property for OMF at Site 9A is Required

The SDEIS under Section 3.3.1.2 Acquisitions and Displacement indicates that there will be a full taking of both our industrial properties within the site 9A footprint. Liberty Property Trust concurs that any taking must be a full taking of each property.

The SDEIS notes that land which is acquired for the SW/LRT Project but not fully used for the OMF may be considered a remnant parcel and sold. Liberty Property Trust has no interest in buying back a remnant piece and there should be no expectation that such remnants will have any



LIBERTY
PROPERTY
TRUST

material economic value to Liberty. Liberty has previously conveyed this same information to representatives of the Met Council.

Liberty Property Trust has been an active participant in the public process and planning of the SWLRT. We are supportive of the project but recognize that a number of our properties will be taken if the project goes forward. Our concerns regarding the SDEIS reflect our past comments on the DEIS regarding our properties in Hopkins, Minnetonka and Eden Prairie, adjacent the Golden Triangle Station. Our earlier DEIS comments are attached for your convenience.

Finally, if the project goes forward, it is essential that our industrial tenants are fully compensated for their relocation costs and are given sufficient lead time to plan and execute a complex industrial plant relocation.

Liberty Property Trust

Richard Weiblen
Vice President, Development.

LIBERTY

PROPERTY TRUST

December 7, 2012

Hennepin County
Housing, Community Works & Transit
701 Fourth Avenue South, Suite 400
Minneapolis, MN 55415

**RE: Comments on the Southwest Transitway
Draft Environmental Impact Statement (DEIS)**

To Whom It May Concern:

Liberty Property Limited Partnership (Liberty) owns, leases, and manages multiple properties adjacent to the proposed Southwest Transitway LRT corridor as it passes through Segment 3 in Eden Prairie and Minnetonka. The subject property addresses are:

5400 - 5550 Feltl Road, Minnetonka
10301 – 10399 West 70th Street, Eden Prairie
6901 Flying Cloud Drive, Eden Prairie
7075 Flying Cloud Drive, Eden Prairie
7246 Flying Cloud Drive, Eden Prairie
7400 Flying Cloud Drive, Eden Prairie

Liberty has completed a review of the DEIS and offers the following comments for consideration:

1. Liberty generally supports the alignment option described in Section 2.3.3 Build Alternatives as Alternative 3A. This alternative includes Segment 3 with the proposed LRT alignment adjacent to, or through several of our properties noted above. While there will be impacts to these properties in order to implement transit that will need to be recognized and analyzed, we agree with the City of Eden Prairie that the 3A alignment offers the most potential to overcome transportation deficiencies in the Golden Triangle area.
2. Chapter 2 – Alternatives includes a description of the proposed Golden Triangle Station in Section 2.3.4. The station location adjoins three of the multiple properties listed above, and includes a proposed park and ride facility described as containing 100 surface parking spaces. There are a number of concerns related to this station that are not fully analyzed in the Conceptual Engineering Layout included with Appendix F of the DEIS. Concerns include proposed location, proposed access, proposed grades, and lack of coordination with existing conditions. The document indicates that a number of these issues will be more fully analyzed in the Preliminary Engineering Design Phase leading up to preparation of the Final EIS; we believe that additional detail is essential to avoid unnecessary impacts and project costs as the design evolves.

10400 VIKING DRIVE • SUITE 130 • EDEN PRAIRIE, MN 55344 • (952) 947-1100 • FAX: (952) 947-0800

Enhancing people's lives through extraordinary work environments
www.libertyproperty.com • NYSE: LRY

Florida • Illinois • Maryland • Michigan • Minnesota • New Jersey • North Carolina • Pennsylvania • South Carolina • Texas • Virginia • Wisconsin • United Kingdom

3. Section 3.1.2 discusses Existing and Anticipated Land Use at a Macro, or policy level and misses some conditions along the corridor where prior land use planning and site-specific project approvals further define what landowners expect to occur on their properties. Future plans are addressed partially in Section 9.4 – Reasonably Foreseeable Future Actions, but the descriptions contained there don't include all of the vested development rights that have accrued to our properties at 6901 Flying Cloud Drive and 7075 Flying Cloud Drive which are subject to an approved PUD Development Plan. The future potential of 6901 and 7075 Flying Cloud drive is partially described in Table 9.4-1, but the approvals include more development than is described as an identifiable Future Action. The property at 7075 Flying Cloud Drive currently contains approximately 345,000 SF of office space currently occupied by SuperValu, Inc., and is approved for additional expansion on the site. As part of the same master planning effort, Liberty began construction of a 128,000 SF office building at 6901 Flying Cloud Drive that included several completed or ongoing commitments that could be affected by the LRT alignment and by the proposed Golden Triangle Station and associated Park and Ride Facility. Issues related to the development potential of these properties include:

- Liberty's PUD Master Plan illustrates the extension of West 70th Street from Flying Cloud Drive east to the current terminus of West 70th Street just to the east of the proposed LRT alignment. The configuration of the at-grade crossing and the vertical alignment of the LRT lines need to be coordinated with the proposed alignment of West 70th Street. This is critical to Liberty in order to maintain a major access to structured parking for 6901 Flying Cloud Drive, to maintain the existing parking and service dock area for 7075 Flying Cloud Drive, and to conform to planned wetland impacts and mitigation that have been approved and permitted by the City and by the Nine-Mile-Creek Watershed District (NMCWD).
- The proposed LRT alignment may impact wetland and buffer areas that Liberty has already made a long-term commitment to manage and maintain. If there is an overlap in responsibility due to LRT development, Liberty would need to be released from their current commitments on any of the wetland or buffer areas subjected to further alterations.
- As part of providing for the full level of development described above, Liberty funded improvements to a section of Flying Cloud Drive to provide the lane geometry needed to allow for the future intersection at West 70th Street with an intersection that would operate acceptably at full development with forecast background traffic growth. More detailed analysis of access and travel patterns due to the Golden Triangle Station and Park and Ride should be completed to determine possible impacts on potential redevelopment.
- As part of its PUD master planning Liberty retained an existing surface parking area adjacent to 70th Street that could function as a Park and Ride facility. The area currently contains 102 parking spaces with direct access to West 70th Street. However, this area was not considered in the Conceptual Engineering layout which was the basis for the DEIS. We would like to see this area analyzed as an option to the location for the Park and Ride facility as identified in the Conceptual Layout.

December 3, 2012

Page 3

- We agree with the City of Eden Prairie that the size of the facility must be balanced with the parking demand to assure adequate parking supply for Park and Ride users to avoid potential overflow issues that would impact the neighboring properties.

We also believe these issues should be addressed in the forthcoming Preliminary Engineering and any related impacts and mitigation should be analyzed in the Final EIS.

4. The property at 7400 Flying Cloud Drive has an approved parking expansion plan that would allow for greater flexibility of uses for the building. The proposed alignment in Segment 3 crosses this property and impacts areas where expanded parking has been approved, and also has significant impacts on existing parking. Ways to reduce the impact to existing and proposed parking on this parcel should be more fully explored in the Preliminary Engineering and Final EIS.
5. Section 3.3.2 – Methodology describes how the project limits were defined for analysis in the DEIS. As noted elsewhere in our comments, we feel that the actual influence or impact area may expand beyond the project limits depicted in the Conceptual Layout included in Appendix F of the DEIS. As an affected property owner we expect that the layout will be further refined in the Preliminary Engineering stage, and request that the specific issues outlined in our DEIS comments are fully designed and analyzed for the Final EIS.
6. Section 4.2 – Water Resources describes in general terms areas where depth to groundwater and surface water bodies might be impacted by the need for dewatering during construction. The areas near all of the Liberty properties along Flying Cloud Drive contain wetlands that could be affected by construction dewatering or by changes in natural drainage patterns where the LRT alignment passes through undeveloped open space. As described above, Liberty already has long-term commitments to ensure the viability of certain wetlands that is a part of our Development Agreement with the City of Eden Prairie and an obligation of permitting required for necessary wetland alteration. We believe that a more thorough analysis of potential impacts on surface water resources from construction phase dewatering and from permanent changes to existing drainage patterns that are tributary to water bodies on Liberty properties should be included in the Final EIS. Mitigation, if necessary, should include the appropriate assignment of responsibility for impacts that occur in areas where Liberty already has contractual maintenance and conservation obligations.
7. The traffic analysis completed for Chapter 6 went through a scoping process that limited the number of existing intersections for which detailed operational analysis was completed. We note that the intersections near the proposed at-grade crossing of the LRT alignment with Valley View Road in the vicinity of its intersection with Flying Cloud Drive all are forecast to have marginal Levels of Service for the 2018 and 2030 forecast periods. We join the City of Eden Prairie in support of a grade-separated crossing at this location to ensure that there is adequate intersection capacity to feed Flying Cloud Drive from the south end at Valley View Road as well as the north end at Shady Oak Road. As noted earlier, a more wide-spread analysis of travel patterns and potential impacts from the

December 3, 2012

Page 4

proposed Golden Triangle Park and Ride facility is warranted to ensure that Liberty's development potential for its Flying Cloud Drive properties is maintained.

8. The intersection of Feltl Road with Smetana Lane at the north end of the Opus II development is proposed to be realigned to coordinate with the crossing of the LRT alignment at Smetana Lane. This intersection was apparently scoped out of detailed analysis by virtue of having daily traffic volumes below 5000 vehicles per day. The intersection is immediately adjacent to our property at 5450 Feltl Road. We would like to see a more detailed operational analysis of this intersection to confirm that the proposed change does not compromise accessibility to the property from Smetana Lane. Also, the realignment of the "T" intersection could require significant grading and tree removal at the north end of the property, which should be further analyzed for the Final EIS.
9. The Technical Memorandum dated March 21, 2012 that is contained in Appendix H describes the traffic analysis completed for the DEIS. In the introduction it states that "*Each station and the impacts on traffic operations and circulation will be analyzed in detail with the Final Environmental Impact Statement (FEIS)*". Liberty wishes to be involved with the Hennepin County design team and the City of Eden Prairie in determining the scope and extent of analysis of traffic impacts from the proposed Golden Triangle Station.
10. Referring to the Conceptual Engineering Layout for Segment 3, Sheet 9 of 15, as illustrated in Appendix F, we offer the following comments on the alignment and grading as it relates to our property at 6901 Flying Cloud Drive:
 - The alignment crosses a wetland at the northwest corner of this property that provides critical storm water detention volume identified in our PUD drainage design. The volume eliminated by filling for the Transitway needs to be provided in a fashion that can be utilized by Liberty.
 - The proposed grade for the alignment across the east end of this property occurs roughly eight feet above existing grade. The embankment required could affect the access to the planned parking ramp supporting the 128,000 square-foot office that is under construction at the site by reducing the space available between the Transitway and wetland and buffer areas already subject to long-term maintenance agreements and conservation easements. This access is critical as there are only two available access locations to serve this office development.
 - The embankment required for the proposed grade of the Transitway also reduces the amount of the existing parking area at the east end of this property that could be utilized as surface parking for the planned Park and Ride component of the Golden Triangle Station. If the Transitway were at, or close to existing grade, nearly all of the 100 planned Park and Ride spaces could be provided in this existing, paved parking area.
11. Referring to the Conceptual Engineering Layout for Segment 3, Sheets 8 and 9 of 15, as illustrated in Appendix F, we offer the following comments on the alignment and grading as it relates to our properties at 7075 Flying Cloud Drive and 10301 70th Street West:

- The proposed alignment for 70th Street was carefully considered to maximize development area south of the proposed roadway while meeting obligations for wetland protection and buffer requirements to the north of the roadway. The crossing elevation of the transit line at 70th Street as depicted in the Conceptual Engineering requires over ten feet of fill at the crossing point, and assumes grade transitions in the roadway profile that would need to extend several hundred feet in either direction from the crossing point, possibly requiring further loss of wetland and wetland buffer if the road stays within its planned corridor, or resulting in the loss of useable lot area if the roadway needs to shift south so that fill for the roadway can be placed without affecting the wetland or associated buffers.
 - Further, ten feet of fill at the crossing point would eliminate existing access to the truck docks, service area, and parking adjacent to the northeast corner of the existing structure occupied by SuperValu, Inc. If this corner of the existing parking becomes essentially a dead-end area by shifting access from 70th Street to the west to accommodate fill for the roadway, then substitute truck circulation requirements will further reduce available parking in this area.
 - This area of the site is also indicated as the location for the Golden Triangle Station Park and Ride, which again, is inconsistent with its existing use for truck docks and service support that is critical to the tenant at this property. Even if the area were elevated on a structure to match the proposed profile grades of the rail and station, there may not be sufficient clearance for the required truck use below.
 - The proposed track alignment between these two properties has a profile grade that roughly matches the top of a large berm separating the two sites. The berm is roughly ten feet tall relative to 7075 Flying Cloud Drive and roughly 14-16 feet tall relative to the property at 10301 West 70th Street. At the proposed elevation the top of the berm is less than 25 feet in width so additional fill would be required on one or both sides to create enough width for the track separation required by the station, with possible impacts to both properties. The width required could be provided by lowering the profile grade to an elevation that allows an at-grade crossing near the existing grade for 70th Street, and reduced impacts to both properties by excavating the berm and establishing a profile eight to ten feet below that analyzed in the DEIS.
 - Liberty would like to see the Preliminary Engineering phase of design analyze a revised profile that would lower the proposed track grade as described above from roughly Station 345+00 to Station 669+00 to determine if the potential for impacts can be reduced.
12. Referring to the Conceptual Engineering Layout for Segment 3, Sheets 7 and 8 of 15, as illustrated in Appendix F, we offer the following comments on the alignment and grading as it relates to our property at 7400 Flying Cloud Drive:
- The proposed alignment across this property has a very large impact on the existing parking supply for this property. We believe a substantial amount of additional parking could be preserved if the alignment could be adjusted to move further to the northwest as it crosses the property. It appears that this could be accomplished by more closely following the edge of

December 3, 2012

Page 6

Highway 212 between Stations 322+00 and 328+00 or 329+00 with tighter radii to move the alignment to the north from 329+00 to 336+00.

- Sufficient proximate and convenient parking is critical to the economic success of this site, so Liberty would like to see additional analysis of the alignment to determine if parking impacts can be reduced.

13. We share the City of Eden Prairie's concerns as expressed in their comment letter regarding the placement and potential impacts from ancillary structures and facilities such as Traction Power Sub-Stations, crossing gates, and traffic signal cabinets. The Preliminary Engineering phase and FEIS should incorporate all of these items into the design so that their effect on all properties along the corridor can be evaluated. Protection of the site's viewsheds and also its visibility from existing roadways is critical to its development.
14. Further, we share the City's concerns with the possible impact on nearby structures from vibration, noise and stray current associated with anticipated rail operations, and request that additional analysis of possible effects of vibration be completed for our properties with existing structures that are close to the proposed rail lines. Impacts on utilities, fiber pathways and existing structures during construction need to be analyzed and mitigated. This analysis is especially important in light of the differing soil conditions found on the site. Detailed analysis should be included for all of our properties to evaluate alternatives and determine solutions for mitigating the design and construction impacts of the project.

Thank you for the opportunity to comment on the DEIS. We look forward to the Preliminary Engineering Design phase of the project to work together to improve the interface of the Southwest Transitway with our affected properties.

Sincerely,

Liberty Property Limited Partnership



Richard A. Weiblen
Vice President Development

A recipe for disaster

6-13-16

An oil derailment
on Kenilworth
with collocation
of light rail &
electricity is a
possibility &
unpredictable.

As long as there is
this possibility, the
Met Council
should not allow
collocation.

Arlene Freed
1109 Xerxes Ave S
MPLS 55405

1) Noise comment: severe & moderate impacts on homes due to wayside bell. Proactive work should be done to see if volumes can be lowered and still deliver on safety.

From: [Shawn Smith](#)
To: [swlr](#)
Cc: [Ginis, Sophia](#)
Subject: KIAA FEIS Response - Addendum
Date: Wednesday, June 15, 2016 10:01:47 AM
Attachments: [KIAA FEIS Response June 2016 Addendum.docx](#)

Hello Nani,

Thanks again for coming to the neighborhood this week.

One of the conversations that happened triggered me to do some additional research on the FEIS. I realize that it is past the deadline, but I am hoping that you can make an exception and accept this addendum to the KIAA response.

Could you let me know so I can tell the board if you are able to accept it or not?

Thank you,
Shawn

Kenwood Isles Area Association

Southwest Light Rail FEIS response Addendum

June 15th, 2016

Light rail and freight rail co-location in a shared corridor is not an unusual occurrence in the United States. These are known as “Common Corridor Operations”. The Southwest LRT Project Office collected and documented information on locations, including mitigation measures in place.

In the addendum – there are 10 examples cited where co-location of freight and light rail occur and are operating in common corridors (We exclude the line that is under construction). We want to call to attention however that there have been seven derailments of either light rail or freight rail, including an actual collision.

We therefore reiterate our position that not only does the FEIS fall short on providing assurance that the trains can share a corridor safely, it actually proves it and makes our position stronger.

21st St is a heavily used street due to pedestrians, bicycles, and vehicles crossing the rail lines to go to East Cedar Lake Beach. Based on the history of examples where derailments have occurred due to pedestrians or human error, it is not unreasonable to expect that there will be one in the 21st St Station area.

An ethanol train will make an emergency stop and derail – causing hundreds of tons of rail cars to push into the crash wall, pushing through and over the crash wall into a passing Light Rail train. That ensuing collision will derail the Light Rail Train, pulling down the electric cantanaries and causing a shower of sparks onto the leaking ethanol train. The subsequent explosion will be larger than the recent Oil train explosion in Oregon, referenced in the response sent in prior to this addendum.

We strongly object to this plan.

From: [Weicher, Richard E](#)
To: [swlrt](#)
Cc: [Clifford M. Greene \(CGreene@greeneespel.com\)](#); [Mitchell, DJ](#); [Rankin, David T](#); [Leibfried, Lynn M](#)
Subject: Southwest LRT Final Environmental Impact Statement
Date: Wednesday, June 15, 2016 3:02:15 PM
Attachments: [BNSF Comments LRT GL EIS 6.15.16.pdf](#)

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office

Attached are comments on behalf of BNSF Railway in response to the Final EIS published by the Federal Transit Administration and the Metropolitan Council on the Southwest LRT /Green Line proposal. Also forwarding a copy to Cliff Greene.

Richard E Weicher
VP & Senior General Counsel
BNSF Railway
547 W. Jackson, Suite 1509
Chicago, IL 60661-5717
312-850-5679 (o)
817-832-0531(c)

CONFIDENTIALITY NOTICE-

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this message in error, please delete this message from all computers and notify us immediately by return e-mail and/or phone (312)850-5679 or (817)352-2368. Thank you.



Richard E. Weicher
Vice President and
Senior General Counsel
richard.weicher@bnsf.com

BNSF Railway Company
547 W. Jackson Blvd. Ste. 1509
Chicago, IL 60661
312-850-5679 Direct
312-850-5677 Fax
2500 Lou Menk Drive
Fort Worth, TX 76131-2828
817-352-2368 Direct
817-832-0531- cell

June 15, 2016

VIA OVERNIGHT DELIVERY AND EMAIL

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426
SWLRT@metrotransit.org

RE: Southwest LRT Final Environmental Impact Statement (Final EIS)

Dear Ms. Jacobson:

This is in response to the Final EIS published by the Federal Transit Administration and the Metropolitan Council (Met Council) dated May 13, 2016. BNSF continues to review the Met Council's proposal to use a portion of BNSF's Wayzata Subdivision to construct and operate the planned Southwest LRT, and as we have expressed in numerous settings with representatives of Met Council and other local bodies, we have overriding concerns since the impact of these proposals on the safety and long-term mobility of our freight movements and existing Metro Transit system utilization in the Minneapolis area and across our interstate network do not appear to have been addressed in the Final EIS.

As we have expressed in our prior discussions and meetings with Met Council going back at least to March, 2015, and then in face-to-face meetings at the Dallas-Fort Worth and Minneapolis airports, because of the potential impact on our freight operations, the current proposed use of BNSF right of way presents significant problems; putting at risk the future fluidity of our freight operations both in general and in the vicinity of Target Field, for which we are not aware an effective solution has been proposed or developed. In addition to concerns we have communicated regarding the ongoing use of our freight network in these areas, below is a summary of specific concerns we have raised that have not been addressed in the Final EIS:

REGARDING SHARED USE OF THE EXISTING BNSF RIGHT OF WAY:

BNSF currently owns the land upon which a portion of the Southwest LRT proposes to exist. BNSF understands the Met Council proposes to occupy a varying parcel width of the existing BNSF right of way adjacent to our Wayzata Subdivision for the Southwest LRT. No agreement exists for use of BNSF right of way and the Final EIS as currently drafted does not provide a summary of possible alternatives or associated impacts. If a transaction in this area were possible, the nature and form of any transfer of any rights by BNSF for the construction and operating rights for Southwest LRT remains to be determined, and any such transaction must provide adequate provisions to ensure BNSF is capable of fully utilizing its remaining right of way for permanent freight operation with adequate capacity to safely meet current and future freight shipper demand.

REGARDING THE OVERHEAD CATENARY:

BNSF has been provided a proposed track and station layout, but has concerns with the overhead catenary system. BNSF is not aware of any inductance study to ensure that the electrical

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
June 15, 2016
Page 2

system used to operate the LRT does not interfere with any existing or proposed BNSF signal equipment. We have also not seen a grounding and stray current study to ensure no BNSF assets will be negatively affected by stray current originating from the LRT electrical system. The Final EIS as currently drafted does not take these issues and their potential impact into consideration.

REGARDING INTRUSION PROTECTION:

BNSF also believes specific proposals for systems to prevent intrusion of a freight train into the light rail network in the event of a derailment (or vice versa) would need to be addressed. We understand there is anecdotal or other data that indicates that the debris field for a freight train derailment at 40 MPH could extend beyond 100 feet. The proposed barriers we understand Met Council proposes may not to our knowledge be sufficient to keep freight and passenger rail operations separate in this instance. In addition, we would request further information on any analysis the agencies conducted of any proposed barrier wall, or barrier wall combined with retained embankment, that would withstand the force of a freight derailment and keep freight separate from passenger rail in the event of a freight derailment. We would presume that any structure will be sufficient to accept and deflect the forces of a freight train derailment, and/or would like to understand the support for your proposal. Whatever system is eventually developed should be approved by a safety regulatory body to ensure that it is appropriately designed to protect both freight and passenger services in the event of a derailment by either service. Again, the Final EIS does not take these issues and their potential impact into consideration.

OTHER OUTSTANDING ISSUES:

The proposed Southwest LRT will affect corridor fluidity along BNSF's Wayzata Subdivision, in particular with respect to existing track design of the area beneath the Target Field promenade deck and to protect future additional mainline capacity for freight service of all kinds and commodities. Further, we are aware of several related proposals for passenger service that will also impact this key segment. As we have communicated previously, all of the proposed passenger projects that would impact our operations need to be considered in order to evaluate use of our right of way for Southwest LRT.

As far as we can determine based upon a review of the draft, these unresolved concerns are not addressed in the Final EIS, and use of BNSF right of way in a manner that addresses these impacts and preserves BNSF's ability to continue to meet its obligations as an interstate common carrier and preserve its ability to meet the current and future freight needs of our customers across our system are critical elements to evaluate such proposals given their impact on physical feasibility, project cost and property required.

Very truly yours,



Richard E. Weicher

cc: Clifford M. Greene
Greene Espel
222 S. 9th Street, Suite 2200
Minneapolis, MN 55402-3362

Lynn Leibfried, BNSF Railway
DJ Mitchell, BNSF Railway



Minnesota House of Representatives

State Representative
Frank Hornstein
State Office Building
100 Rev Dr Martin Luther King Jr Blvd
St. Paul, Minnesota 55155-1298



Ms. Nani Jacobson, Assistant Director,
Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426



Minnesota House of Representatives

100 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155



Minnesota Senate

75 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155



June 13, 2016

Ms. 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,

We are writing to express our serious concerns with the freight rail safety sections of the Final Environmental Impact Statement (FEIS) for the Southwest Light Rail project.

Over the past three years we have championed legislation to address safety issues regarding the transportation of crude oil and ethanol in Minnesota. There are specific challenges with hauling ethanol through the Kenilworth corridor and downtown Minneapolis. Our concerns are informed by the particular risks and consequences of transporting these materials in a densely populated area that is colocated with light rail.

Rather than address ways in which the risks associated with colocation can be identified and managed, the FEIS reads like an advocacy document for the freight rail industry, with a clear focus on addressing the needs of the railroads utilizing the corridor.

For example, the FEIS states, "*Moving freight via rail is especially important in moving bulk commodities, such as minerals and agricultural products that help drive Minnesota's economy...for Minnesota a strong rail system supports economic development, enhances environmental sustainability, helps preserve the publicly owned roadway infrastructure and increases business marketability in the state*" (Purpose and Need, 1-14)

The FEIS also asserts that "*it is important that any freight rail modifications to be included in the Project be done in a way that helps to maintain that state's balanced and economically competitive freight rail system*" (Purpose and Need, pg 1-15)

In justifying the document's relative silence on the risks of hauling ethanol in the Kenilworth Corridor in close proximity to residences and light rail trains, the FEIS states, "*Future freight rail operations are subject to a range of market forces and are dependent on the business plans of freight railroad operators, both of which are outside the jurisdiction of the FTA and the Council...and the Final EIS does*

not evaluate potential adverse effects on the human environment related to potential indirect impact of increased freight rail frequency and/or length. (Transportation Analysis and Effects 4-48)

The FEIS claims that there are four factors that impede the Council and FTA from addressing increases in real frequency and length of trains. These include an inability to forecast rail industry trends because of proprietary information, and a lack of *"existing credible scientific evidence or data which can be used to evaluate potential for related adverse impacts on the human environment related to future market demands placed on freight rail cargo in the Project's study area..."* The FEIS further claims that, *"the FTA and the Council are aware of no theoretical approaches or research methods generally accepted in the scientific community to derive information required for this analysis without the cooperation of freight rail operators in sharing proprietary information"* (Transportation Analysis and Effects, 4-48)

Railroads have also claimed that information concerning their level of insurance, disaster planning, and routing criteria are also proprietary, yet we see no evidence of the Met Council requesting this information from the railroads in the corridor. Recent court cases in California and Maryland have successfully challenged railroad's proprietary claims on similar issues.

The FEIS can and should address potential adverse human impacts of likely increased rail operations, particularly as it relates to the transportation of ethanol, crude oil and other high hazard flammable materials.

The FEIS also describes an *Operations Emergency Management Plan* and a *Safety and Security Management Plan*, yet the document claims that *"regulation over the operations and related communications from TC and W to emergency responders are outside the jurisdiction of the Council and FTA."* (Executive Summary ES-9) The EIS then states that these issues are under the jurisdiction of the FRA and PHMSA. Yet there is no discussion of how FRA and PHMSA plan to coordinate with the Council and safety issues, or how the Emergency Management Plan and Security Management Plan will involve the public, first responders and Emergency Managers in its development and implementation.

This issue is particularly important as Emergency Managers testified multiple times to Minnesota legislative committees in April 2016 regarding "significant gaps" in emergency preparedness as related to freight rail safety.

The FEIS describes design criteria to enhance safety to prevent LRT derailments, including guardrails, crash walls and other enhancements. It is unclear to what extent these enhancements will be implemented or are merely advisory. For example the FEIS discusses, *"intrusion detection for possible freight derailment will be installed, where appropriate"* (Executive Summary, ES-8)

There is little specific information in the FEIS on whether or where this safety infrastructure will be installed and its cost.

The FEIS should contain much more specific and substantive information regarding emergency response planning as it relates to freight rail operations along all areas where light rail and freight rail are colocated. In addition the FEIS should contain more precise information on the location of safety related infrastructure and its costs.

We raised serious concerns regarding the colocation of freight and light rail when the Metropolitan Council decided to keep freight rail permanently in the Kenilworth corridor. This decision was made despite the original law requiring the return of freight rail to a westerly alignment. In addition, in a study that we insisted upon, a viable, safe, prudent, cost-effective alternative to do so was identified. This is the MN&S Spur North identified in March 21, 2014 TransSystems' SWLRT Engineering Evaluation of Freight Rail Relocation Alternatives Final Report, stating "*... in our opinion, resolves many of the shortcomings of the other versions previously presented.*"

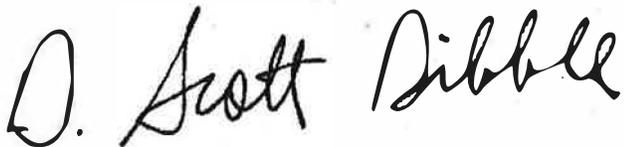
The FEIS should, at a minimum, heed the advice of that report for whichever alignment is chosen: "*Whether the freight rail is transferred to the MN&S Spur north or remains on the modified Kenilworth Corridor, there are a number of safety improvements that should be included as a part of this overall project. They consist of, but not limited to: (1) Centralized Traffic Control (CTC) to expedite train movements and provide broken rail protection for the route, (2) electronic detection devices such as hotbox and broken wheel detection, and (3) equipment necessary to assure compliance with the yet to be finalized Positive Train Control (PTC) requirements.*"

We had mistakenly anticipated that the Council and FTA would seriously address rail safety concerns regarding colocation during the Supplemental Environmental Impact Statement process. The FEIS falls significantly short of addressing those concerns.

The FEIS should not be deemed adequate until issues related to freight rail safety as discussed above and in citizen and other public sector comments are addressed. If issues pertaining to rail safety cannot be adequately addressed, LRT should not be located in such close proximity to an active freight rail line.

Thank you for your consideration.

Sincerely,



D Scott Dibble
State Senator, District 61



Frank Hornstein
State Representative, District 61A

VICKIE POPELOV
817.352.2334
BNSF - LAW
2500 LOU MENK DRIVE
FORT WORTH TX 76131

0.0 LBS LTR 1 OF 1

SHIP TO:

MS. NANI JACOBSON
METRO TRANSIT-SW LRT PROJECT OFFICE
SUITE 500
6465 WAYZATA BLVD.
SAINT LOUIS PARK MN 55426-1724



MN 559 9-28

UPS NEXT DAY AIR

TRACKING #: 1Z FV2 495 01 9519 1945

1



BILLING: P/P

BNSF Locally Associated Cost Center: 85413
Reference Data: Richard Wetche
CS 18.1.17. WNTNVS0 75.0A.04/2016



<https://www.campusship.ups.com/cship/create?ActionOriginPair=default> PrintWindow... 6/15/2016





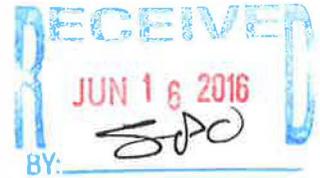
Richard E. Weicher
Vice President and
Senior General Counsel
richard.weicher@bnsf.com

BNSF Railway Company
547 W. Jackson Blvd. Ste. 1509
Chicago, IL 60661
312-850-5679 Direct
312-850-5677 Fax
2500 Lou Menk Drive
Fort Worth, TX 76131-2828
817-352-2368 Direct
817-832-0531- cell

June 15, 2016

VIA OVERNIGHT DELIVERY AND EMAIL

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426
SWLRT@metrotransit.org



RE: Southwest LRT Final Environmental Impact Statement (Final EIS)

Dear Ms. Jacobson:

This is in response to the Final EIS published by the Federal Transit Administration and the Metropolitan Council (Met Council) dated May 13, 2016. BNSF continues to review the Met Council's proposal to use a portion of BNSF's Wayzata Subdivision to construct and operate the planned Southwest LRT, and as we have expressed in numerous settings with representatives of Met Council and other local bodies, we have overriding concerns since the impact of these proposals on the safety and long-term mobility of our freight movements and existing Metro Transit system utilization in the Minneapolis area and across our interstate network do not appear to have been addressed in the Final EIS.

As we have expressed in our prior discussions and meetings with Met Council going back at least to March, 2015, and then in face-to-face meetings at the Dallas-Fort Worth and Minneapolis airports, because of the potential impact on our freight operations, the current proposed use of BNSF right of way presents significant problems; putting at risk the future fluidity of our freight operations both in general and in the vicinity of Target Field, for which we are not aware an effective solution has been proposed or developed. In addition to concerns we have communicated regarding the ongoing use of our freight network in these areas, below is a summary of specific concerns we have raised that have not been addressed in the Final EIS:

REGARDING SHARED USE OF THE EXISTING BNSF RIGHT OF WAY:

BNSF currently owns the land upon which a portion of the Southwest LRT proposes to exist. BNSF understands the Met Council proposes to occupy a varying parcel width of the existing BNSF right of way adjacent to our Wayzata Subdivision for the Southwest LRT. No agreement exists for use of BNSF right of way and the Final EIS as currently drafted does not provide a summary of possible alternatives or associated impacts. If a transaction in this area were possible, the nature and form of any transfer of any rights by BNSF for the construction and operating rights for Southwest LRT remains to be determined, and any such transaction must provide adequate provisions to ensure BNSF is capable of fully utilizing its remaining right of way for permanent freight operation with adequate capacity to safely meet current and future freight shipper demand.

REGARDING THE OVERHEAD CATENARY:

BNSF has been provided a proposed track and station layout, but has concerns with the overhead catenary system. BNSF is not aware of any inductance study to ensure that the electrical

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
June 15, 2016
Page 2

system used to operate the LRT does not interfere with any existing or proposed BNSF signal equipment. We have also not seen a grounding and stray current study to ensure no BNSF assets will be negatively affected by stray current originating from the LRT electrical system. The Final EIS as currently drafted does not take these issues and their potential impact into consideration.

REGARDING INTRUSION PROTECTION:

BNSF also believes specific proposals for systems to prevent intrusion of a freight train into the light rail network in the event of a derailment (or vice versa) would need to be addressed. We understand there is anecdotal or other data that indicates that the debris field for a freight train derailment at 40 MPH could extend beyond 100 feet. The proposed barriers we understand Met Council proposes may not to our knowledge be sufficient to keep freight and passenger rail operations separate in this instance. In addition, we would request further information on any analysis the agencies conducted of any proposed barrier wall, or barrier wall combined with retained embankment, that would withstand the force of a freight derailment and keep freight separate from passenger rail in the event of a freight derailment. We would presume that any structure will be sufficient to accept and deflect the forces of a freight train derailment, and/or would like to understand the support for your proposal. Whatever system is eventually developed should be approved by a safety regulatory body to ensure that it is appropriately designed to protect both freight and passenger services in the event of a derailment by either service. Again, the Final EIS does not take these issues and their potential impact into consideration.

OTHER OUTSTANDING ISSUES:

The proposed Southwest LRT will affect corridor fluidity along BNSF's Wayzata Subdivision, in particular with respect to existing track design of the area beneath the Target Field promenade deck and to protect future additional mainline capacity for freight service of all kinds and commodities. Further, we are aware of several related proposals for passenger service that will also impact this key segment. As we have communicated previously, all of the proposed passenger projects that would impact our operations need to be considered in order to evaluate use of our right of way for Southwest LRT.

As far as we can determine based upon a review of the draft, these unresolved concerns are not addressed in the Final EIS, and use of BNSF right of way in a manner that addresses these impacts and preserves BNSF's ability to continue to meet its obligations as an interstate common carrier and preserve its ability to meet the current and future freight needs of our customers across our system are critical elements to evaluate such proposals given their impact on physical feasibility, project cost and property required.

Very truly yours,



Richard E. Weicher

cc: Clifford M. Greene
Greene Espel
222 S. 9th Street, Suite 2200
Minneapolis, MN 55402-3362

Lynn Leibfried, BNSF Railway
DJ Mitchell, BNSF Railway

Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, MN 55155-4194 | www.pca.state.mn.us

PRESORTED
FIRST CLASS

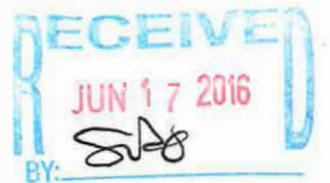


U.S. POSTAGE >>> PITNEY BOWES



ZIP 55155 \$ 000.39⁹
02 1W
0001401447 JUN 15 2016

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426



FACEBOOK 55426





Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer



June 13, 2016

Ms. Nani Jacobson
Assistant Director, Environmental and Agreements
Metro Transit – Southwest LRT Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN 55426

Re: Southwest Light Rail Transit Project Final Environmental Impact Statement

Dear Ms. Jacobson:

Thank you for the opportunity to review and comment on the Final Environmental Impact Statement (FEIS) for the Southwest Light Rail Transit project (Project) located in Hennepin County, Minnesota. The Project consists of construction of a new light rail line from downtown Minneapolis to Eden Prairie. Minnesota Pollution Control Agency (MPCA) staff has reviewed the FEIS and have no comments at this time.

We appreciate the opportunity to review this Project. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this FEIS, please contact me via email at Karen.kromar@state.mn.us or via telephone at 651-757-2508.

Sincerely,

A handwritten signature in blue ink that reads "Karen Kromar".

Karen Kromar
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:bt

cc: Dan Card, MPCA, St. Paul
Teresa McDill, MPCA, St. Paul

June 16, 2016

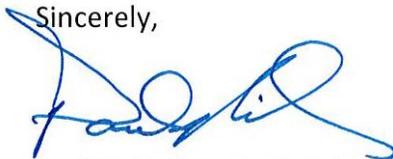
Mr. Jim Alexander
Project Director
Green Line Extension (Southwest LRT) Project Office
6465 Wayzata Blvd., Suite 500
St. Louis Park, MN | 55426
L

**RE: SWLRT Final Environmental Impact Statement
Formal Comments**

Dear Mr. Alexander,

The City of Minneapolis appreciates the ability to comment on the Final Environmental Impact Statement (FEIS) for the Southwest LRT Corridor (Green Line Extension) project. The attached comments were presented to the Transportation and Public Works Committee of the Minneapolis City Council on June 7, 2016 and were approved by the full City Council on June 17, 2016. Please contact me if you have any questions.

Sincerely,



Paul D. Miller - Project Manager
PW Transportation Planning & Engineering
309 2nd Ave. S., Room 300
Minneapolis, MN. 55401-1390
(612) 673-3603

Attachment

SWLRT
Final Environmental Impact Statement (FEIS)
City of Minneapolis Staff Comments
June 2, 2016

Preface to Staff Comments:

The City of Minneapolis continues to support the Southwest LRT project contingent on adherence to the Memoranda of Understanding reached between the City of Minneapolis and Met Council and between the City of Minneapolis and Hennepin County, both of which were adopted on August 29, 2014.

In its preface to Staff comments on the SWLRT FEIS, the City of Minneapolis wishes to restate previous concerns which are intended to lessen the negative impacts to residents and businesses near the corridor and to improve the quality of the project, comments are also intended to inform the final design, project specifications, construction means/methods, emergency planning, and long-term operation of the line. The City of Minneapolis will continue to work closely with the Southwest Project Office and with other partnering agencies to help make this project a long-term success.

The development of the project including route selection differs significantly from the recounting outlined in the FEIS. The City's perspective has been captured in previous council actions; the City of Minneapolis passed Resolution 2014R-362 on August 29, 2014, and Resolutions 2015R-384 and 2015R-385 on September 25, 2015 approving the physical design component of the preliminary design plans and conveying the City's concerns regarding freight rail safety for the Southwest Corridor Light Rail Transit Project in the City of Minneapolis. The statements and positions asserted in Resolution 2014R-362, and Resolutions 2015R-384 and 2015R-385 continue to be valid for the City Council of the City of Minneapolis (see Attachment A), in addition to the following:

A. Safety & Security:

Freight Rail Safety: The City's perspective has been captured in previous council actions; the City of Minneapolis passed Resolution 2015R-385 on September 25, 2015 conveying the City's concerns regarding freight rail safety (see Attachment A – City Resolutions).

The FEIS describes the Council's *Operations Emergency Management Plan* for light rail which was developed to assist in identifying, responding to, and resolving emergency situations for the Project. The Operations Emergency Management Plan establishes the response process and responsibilities for departments and staff within Metro Transit, as well as outside agencies, in the event of a rail emergency. In addition, the Council maintains an emergency preparedness exercise plan, in compliance with the *Safety and Security Management Plan*. The emergency preparedness exercise plan identifies emergency preparedness exercises, which will be carried out by the LRT Fire Life Safety and Security Committee (FLSSC) both in advance of operation of the Project and during normal operations on an annual basis.

SWLRT
Final Environmental Impact Statement (FEIS)
City of Minneapolis Staff Comments
June 2, 2016

There must be coordination between the SPO and the railroad to minimize the risk of a derailment, especially if trains are carrying hazardous materials. Emergency vehicle access to the construction site must be coordinated prior to construction. Although not specifically identified in the FEIS, the City of Minneapolis Fire Department and the Minneapolis Police Department should be considered as contributing partners in all emergency planning and included as members of the FLSSC. The SPO shall include both the Minneapolis Fire Department and the Police Department in future Emergency Response planning for both the construction period and long term operations.

LRT Operation - The FEIS acknowledges that there will be emergency vehicle delays at various locations within Minneapolis and St. Louis Park once the LRT opens for service. The Council shall include both the Minneapolis Fire Department and the Police Department in future Emergency Response planning for both the construction period and long term operations.

Pedestrian Connections – the continued presence of freight rail within the Kenilworth Corridor, in combination with LRT operations will be a substantial barrier to pedestrians attempting to access station locations and/or simply attempting to cross the rail corridor. To date, pedestrian crossings of the rail corridor are common and have been largely unrestricted. Current design plans provide for a limited number of at-grade crossing points and attempt to restrict all other crossings throughout the corridor by installation of various types of railings and fences. Although pedestrian crossings of the rail corridor at places other than established crossing points are technically considered a “legal trespass”, they do happen and will continue to occur regardless of any physical constraint. According to the FEIS, the Council will implement a Safety and Security Management Plan (SSMP) to provide and maintain safety and security during operations within the vicinity of existing freight rail service; the Council and the SSMP must address this issue.

B. Construction Impacts:

Given the close proximity of homes, condominiums, apartments and townhomes to the construction work, efforts must be made to dampen or minimize the noise and vibration caused by Tunnel Construction activity. Residents adjacent to the proposed tunnel have expressed great concern over the potential noise and vibration, and the potential for significant damage being caused to their homes. Construction impacts pertaining to the shallow tunnel design such as noise and vibration are covered in the FEIS. Although it is understood that the FEIS provides for mitigation of short-term construction impacts such as noise & vibration, and requires various construction mitigation plans, the FEIS does not specifically address construction means and methods. Current tunnel design

SWLRT
Final Environmental Impact Statement (FEIS)
City of Minneapolis Staff Comments
June 2, 2016

plans indicate steel sheet piling as a component of the design. The construction method for piling installation is of specific concern; the City of Minneapolis shall be consulted in the review of selected construction means and methods for tunnel construction.

There will also be tree loss along the corridor. It should be clearly understood by the Council and its contractors that tree removal in the Kenilworth corridor is a highly sensitive issue. It should be noted that there is concern about potential noise created by chain saw activity in addition to wood chipping. Hours of construction operation must be limited to ensure that residents are not disrupted; the City of Minneapolis Noise Ordinance will be enforced restricting hours of operation on week nights, weekends, and Holidays. An effort must be made by the Council and its contractors to minimize tree removals, control dust, maintain safe truck routes, comply with truck weight limits, and to follow jake breaking laws.

The FEIS identifies the requirements to develop and implement a construction management plan that addresses means and methods, hours of operation, access routes, BMPs for mitigating dust and debris on public streets and private property. The City of Minneapolis shall be consulted in the development of this plan.

C. LRT Operation – Noise:

The FEIS covers noise and vibration mitigation at length; however as previously stated in the DEIS and SDEIS comments, it is important that noise from LRT operations, bells, whistles, and horns continue to be evaluated and minimized. While some warning devices are required by federal law, policies and procedures regarding some rail operations are local (at the discretion of the Metropolitan Council). Noise and vibration mitigation covered in the FEIS is largely based upon existing conditions and modeling; a commitment by the Council to further analyze noise after LRT operations begin and re-evaluate potential mitigations must be considered.

D. Visual Impact:

The City of Minneapolis agrees that the project will result in a substantial level of visual impact in the Kenilworth corridor. To some extent, the impact will be mitigated and the corridor improved in the manner described in the memorandum of understanding between the Metropolitan Council and the City of Minneapolis. However, the Council and its contractors should commit to additional care and control of construction means and methods within the projects “limits of disturbance” to minimize visual impacts as much as possible. The City looks forward to continued conversations with the Council, its contractors, and the community regarding the restoration of the corridor, and expects these measures to be fully implemented by the project.

SWLRT
Final Environmental Impact Statement (FEIS)
City of Minneapolis Staff Comments
June 2, 2016

Staff Comments on the Adequacy of the FEIS:

On May 13, 2016 the Final Environmental Impact Statement (FEIS) was issued for public review, with comments on the adequacy of the FEIS to be accepted by the Metropolitan Council through June 13, 2016. The FEIS is considered adequate under Minn. Rule 4410.2800, subp. 4, if it:

- A. Addresses the potentially significant issues and alternatives raised in scoping so that all significant issues for which information can be reasonably obtained have been analyzed in conformance with part 4410.2300, items G and H;
- B. Provides responses to the substantive comments received during the draft EIS and SDES review concerning issues raised in scoping; and
- C. Was prepared in compliance with the procedures of the act and parts 4410.0200 to 4410.6500.

Or, as summarized, the FEIS will be determined adequate if it addresses and analyzes the significant issues raised in scoping, responds to substantive comments on the draft EIS and SDEIS, and is prepared in compliance with the environmental rules. Therefore, comments by City staff on the adequacy of the document will address whether it meets those standards.

Staff Comments:

Public Works and CPED staff have reviewed the FEIS and,

- A. the document addresses the potentially significant issues and alternatives raised in scoping so that all significant issues for which information can be reasonably obtained have been analyzed in conformance with part 4410.2300, items G and H.
- B. the document has provided responses to all substantive comments by the City received during the draft EIS and SDES.
- C. the document was prepared in compliance with the procedures of the act and parts 4410.0200 to 4410.6500.

ATTACHMENT A

City Council Resolutions

2014R-362

**Resolution to Approve the Physical Design Component
of the Preliminary Design Plans for the Southwest Corridor Light Rail Project
in the City of Minneapolis**

Whereas, the City of Minneapolis has been a strong advocate for increased investments in transit generally and for Southwest LRT in particular, and has been a reliable regional partner in advancing a multimodal transit system, and

Whereas, the City of Minneapolis has relied on other regional partners to work in a collaborative way to achieve a shared vision and is therefore extremely disappointed to be asked to approve a project which violates past commitments, and

Location of Freight

Whereas, when the Kenilworth Rail Corridor was acquired by the Hennepin County Regional Railroad Authority (“HCRRA”) in the late 1980s, the corridor was empty and not regularly in use by any railroad, and

Whereas, MNDOT needed to move freight rail out of the Midtown Corridor because the reconstruction of Highway 55 was going to sever the at-grade crossing of the highway. The government agencies involved had decided the solution was to relocate freight rail to the existing Minneapolis, Northfield and Southern Railway (“MN&S”) rail corridor in St. Louis Park. But before the project began, project engineers learned that the land under the planned connection to the freight reroute – the Golden Auto site in St. Louis Park – was contaminated and unfit for construction, and

Whereas, HCRRA then allowed Twin Cities & Western (“TC&W”) railroad to temporarily move its trains to the publicly-owned Kenilworth Corridor right-of-way in order to assist the Minnesota Department of Transportation (MNDOT) to meet deadlines to save federal funding for the reconstruction of Highway 55 in south Minneapolis, and

Whereas, the Kenilworth Corridor was only to be in use for a maximum of six years, thus allowing time for environmental cleanup at the Golden Auto site. HCRRA entered into an agreement with TC&W for relocation to the MN&S corridor after the clean-up, and

Whereas, Hennepin County’s promise to re-route freight before the corridor would be used for passenger transit service is summarized in its 2009 Freight Rail Study, and

Whereas, the State legislation providing substantial funding for soil remediation for the Golden Auto site required that MNDOT not disburse those funds until an agreement had been reached regarding the routing of freight. MNDOT failed to follow the law and gave the soil remediation funds to St Louis Park without a binding agreement from St. Louis Park regarding the rail routing. Laws of Minnesota, 1997, Ch. 231, Art. 16, Sec.23, and

Whereas, when planning for Southwest LRT began in earnest in the mid-2000s, TC&W trains continued to operate in the Kenilworth Corridor, as they were not moved to the MN&S pursuant to the earlier agreements and state law, and

Routing of LRT

Whereas, decisions about light rail projects like Central LRT and Southwest LRT are driven by a need to adhere to the Federal Government’s transit criteria or “funding formula,” as the federal government provided 50% of the funding for Central and is anticipated to do the same for Southwest, and

Whereas, the decision about where to route the Southwest LRT line was made when the Bush-era transit funding formula was still in effect. That formula said that only new transit riders should count. If you were already a transit rider, you didn’t count towards projected ridership. That formula was inherently biased against urban neighborhoods where lots of people already ride transit. That formula was inherently favorable to suburban areas where it is easier to find potential riders not currently taking transit. The Bush-era formula created an incentive for transit planners and policy-makers to avoid, rather than serve, dense neighborhoods where many people already take transit, and

Limitations of Kenilworth Alignment

Whereas, the routing of Southwest LRT was not designed around serving disadvantaged populations or serving the greatest number of Minneapolis residents. It was designed to achieve the fastest route between suburban and downtown destinations, and

Whereas, when the City reluctantly agreed to proceed with Hennepin County’s preferred alignment of Kenilworth, it did so with the express condition that the bicycle/pedestrian trail in the Kenilworth Corridor (the “Kenilworth Trail”) would be preserved and with reassurance that long-standing promises to reroute freight would be kept, and

Serving the Communities Left Behind

Whereas, following the selection of the Kenilworth Corridor as the Locally Preferred Alternative (LPA), the City redoubled its existing efforts to advance plans to provide rail service to the Nicollet Avenue corridor in the form of a more appropriately-sized Modern Streetcar and to provide rail service to the Midtown Greenway. These two corridors had been considered for Southwest LRT, but not selected, and

Whereas, the City appreciates Hennepin County’s leadership in advancing Modern Streetcar on Nicollet by helping the City secure passage of a value capture tool and Metropolitan Council’s leadership on advancing rail transit in the Midtown Greenway through its Alternatives Analysis, and

Whereas, the City also appreciates the support of both Hennepin County and the Metropolitan Council in their collaborative work with the City to jointly fund a study of the West Broadway corridor through North Minneapolis. This is a key step toward potentially expanding a Modern Streetcar to North Minneapolis, which would include an estimated 12-16 stops in North Minneapolis between Hennepin Ave and the City border in a full build out scenario, and

Whereas, these neighborhoods along Midtown, Nicollet and Broadway are crying out for improved transit and for the opportunity to be connected to the regional spine of Southwest LRT and without continued shared efforts by our partner agencies, Southwest LRT will not meet its full potential, and

Freight Challenges Will Be Ongoing

Whereas, after the LPA decision the Metropolitan Council took over the project as lead agency and convened a Southwest Corridor Management Committee (CMC) to advise the Metropolitan Council on Southwest LRT, and

Whereas, coordination with and the cooperation of the railroads was identified at the CMC as a potential obstacle to progress of the project. The City's sole delegate at the CMC, Mayor Rybak, was reassured that the Metropolitan Council was going to be a tough negotiator with the railroads, and

Whereas, in late 2012, Hennepin County released the Draft Environmental Impact Statement (DEIS) for the Southwest LRT project. The City's official comments on the DEIS made it absolutely clear that its continued support for the Kenilworth LRT route was contingent upon implementing the freight relocation plan, and

Whereas, at the direction of the Federal Transit Administration ("FTA"), the DEIS included analysis of a scenario in which both freight and LRT would coexist at-grade in the Kenilworth corridor, a concept that had not advanced through the Alternatives Analysis process, or for which the project sponsor developed conceptual engineering drawings. Using layouts developed by the City of St. Louis Park, not the Southwest LRT Project Office or Hennepin County, the DEIS found that co-locating freight and LRT at-grade in the Kenilworth corridor would be detrimental to the environment, and recommended the LPA with freight re-routed as the option "that will cause the least damage to the biological and physical environment and that best protects, preserves, and enhances historic, cultural, and natural resources." Southwest Transitway DEIS, October 2012, pages 11-15, and

Whereas, tasked with belatedly addressing the freight issue, last summer the Metropolitan Council put forward three options, only one of which rerouted the freight as promised. This option included construction of a new rail right-of-way located on top of a two-story berm. It imposed surprising and, as it turned out later, unnecessary impacts to neighbors along the MN&S in St. Louis Park, including the removal of over 30 homes, and

Whereas, at the CMC, Mayor Rybak's vote was cast in favor of removing the most expensive option, a deep tunnel, from further consideration. This was done after the Mayor was assured that an independent freight expert would be hired by Metropolitan Council to look at all options for addressing the freight issue, and

Whereas, at Governor Dayton's direction, the Metropolitan Council developed a scope of work for the independent freight study. All the cities along the corridor including Minneapolis were able to provide input, and the scope of work was formally adopted by the CMC. As called for by Metropolitan Council staff, the scope of work explicitly identified the American Railway Engineering and Maintenance Right-of-Way (AREMA) standards as the design standard that the freight expert must meet for any proposed freight line, and

Whereas, TranSystems of Kansas City was hired to do the freight analysis and it developed the MN&S North solution which requires the taking of dramatically fewer homes and was significantly less expensive than the "two-story tall berm option" both in initial construction and from a long-term operating perspective. The TranSystems solution provided important benefits to St. Louis Park, and to the region described in the City of Minneapolis's May 7, 2014 Resolution, and

Whereas, unfortunately, Southwest Project staff reacted by undermining TranSystems design which met, and in some cases, exceeded the required AREMA standards according to the City's own consultant with substantial freight expertise. TranSystems was not invited to present their final report in person so they could answer questions about the report. When the City repeatedly asked Project staff to either confirm or deny that the TranSystems solution met the agreed-upon AREMA standard, Metropolitan Council staff repeatedly declined to answer the question. They simply indicated that the proposed solution was not acceptable to the railroads, and

Railroads and the Surface Transportation Board (STB)

Whereas, in 1998 when MnDOT was moving freight from the Midtown Corridor to its temporary location in the Kenilworth corridor, TC&W signed a trackage rights agreement with HCRRA which owns the Kenilworth Corridor. The trackage rights agreement says TC&W would move out of the Kenilworth corridor when provided with another connection. TC&W signed another similar agreement in 2012, and

Whereas, if after approval by the Surface Transportation Board (STB), the Metropolitan Council were to build the TranSystems MN&S North solution, the conditions of these agreements will have been met and TC & W would be required to move, and

Whereas, while TC&W clearly opposed the re-route, the STB exists to resolve these kinds of disputes between railroads and local governments. Given that the reroute meets AREMA standards, coupled with the fact that the reroute is comparable in length and geometry to the existing Kenilworth route, the City agrees with the TranSystems principal who said that he could not find any reason why the STB would not approve the reroute, and

Whereas, of the government agencies represented at the CMC, only the City of Minneapolis, was willing to re-route freight out of the corridor by going to the STB. Mayor Hodges was outvoted at the CMC by all the cities along the corridor as well as Hennepin County and Metropolitan Council representatives. Opponents of rerouting the freight expressed concern that opposition to the freight re-route by TC&W at the STB would result in unacceptable delays, even if it were ultimately approved, and

Whereas, since the TranSystems report is still unrefuted by any credible source, the City does not concede that Freight could not be re-routed safely from the corridor. Nonetheless, the City must react to the region's unwillingness to take a possible re-route to the STB, and

Whereas, there were serious mistakes made during the development of this project: failing to secure a binding agreement with St Louis Park, failing to secure a binding agreement with the railroads, failing to follow up with MNDOT to ensure they were following the law requiring a binding agreement before disbursing funds for the Golden Auto site, failing to design a new version of a freight reroute to reflect changes in industry practice, failing to hire an independent engineering firm like TranSystems years earlier, and when a new viable reroute was finally identified, an unwillingness to bring that plan to the STB for approval, and

Whereas, these mistakes were not made by the City and cannot be corrected by the City, but the City can do everything in its power to avoid repeating these mistakes and therefore has secured written, binding agreements on critical issues with the responsible government agencies, and

Whereas, nonetheless the City has entered into a Memorandum of Understanding with the Metropolitan Council regarding property ownership in the Kenilworth Corridor, and

Whereas, the City has entered into a Memorandum of Understanding with Hennepin County regarding property ownership in the Kenilworth Corridor, and

Whereas, the City has entered into a Memorandum of Understanding with the Metropolitan Council regarding design of the Southwest LRT in Minneapolis and the stations in Minneapolis, and

Whereas, the Memoranda of Understanding for Southwest LRT reached by the City could not address, and are not expected to address, every possible issue which will affect residents quality of life or their experience of Southwest LRT, and ongoing work will be required at each stage of project development, and

Whereas, the City of Minneapolis considers the pedestrian access and other project components from the resubmitted municipal consent package that are described in the Design Memorandum of Understanding to be necessary mitigations for both the alignment choice and the unexpected and unwelcome presence of freight rail in the Kenilworth Corridor, and

Whereas, the City of Minneapolis considers the Memoranda of Understanding with the Metropolitan Council and Hennepin County to be important, though limited, assurances regarding future property ownership in the Kenilworth Corridor, and

Whereas, without such agreements, the City of Minneapolis would not approve the physical design component of the Preliminary Design Plan for Southwest LRT, and

Benefits to the Region and Minneapolis

Whereas, while the routing-specific and station-specific benefits of Southwest LRT to advancing equity and to serving Minneapolis neighborhoods, have been exaggerated, Southwest LRT will nonetheless benefit equity by significant overall improvement of the regional transit system, and

Whereas, while Southwest LRT was not designed around serving disadvantaged populations or serving dense urban neighborhoods, Central LRT was designed around those goals. Central LRT serves, rather than avoids, dense Minneapolis neighborhoods. Central LRT was built on a city street with accessible, easy-to-find stations and ample room for development and job growth. These qualities of Central LRT are critically important because Southwest and Central will be one single “interlined” train. For example, riders will be able to get on in West Bank and get off in Hopkins without changing trains. This is referred to as a “one seat ride,” and

Whereas, both Hiawatha LRT (Blue Line) and Central LRT (Green Line) have exceeded ridership projections, and Southwest LRT, largely on the basis on its suburban ridership, still has the potential to be a successful project with ridership projected at 30,000 every weekday by 2030, and

Whereas, bringing people into downtown Minneapolis by transit, and not by automobile, will benefit Downtown Minneapolis, and is consistent with the City’s plans, including Access Minneapolis – the City’s Ten Year Transportation Action Plan, and

Whereas, residents of Minneapolis are disproportionately affected by regional air pollution and increasing overall regional transit ridership will help fight global climate change and improve regional air quality.

THEREFORE, BE IT RESOLVED, that the City of Minneapolis approves the physical design component of the preliminary design plans for the Southwest Corridor Light Rail Project that were submitted to the City by the Metropolitan Council in order to fulfill the requirements of Minnesota Statutes, Section 473.3994, Subd. 3, and

BE IT FURTHER RESOLVED, that the City of Minneapolis requests that the Metropolitan Council communicate with TC&W and seek the cooperation of TC&W in developing a "Good Neighbor Agreement" that will include a promise to maintain the current speed limit for freight in the corridor and approximately the same freight mix as currently exists, and

BE IT FURTHER RESOLVED, that the City of Minneapolis requests Metropolitan Council respect the residential and/or park-like nature of the 21st Street and Penn Ave Station Areas and agree to avoid unnecessary discretionary noise pollution, including not ringing bells as trains approach these stations.

**2015R-384
Resolution
of the
City of Minneapolis**

By Reich

Approving the Physical Design Component of the Preliminary Design Plans for the Southwest Corridor Light Rail Project in the City of Minneapolis.

Whereas, the City of Minneapolis passed Resolution 2014R-362 on August 29, 2014, approving the physical design component of the preliminary design plans for the Southwest Corridor Light Rail Transit Project in the City of Minneapolis as submitted to the City in July of 2014; and

Whereas, the statements and positions asserted in Resolution 2014R-362 continue to be valid for the City Council of the City of Minneapolis; and

Whereas, continued design and engineering by the Metropolitan Council resulted in an updated project cost estimate of \$1.994 billion; and

Whereas, project partners and stakeholders engaged in discussions regarding project scope reductions that resulted in changes in the project and a new project scope and related cost estimate of \$1.744 billion; and

Whereas, the Metropolitan Council has submitted the revised version of the physical design component of the preliminary design plans for the Southwest Corridor Light Rail Transit Project for approval by Hennepin County and the cities of Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and Minneapolis per Minnesota Statutes, Section 473.3994, Subd. 3; and

Now, Therefore, Be It Resolved by the City Council of The City of Minneapolis:

That the City of Minneapolis approves the physical design component of the preliminary design plans for the Southwest Corridor Light Rail Transit Project that were submitted to the City by the Metropolitan Council in order to fulfill the requirements of Minnesota Statutes, Section 473.3994, Subd. 3.

**2015R-385
Resolution
of the
City of Minneapolis**

By Reich, Palmisano, and Bender

Conveying the City's concerns to the railroad companies and the Metropolitan Council regarding freight rail safety in the Southwest Light Rail Corridor and the City of Minneapolis.

Whereas, the Minnesota legislature, in 2015 updated Minnesota laws chapter 312 which calling on the State to, "analyze preparedness and impacts to public safety from transportation of ethanol by rail"; and

Whereas, the Minnesota legislature updated Statutes 115E to include additional safety and spill response reporting for trains carrying oil and ethanol; and

Whereas, 19,000 Minneapolis residents live in the evacuation zone of a possible oil, ethanol, and other high hazardous flammable materials train explosion in the Kenilworth corridor and Downtown Minneapolis; and

Whereas, the Federal Railroad Administration has found the risks of an explosion from ethanol tankers to be similar to those of carrying crude oil; and

Whereas, the utilization of unit trains carrying eighty or more ethanol and other flammable tanker cars through the Kenilworth Corridor and downtown Minneapolis is increasing; and

Whereas, Twin City and Western Railroad has opposed public disclosure of state required spill prevention and clean-up plans; and

Now, Therefore, Be It Resolved by The City Council of The City of Minneapolis:

That the City of Minneapolis convey via letter a request that railroad companies traveling in the Kenilworth Corridor and parts of downtown Minneapolis that are co-located with light rail:

- publicly disclose emergency response and spill prevention plans; and
- begin a process with city and local neighborhood organizations and citizens groups to address community concerns; and
- publicly disclose routing decision plans and present options for rerouting of oil, ethanol, and other high hazardous flammable trains from the Kenilworth Corridor during SWLRT construction; and
- report to the city the extent of its liability insurance for spills, fires and explosions and items covered under that insurance.

Be It Further Resolved that the City of Minneapolis convey via letter a request to the Metropolitan Council to:

- prepare a report to the Minneapolis City Council regarding rail safety measures undertaken in other communities in the United States where light rail transit is co-located with crude oil and ethanol trains; and

- ensure that the Final Environmental Impact Statement for the Southwest Light Rail project include discussion of emergency response planning for an ethanol, oil, or other hazardous materials train incident; and
- discuss measures the Metropolitan Council will take to ensure that railroads operating in the corridor respond to the above mentioned requests from the City of Minneapolis of the railroads.

Executive Office / cad

BACHMAN'S

6010 Lyndale Avenue South, Minneapolis, MN 55419-2289

Comment #50

MINNEAPOLIS MN 554

23 JUN 2016 PM 8 T



Ms. Nani Jacobson
Assistant Director – Environmental and
Agreements
Metro Transit Southwest LRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426

RECEIVED
JUN 27
BY: SA

65400\$1724 0019



June 2, 2016

Ms. Nani Jacobson
Assistant Director – Environmental and Agreements
Metro Transit Southwest LRT Project Office
6465 Wayzata Boulevard, Suite 500
St. Louis Park, MN 55426

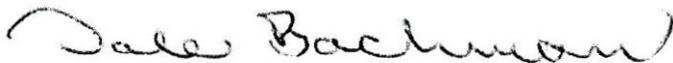
Dear Ms. Jacobson:

Thank you for the responses to our comments of July 17, 2015 for Bachman's, Inc., and our Eden Prairie location, at 770 Prairie Center Drive. We look forward to additional information regarding our concerns as it becomes available.

We continue to have great concern about the impacts of construction of the "bridge" and the vibrations over time, due to the operations of light rail, on our adjacent existing retaining wall. The retaining wall was engineered and installed prior to the development of the Costco storm water pond / wetland, and prior to construction and operation of light rail. We believe the existing retaining wall should be part of the project to ensure it will continue to perform, as it has in the past, through construction and light rail operations in the future. We further request that the Metropolitan Council and Project perform a study, prior to construction, at their expense, to determine the impacts of construction and vibrations from light rail operations over time on the structural integrity and performance of the existing retaining wall in the future.

Thank you for this opportunity to provide comments on the final EIS document.

Sincerely,



Dale L. Bachman
Chairman / Chief Executive Officer

DLB:cad

cc: Lee Bachman
Paul Bachman
Tom Shroyer

Attachment D – Responses to Comments Received on the Final EIS

ATTACHMENT D**Guide to Attachment D****Attachment D: Responses to comments received on the Final EIS**

Attachment D includes responses to comments received on the Final EIS. Included in the responses to comments are the following:

- *Comment Number*: A unique comment identification number assigned to each comment, corresponding with the ID Number from Attachment C.
- *Commenter*: The name of the individual submitting the comment, if provided.
- *Commenter Organization*: The name of the organization, business or group, if provided.
- *Response*: An individual response for each comment received.

Comment #	#1
Commenter	Dianne Desrosiers
Commenter Organization	Tribal Historic Preservation Officer, Sisseton Wahpeton Oyate

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) Final Environmental Impact Statement (EIS). The Project maps and cultural resources surveys requested are included in Appendix H of the Final EIS and in the *Cultural Resources Evaluation Supporting Documentation Technical Memorandum* in Appendix C of the Final EIS.

Comment #	#2
Commenter	Kim Ramey
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council responded to the request for a hard copy on May 20, 2016.

Comment #	#3
Commenter	Richard Adair
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council and FTA acknowledge the support for the Project and the new bridges over the Kenilworth Channel.

In regards to concerns that the Final EIS did not fully capture the greenhouse gas (GHG) emissions reduction benefits of the project, Table 3.11-4 quantifies these benefits on a regional basis. Under the Project, GHG emissions in 2040 will decrease by more than 955,000 metric tons per year when compared to 2013 existing conditions. See Section 3.11 of the Final EIS for more information on the methodology used to analyze the Project's GHG emissions reduction.

Comment #	#4
Commenter	Karen Lee Rosar
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council and FTA acknowledge the support for the Project.

Comment #	#5
Commenter	Eric Ecklund
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council continues to work with local funding partners and the Legislature to secure remaining non-federal funding for the Project.

Comment #	#6
Commenter	Doug Ellingson
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council and FTA acknowledge the support for the Project.

The state's legislative and budgeting process is used to determine the state's transportation priorities. The Project's proposed capital finance plan, which includes a proposed state funding share is described in Chapter 7 of the Final EIS. The state legislative and budgeting process will be used to determine the State's participation in Project funding. The Council continues to work with local funding partners and the Legislature to secure remaining non-federal funding for the Project.

Comment #	#7
Commenter	Bill Weber
Commenter Organization	None

Response

This comment was subsequently retracted by the commenter and replaced with Comment #8.

Comment #	#8
Commenter	Bill Weber
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The roadway configuration is shown in Appendix E of the Final EIS. The Project includes a new median on Wooddale Avenue that makes Minnesota Service Road right-in, right-out only. Drivers will not be able to turn left (westbound) from northbound Wooddale Avenue onto Minnesota 7 Service Road.

Comment #	#9
Commenter	Karen Kromar
Commenter Organization	Minnesota Pollution Control Agency

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council has provided an electronic copy of the Final EIS to the Minnesota Pollution Control Agency and the EQB distribution list.

Comment #	#10
Commenter	Steve Smith
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council and FTA note your opposition to the Project and concerns regarding environmental impacts. Refer to Final EIS Appendix L, Attachment 3, *Theme B: Opposition to the Project*, which addresses your comments. Also refer to Section 5.1 of this Record of Decision for FTA's findings regarding the environmental review of the Project.

Comment #	#11
Commenter	Arthur Higinbotham
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council has complied with the Lakes and Parks Alliance discovery request.

In regards to the comment about the Alternatives Analysis (AA), a summary of the AA phase is included in Section 2.2.2 of the Final EIS. The AA evaluated multiple transportation modes and alignments against detailed performance criteria, including ridership, community impacts, environmental impacts, and cost. Chapter 2 of the Final EIS also summarizes the process to identify the Locally Preferred Alternative.

Comment #	#12
Commenter	Scott Dibble / Frank Hornstein
Commenter Organization	Minnesota State Senate, Minnesota House of Representatives

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). Responses to your letter were included in letters to you from Marisol Simón, Regional Administrator –FTA Region 5, and Adam Duininck, Chair – Metropolitan Council, dated June 1, 2016 and June 3, 2016, respectively. The letters are incorporated herein as responses to your comment letter.



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)

June 1, 2016

D. Scott Dibble, State Senator
Minnesota Senate
85 University Ave W
Saint Paul, Minnesota 55155

Frank Hornstein, State Representative
Minnesota House of Representatives
100 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155

Re: Metropolitan Council, Metro Transit Southwest Light Rail Transit Project, Minneapolis
Final Environmental Impact Statement Comment Period Extension Request

Dear State Senator Dibble and State Representative Hornstein:

The Federal Transit Administration (FTA) is in receipt of your correspondence dated May 20, 2016. Your letter requests that FTA extend the 30-day comment period for the Metropolitan Council, Metro Transit Southwest Light Rail Transit Project (SWLRT Project), Final Environmental Impact Statement (FEIS).

FTA has reviewed your request and decided to retain the 30-day comment period for two reasons. For one, comment periods are typically no longer provided between the release of an FEIS and issuance of a Record of Decision (ROD). With some exceptions, 23 U.S.C. § 139(n)(2) provides that the lead agency for the environmental review shall, to the maximum extent practicable, combine the FEIS and ROD into a single document. This provision took effect October 1, 2012. For this project, FTA determined that combining the FEIS and ROD would not be practicable because the document must address the Minnesota Environmental Protection Act (MEPA) requirement for a 10-day comment period for Adequacy Determination purposes (Minnesota Rules 4410.2800 § Subp. 2). Consequently, FTA decided to publish the FEIS with a 30-day comment period to encompass the MEPA provision while satisfying NEPA requirements. Comments received during this time will be addressed in the FTA ROD.

Secondly, the main body of the SWLRT Project FEIS is within 400 pages and includes all substantive environmental analyses that are discussed in the various appendices. All previous comments received on the Draft EIS and Supplemental Draft EIS are documented in the FEIS with explanations of how they were considered. The FEIS does not provide any further substantive new information that wasn't available in these other documents. New information in the FEIS relates primarily to mitigation commitments. Therefore, a 30-day review period is sufficient for the public to review the FEIS.

Re: Metropolitan Council, Metro Transit Southwest Light Rail Transit Project, Minneapolis
Final Environmental Impact Statement Comment Period Extension Request

If you have questions or would like to discuss this matter further, please feel free to contact me at 312-353-2789 or marisol.simon@dot.gov. Thank you.

Sincerely,


for Marisol R. Simón
Regional Administrator

cc: Adam Duininck, Chair, Metropolitan Council

June 3, 2016

Scott Dibble, State Senator
Minnesota Senate
85 University Ave W
Saint Paul, Minnesota 55155

Frank Hornstein, State Representative
Minnesota House of Representatives
100 Rev. Dr. Martin Luther King Jr. Blvd
Saint Paul, Minnesota 55155

Dear Senator Dibble and Representative Hornstein,

The purpose of this letter is to respond to your request to extend the Southwest LRT Final Environmental Impact Statement (FEIS) comment period beyond June 13.

We agree with FTA's decision to retain the 30-day comment period, as outlined in its June 1 response to you. In addition to FTA's reasons, I'll add that the Metropolitan Council has provided ample opportunities for public comment throughout the environmental review process, including comment periods for both the Draft Environmental Impact Statement (DEIS) and the Supplemental DEIS, which is the appropriate time for the public to provide substantive comments under the National Environmental Policy Act and Minnesota Environmental Policy Act. The 1,200+ comments have positively informed and improved the overall design of the Southwest LRT project.

These meetings were open to the public and the presentation materials are posted online at www.swlrt.org.

Please feel free to contact me at 651-602-1453 or adam.duininck@metc.state.mn.us if you have questions.

Sincerely,



Adam Duininck
Chair
Metropolitan Council

cc: Marisol R. Simón, FTA Regional Administrator
Carolyn Flowers, FTA Administrator

Comment #	#13
Commenter	Jami LaPray
Commenter Organization	Safety in the Park

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council and FTA acknowledge the support for the Project.

Comment #	#14
Commenter	Stuart Nolan / Lisa Moe
Commenter Organization	StuartCo

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The sections below provide responses to the comments received on the Final EIS. For the purposes of this response, Greenfield Apartments, Deer Ridge and Raspberry Woods shall be referred to collectively as “StuartCo Properties.”

1. Noise

Section 3.12 and Appendix K of the Final EIS document the methodology, analysis and effects associated with noise impacts from the Project. The analysis uses the results of on-site noise monitoring to assess the impacts of the Project and identify mitigation in accordance with the Federal Transit Administration’s (FTA’s) *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006) and Council policy.

Regarding the questions about the noise assessment for the StuartCo Properties, on-site testing was completed in March 2010 adjacent to, but not on, the StuartCo Properties. This testing was taken at Smetana Road and Nolan Drive, which is representative of the ambient noise conditions at the southern buildings of both complexes (see Exhibit 3.12-3 of the Final EIS and Exhibit 4.1-1 in Appendix K). As described in Section 6.1.3 of the *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006), residential neighborhoods can be clustered to simplify the analysis without compromising the accuracy of the analysis. The noise assessment data are provided within Appendix K of the Final EIS, specifically in Appendix J (contained therein): Detailed Noise Impact Data table. The noise analysis conducted for the northern buildings of Deer Ridge and Greenfield Apartments was based on measurements taken in August 2013 at a location on Claremont Apartments’ property that is representative of the quieter conditions farther away from the road, including Claremont Apartments and the northern buildings of Deer Ridge and Greenfield Apartments. This noise measurement was also used for the noise analysis for Claremont Apartments, where a moderate noise impact was identified and noise mitigation identified due to proximity of the residences to the LRT alignment. No major changes to the ambient noise sources in the area have occurred since 2013, therefore it is appropriate to use noise monitoring data from 2013. In contrast, there are no noise impacts identified at the StuartCo Properties because there is a greater distance from LRT to the apartment buildings and due to proximity of the southern buildings to a roadway, therefore no mitigation is warranted.

The FTA’s *Transit Noise and Vibration Impact Assessment Manual* indicates that the quietest location on the property is used to measure ambient noise and assess noise impacts (see Appendix D: Determining Existing Noise, page D-3 of the *Manual*), The *Manual* also indicates it is appropriate to use one receiver to represent the noise environment at other sites when the proximity to major noise sources is similar among the sites (see section 6.6.3 of the *Manual*). Within the Greenfield Apartments and Deer Ridge sites, the southern buildings of each complex are close to Smetana Road, and the northern two buildings are farther from Smetana Road; therefore, two different noise measurements were used in the noise assessment for these properties as indicated in Appendix J, Detailed Noise Impact Data, in Appendix K of the Final EIS. The “noise site used” column in Appendix J indicates which monitoring location data were used in the assessment for each property at Greenfield Apartments and Deer Ridge. For example, Site N27 (Nolan Drive) was used for the southern buildings of both complexes. Site N5 (Claremont Apartments) was used for their northern buildings because it provided a quieter location than the Nolan Drive site for buildings further from

a roadway. By using both of these measurements the analysis meets FTA's criteria and provides an accurate assessment for buildings that are close to, and further from, the road. No mitigation is proposed for any of the buildings in the Greenfield Apartments and Deer Ridge because no noise impacts were identified for those buildings. Mitigation is provided for severe and moderate impacts where the existing noise levels exceed 65 A-weighted decibels (dBA) day-night sound level (Ldn) or where there is an increase in noise due to the Project of 3 dB or greater, where reasonable and feasible, in accordance with the noise mitigation guidelines contained in the Regional Transitway Guidelines (Council, March 2016).

The buildings of Raspberry Woods exceed the FTA screening distance of 350 ft necessary for inclusion in the Project's noise assessment.

The LRT track curve near the southern properties at Greenfield Apartments and Deer Ridge (refer to Final EIS Appendix E, Figure 10) is not tight enough to produce wheel squeal for incorporation into the noise assessment (this is generally conducted for curves with a radius of 300 feet or less; the radius of this curve is greater than 500 feet).

In response to comments about the LRT speed assumptions used in the noise assessment for the Final EIS, Appendix J, Detailed Noise Impact Data, in Appendix K of the Final EIS includes the light rail vehicle speed projections at each noise modeling location. Since the publication of the Draft EIS, the Council advanced the design of the Project, incorporating design adjustments into the Project, including changes to the light rail vehicle speeds. The noise analysis in the Final EIS for the StuartCo Properties included light rail vehicle speeds projected to be approximately 55 mph adjacent to the northern buildings of the Greenfield Apartments and Deer Ridge complexes and 30 mph near the southern buildings of both complexes.

In response to comments about how elevated track was incorporated into the noise analysis in the Final EIS for the Greenfield Apartments and Deer Ridge complexes, refer to the Detailed Noise Impact Data in Appendix K of the Final EIS. The "Elevated" column indicates elevated track for Deer Ridge and at-grade track for Greenfield Apartments. Elevated structures are analyzed as part of the noise analysis when there is line of sight between the bottom of the structure and residences. For these elevated structures, an additional 4 decibels are added to the projected noise levels from an LRT track due to structure-borne noise (See Section 3.1 of Appendix K, Noise and Vibration Supporting Documentation, of the Final EIS). For example, light rail track on a structure 5 feet off the ground would not be factored into the noise analysis as elevated track because the bottom of the structure would not be visible from the StuartCo Properties. For the track to be evaluated as elevated structure in this location, the track would need to be 10 to 15 feet off the ground providing a clear line of sight from the building to the bottom of the structure.

The track will not be elevated by the Greenfield Apartments. At Deer Ridge, the track will only be elevated at the northern building, therefore this is the only building that should be analyzed with elevated structure. The bottom of the light rail structure would not be visible from the remaining buildings of either complex and, therefore, should not be analyzed as elevated structure in those places. For the southern building at Deer Ridge, the Final EIS incorrectly assessed noise for an elevated track at this location, however this area should have been analyzed with track at-grade (See Appendix J, Detailed Noise Impact Data, in Appendix K of the Final EIS). A correction is not needed to the analysis however because the noise level reported in the Final EIS is higher than the Project will cause due to the more stringent elevated noise level being used for the analysis. When assessed using the at-grade track in the noise assessment for Deer Ridge, the noise level with the Project would be 50 decibels, instead of 53 decibels as reported in the analysis in the Final EIS. This does not change the results of impacts or mitigation needed for the Project. Additionally, Table 3.12-5 in Section 3.12 of the Final EIS contains a rounding error: the 54 dBA reported under the

“Total Project Noise” column for Greenfield Apartments should be 53 dBA. Appendix J, Detailed Noise Impact Data, in Appendix K of the Final EIS correctly reports this as 53 dBA (rounded from the actual calculation of 53.47 dBA). In either case the Project noise level is below the impact criteria.

Refer to Final EIS Appendix M, Attachment 4, Response #144 for a response to the comment regarding the screening distance used for noise impacts from the proposed Hopkins OMF. Although it is true that the screening distance to identify noise sensitive receptors at the OMF is 1,000 feet, the screening distance should be applied at the center of the facility, not at the edge (See Table 4-1, Screening Distances for Noise Assessments, on page 4-3 of FTA’s *Transit Noise and Vibration Impact Assessment Manual*). The screening distance accounts for all noise sources within an OMF, including train movements within the site. When the screening distance is applied at the center of the OMF, there are no sensitive receptors among the StuartCo Properties within the screening distance. Field review has determined that all land uses within the 1,000 foot screening distance are commercial or industrial, and are not sensitive receptors. Wheel squeal is not evaluated because the center of the OMF is more than 1,000 feet away from the buildings on the StuartCo Properties. Refer to Figure 1 of this response showing the 1,000 foot distance from the OMF in relation to the StuartCo Properties. The noise assessment conforms with the evaluation guidelines in the FTA manual.

2. Environmental Releases and Project Impacts

Section 3.14 of the Final EIS includes a description of the methodology used and findings regarding the Project potential to encounter contaminated materials. The Final EIS includes the Hopkins Sanitary Landfill as a site of concern because Project construction activities will disturb the site; accordingly, the contractor will be required to follow protocols specified in Response Action Plans (RAPs). A Phase II Environmental Site assessment completed for the Hopkins Sanitary Landfill identified restrictions on the reuse of soils from the site. See Final EIS Appendix M, Attachment 4, Response #144 for more information about the hazardous materials at this site. The RAPs take into consideration the types and locations of specific construction activities at the site and identify actions to minimize and avoid risks related to soil management and disposal. A RAP for the OMF, approved by the Minnesota Pollution Control Agency (MPCA) in March 2016, includes the implementation of a soil vapor intrusion mitigation system to address chlorinated solvent contamination resulting from soil and groundwater contamination. This mitigation system will help mitigate methane soil vapor, in the event of methane migration to the OMF site occurs. Refer also to Final EIS Appendix L, Attachment 3, *Theme 0.6: Noise and vibration impacts to specific properties*, which addresses the vibration sensitivity of the landfill site.

3. Visual Aesthetics

a. Destruction of Existing Woodlands and Wetlands

Visual impacts due to tree removals and wetland impacts are evaluated as part of the visual impacts assessment in Section 3.7 of the Final EIS. The Final EIS acknowledges the Project will result in visual impacts due to the removal of existing vegetation and introduction of new visual elements such as the track, overhead wire system, and stations. The Project will mitigate these impacts by designing and implementing landscaping at appropriate locations, within available landscape budget and balancing other priorities for landscaping (e.g., surface water quality, habitat preservation, impact on species of concern), as noted in Attachment A of this Record of Decision.

Wetlands Restoration

Final EIS Section 3.9 describes wetland impacts on StuartCo property, which is identified as Wetland MTA-MTA-11. The total size of this wetland is 11.79 acres. The Project will permanently impact 3.13 acres of state-regulated wetland and 0.04 acres of federally regulated wetland. In

addition, 3.08 acres of wetland at this location will be temporarily impacted by construction activities. Wetland impacts at this location have been minimized by design adjustments; in this location, the Project will be constructed on a bridge to minimize wetland impacts.

Wetland mitigation proposed for the Project as a whole includes the following:

- Purchase the required amount of wetland mitigation bank credits based on the long-term impacts and associated replacement ratios identified in the WCA and CWA Section 404 permit applications.
- Restore wetlands temporarily affected during construction to existing grade and hydrology and reseed with appropriate native wetland species seed mix, as required by the WCA and CWA Section 404 permit applications.
- Purchase wetland mitigation bank credits for CWA-regulated short-term impacts lasting longer than 180 days.

The Council developed a *Wetland MTA-MTA-11 Restoration Plan* for the wetland adjacent to StuartCo property due to the extent of the temporary impacts, which is included in the Project's *Minnesota Interagency Water Resource Application* submitted to permitting agencies in May 2016.

Woodlands Restoration

Section 3.10 of the Final EIS describes the Project's impacts to habitat, including woodlands. The Project as a whole will remove 18.8 acres of woodlands and have short-term impacts (woodlands that will be removed and replaced) on 5.1 acres of woodlands Project-wide. In 2016, the Project conducted a tree survey and inventory along the LRT corridor in this area in order to support efforts to minimize impacts to trees. The results of this survey and inventory will be included in the contract specifications for the Project's construction contractor. To mitigate for these losses of woodland habitat, native landscaping will be incorporated into the Project's design during Engineering, where applicable and appropriate. Habitat that is temporarily disturbed during construction will be re-seeded and restored, where appropriate, upon construction completion.

b. Restoration of Destroyed and Compacted Lands

Construction sites will be restored and reseeded where appropriate, including replacement of suitable soils as needed. Additionally, the Project's construction specifications will include a plan to manage invasive species and noxious weeds. Further, the Minnesota Interagency Water Resource Application submitted to permitting agencies in May 2016 specifies measures to avoid soil compaction while working in a wetland. The contractor will be required to implement measures, when and where possible, to avoid bringing equipment into wetlands to the extent possible, to schedule work during drier seasons or when the ground is frozen, to minimize the number of repeated passes over the same trail when working in a wetland area, and to use equipment types specified in the permit to avoid unnecessary soil compaction. After construction, the contractor will use soil chiseling to break up compacted surfaces and till in compost to aid in long term soil decompaction.

4. Light Impacts

Section 3.7 of the Final EIS acknowledges that the overall Project has the potential to cause light spill and glare effects. However, headlights on the fronts of light rail vehicles have highly focused beams that direct the light downward onto the track and straight ahead of the vehicle. As such, the light rail vehicle headlights will not project light into the surrounding environment. Sunlight reflecting on light rail vehicles does not pose a visual or safety impact. Vehicles pass by residences quickly. The Project's visual resources analysis was prepared using the standardized approach for

visual impact assessment documented in the FHWA's Visual Impact Assessment of Highway Projects (FHWA, 1988), which uses other metrics focusing on visual change and does not require consideration of sunlight reflection impacts.

5. Public Safety

Section 4.6 of the Final EIS addresses safety and security considerations. The Project will be designed in accordance with the Metro Light Rail Transit Design Criteria. As shown in the 90 Percent Design Plans available on the Project website (<http://metrotransit.org/swlrt/feis>, under the heading "Design Plans"), the light rail bridge structure will be supported by tressle-bent piers adjacent to Greenfield Apartments, and on concrete piers adjacent to the existing landfill. The light rail bridge will have fences/railings to secure the guideway adjacent to the StuartCo Properties, the retaining walls will have fall protection fences/railings, and the short distance of at-grade guideway abutting Greenfield Apartments will also have corridor protection fencing to secure the guideway. The Council will own and maintain the LRT guideway and LRT infrastructure, and will address graffiti as needed. The Council will coordinate with StuartCo regarding safety measures on the properties as appropriate.

6. Construction Impacts

Construction activities are described in Section 2.1.1.2 of the Final EIS. Table 2.1-2 of the Final EIS describes track and bridge construction activities and methods at a summary level developed to assess impacts in the Final EIS. The Council does not prescribe means and methods for the construction contractor to construct the Project. However, the Project uses conventional design for the proposed elements near the StuartCo Properties. For example, the design of the bridge near the StuartCo Properties includes conventional driven pile foundations and tressle-bent piers, cast in place piers/pier caps, prestressed concrete beams, and cast-in-place decks. Based on soil testing, the cast-in-place pipe piles are anticipated to be driven to depths of up to 90 feet. Vibratory piling is not anticipated to be needed as part of the bridge construction near the StuartCo Properties. Temporary removal of water from the shallow excavations necessary for foundation work is anticipated to be accomplished with sump pumps in the excavations. The Minnesota Interagency Water Resource Application submitted to permitting agencies in May 2016 stipulates that the contractor will, where possible, schedule construction work during drier seasons or when the ground is frozen to minimize impacts to Wetland MTA-MTA-11 as described in Item 3.a. above.

The Project's Construction Communication Plan will include activities to inform area residents about construction activities such as working hours. The Project's Construction Mitigation Plan, which will reference design and specification information contained in the Project construction documents, will require pre-construction and post-construction inspection of selected properties, based on factors such as their proximity to the construction site, the type of construction activities that will occur adjacent to the property, and soil conditions at the site. The Deer Ridge and Greenfield Apartments would be identified as requiring these inspections, which will document pre-construction conditions. The Construction Mitigation Plan will also include requirements for monitoring construction-related vibration and procedures to modify construction methods if monitoring thresholds are exceeded. The Council will coordinate with StuartCo during construction as appropriate.

7. Groundwater Plan

The Project performed geotechnical explorations including auger and Cone Penetration Test (CPT) borings on the StuartCo Properties in April 2013 and March 2014. A total of nine soil borings were taken along the Project between Smetana Road and the Bass Lake Spur railroad tracks. Specific locations are identified in "Geology and Groundwater Supporting Documentation" in Final EIS

Appendix C, Geotechnical Evaluation, West Segment 3. This information was incorporated into the geotechnical recommendations that informed the design of Project facilities at those locations. The Project design has addressed surface water issues to comply with requirements of municipalities, the Nine Mile Creek Watershed District and the MPCA National Pollutant Discharge Elimination System (NPDES).

As shown in the 90 Percent Design Plans available on the Project website, the light rail will be on a bridge supported by tressle-bent piers adjacent to Greenfield Apartments, and on concrete piers adjacent to the existing landfill; therefore, the Project is not anticipated to impact flows of surface water or groundwater.

8. Wildlife, Birds, and Flora

Section 3.10 of the Final EIS provides an assessment of impacts to wildlife habitat based on a review of land cover types data. The existing habitat within the habitat study area has been assessed through the review and evaluation of five environmental spatial data sources created by the Minnesota Department of Natural Resources (MnDNR): (1) Minnesota Land Cover Classification System (MLCCS); (2) Regional Ecological Corridors; (3) Regionally Significant Ecological Areas; (4) Native Plant Communities; and, (5) Sites of Biodiversity Significance. This analysis is documented in the Southwest LRT Habitat Analysis technical report, incorporated by reference into the Final EIS (see Final EIS Appendix C, Supporting Documents and Technical Reports). The habitat near the StuartCo Properties is primarily wetland.

The Project will result in a loss and/or degradation of vegetated areas, which could result in a decrease in wildlife foraging areas, breeding habitats, and nesting areas. Additionally, the Project will result in a short-term loss of vegetated areas. To mitigate for habitat loss, native landscaping will be incorporated into the Project's design during Engineering, where applicable and appropriate.

The Project's Construction Mitigation Plan, will include requirements such as vegetation protection, invasive species management, compliance with state and federal rules for vegetation and wildlife protection, and use of wildlife-friendly erosion control materials. The Plan will also include requirements for restoration of disturbed areas to meet requirements of the local, state and federal rules and permits.

Additionally, the *Wetland MTA-MTA-11 Restoration Plan* (referenced above) includes detail regarding reseeding and replanting, maintenance, and monitoring in order to fully restore the temporarily impacted portion of the wetland to pre-Project conditions.

9. Park and Recreation Areas

The only path that will be physically altered by the Project in the vicinity of the Deer Ridge and Greenfield Apartments is the private trail that connects Deer Ridge with Greenfield Apartments. The Project will reconfigure the existing trail connecting the properties in a slightly different location, but trail connectivity will remain. The Council will coordinate with StuartCo on the reconfiguration of the existing trail during Engineering for incorporation in the Project's final design plans. The Project's Construction Mitigation Plan, will require keeping this path open to users during construction, with only limited closures for selected activities (such as erecting bridge beams) as a precautionary safety measure.

10. Fire Safety and Access

The Project design indicates that the fire safety entrance will be temporarily closed to facilitate construction of the Smetana Road bridge over the Project, the adjacent retaining walls, and for rerouting of underground utilities. The design includes replacement of this entrance to its existing

location and grade. The Construction Mitigation Plan, will include requirements from the construction contract for constructing and maintaining a temporary fire safety entrance to Smetana Road during the time when the existing safety access is not available. The Council will obtain local agency approval and will coordinate with StuartCo on the design of the temporary entrance as appropriate.

11. Trespass

The Project's proposed property acquisition will include permanent acquisitions and temporary easements. The construction contractor will only have access to the property that has been permanently or temporarily acquired for the Project, and the contractor's access to temporarily acquired properties will be limited to the duration specified in the temporary easements. During construction, the Council will work with the construction contractor and adjacent property owners, including StuartCo, to address issues and discuss concerns should they arise. The Project's Construction Mitigation Plan will include requirements for construction contractor's security procedures. The procedures will require the contractor to maintain security of the construction site. The Construction Mitigation Plan will also include requirements for the construction contractor to arrange for their worker parking and will prohibit use of private parking unless approved by the affected property owner.

12. 11th Avenue South

The Council considered and performed a high-level screening of the suggested 11th Avenue South alignment in 2015 based on the plan provided by StuartCo to the Southwest LRT Project Office (refer to Figure 2 of this response for a copy of the plan). Based on this screening, this route was determined to have the potential for more adverse impacts than the Project alignment. Therefore the Council rejected this alignment due to several reasons when compared to the Project. In summary, the suggested 11th Avenue South alignment would:

- Not connect to the Hopkins OMF site. The alternative OMF location proposed by StuartCo for the 11th Avenue alignment would require additional study and did not provide enough analysis to determine feasibility of an OMF location near 11th Avenue South;
- Not connect to the proposed Shady Oak Station in Hopkins;
- Have additional at-grade crossings
- Lack enough space to accommodate LRT in the existing right of way in addition to the roadway and sidewalks without additional property acquisitions, though the property impacts were not quantified;
- Restrict vehicle access to side streets and driveways that has the potential to cause additional traffic and property access impacts; and
- Impact additional wetlands near Smetana Road that could potentially alter the Least Environmentally Damaging Practical Alternative determination received from the U.S. Army Corps of Engineers.

Additionally, the proposed alignment bisects a Section 4(f) property referred to as Unnamed Open Space B (also known as Outlot A) in the Amended Draft Section 4(f) Evaluation published in January 2016. This property is an approximately 49-acre open space located in Minnetonka, generally south of Smetana Road, west of Green Circle Drive North of Bren Road West, and east of Claremont Apartments. Refer to Chapter 6, Final Section 4(f) Evaluation, Section 6.6.1.3 of the Final EIS for a description of this property and summary of the *de minimis* impact determination on this property from the Project. The *de minimis* impact for this property is based on several factors including: only

one acre of the property will be used by the Project; most of the natural areas located in the northern portion of the property will not be directly affected by the Project; and the light rail alignment will be generally screened from those natural areas by retained vegetation and existing residential buildings. Compared to the Project alignment, the suggested 11th Avenue South alignment would result in greater harm considering the 11th Avenue South alignment would traverse the entire portion of this property; therefore, would likely constitute a non-*de minimis* use of the Section 4(f) resource, which would require a Section 4(f) avoidance alternatives analysis, a least overall harm analysis, and all possible planning to minimize harm. The analysis would identify the proposed Project—not StuartCo's 11th Avenue Route—as the alternative that would result in the least overall harm, in light of the Section 4(f) statute's preservation purpose (as per 23 CFR 774.3(c)(1)).

The Council did not perform a ridership analysis for this alternative because it was rejected due to the potential for environmental impacts noted above. Please refer to Final EIS, Appendix M, Attachment 4, Response #92 for additional information.



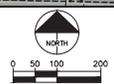
Jun 23 2016 11:03 am V:\MAD\CAD\SEGMENT\W\EDWARDS\TRACK\DRW-W\TRK-DST_APTL_Midway By Denver.dwg



SOUTHWEST LRT
VICINITY OF OMF (1000 FT)

FIGURE 1

Rev 0
05/31/2016



DRAFT-WORK IN PROCESS



Stuart Nolan, Founder

snolan@stuartco.com

(952) 948-9501

Lisa Moe, CEO

lmoe@stuartco.com

952-958-9506

Figure 2

August 25, 2015

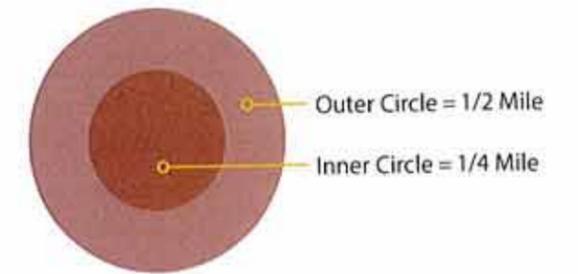
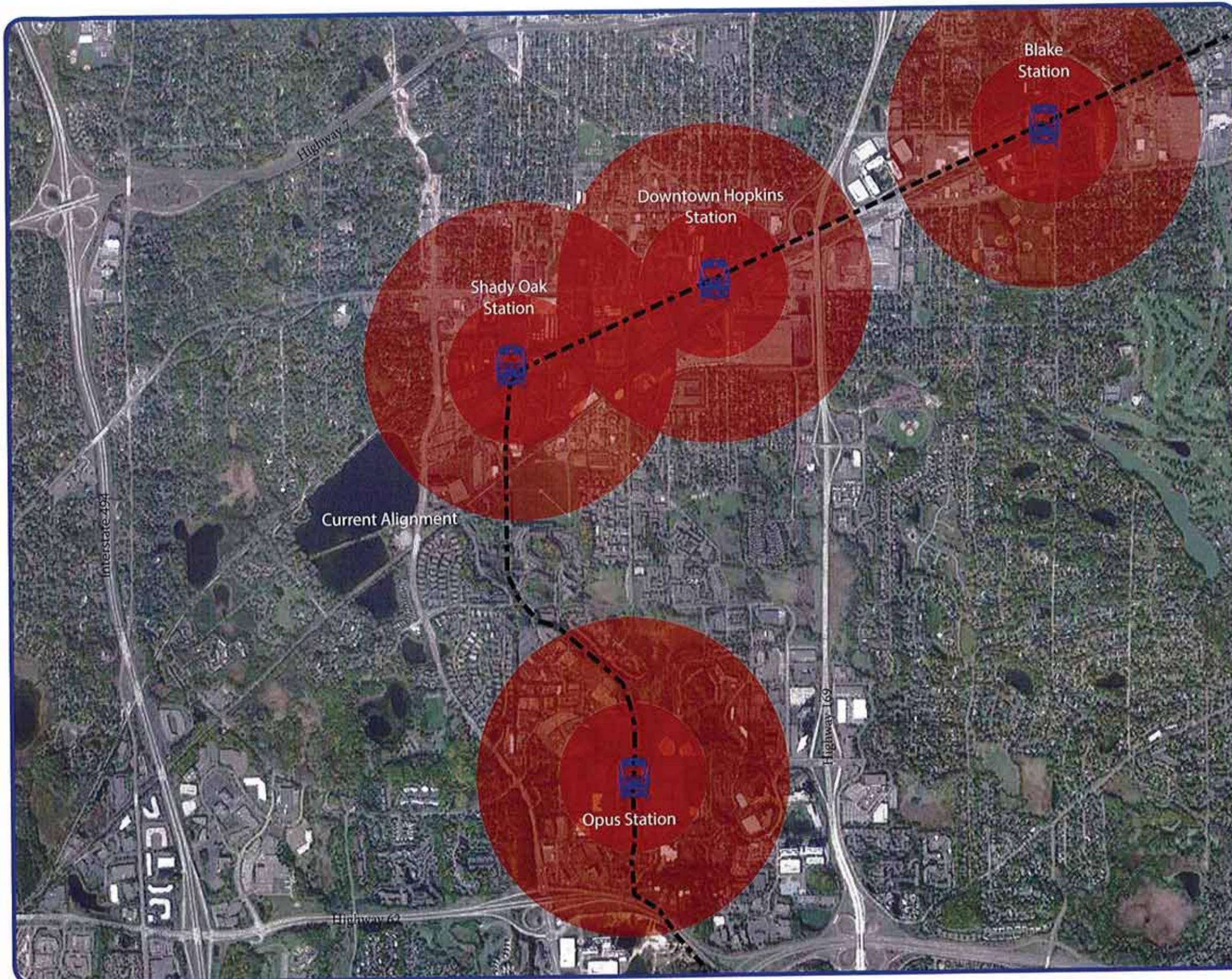


Proposed 11th Avenue LRT Alignment

- More accessible for Hopkins residents
- Shorter, faster, more direct route
- New opportunities for Transit-Oriented Development
- Costs less

North

Date: 8/24/2015

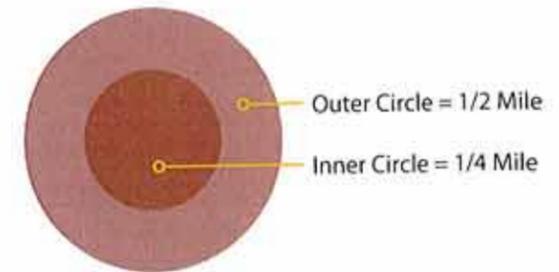
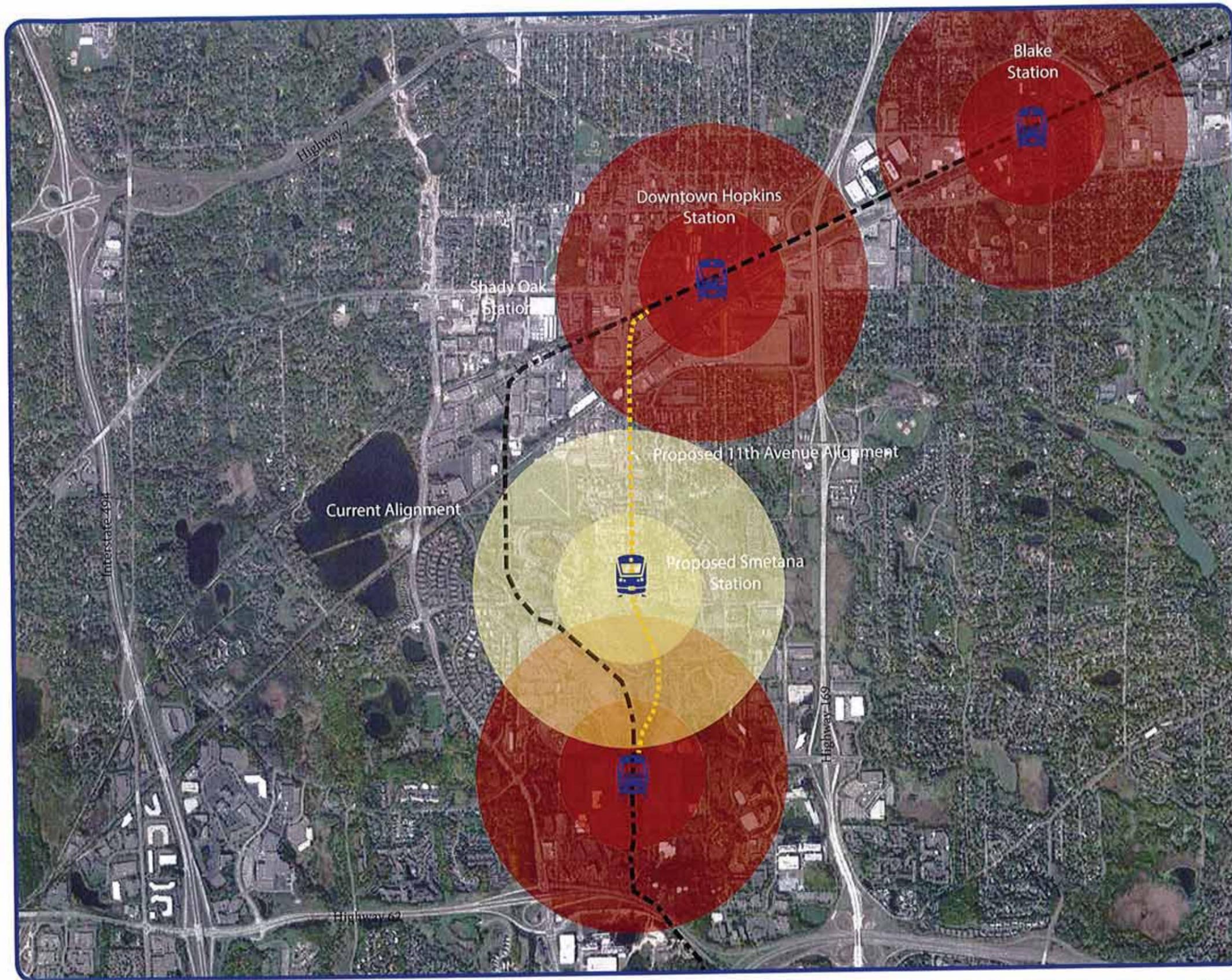


LRT Station Location
.....

Current Alignment Summary: Gap
.....

- \$74 million estimated cost (2013 dollars) for line between Shady Oak and OPUS
- Length of track from Shady Oak Station to OPUS Station - 11,501feet
- Bridge will span 3,250 feet with a height of 23 1/2 feet over wetland west of the landfill
- Potential adverse impacts to wetlands and landfill
- Shady Oak Station
 - Only 853 people within 0.5 miles
 - 10-minute walk-shed does not include a majority of the 853 people
 - 10-minute walk-shed overlaps with Downtown Hopkins Station
- Opus Station
 - Only 1,131 people within 1/2 mile radius
 - No rental units within 1/4 mile radius

North  Date: 8/24/2015



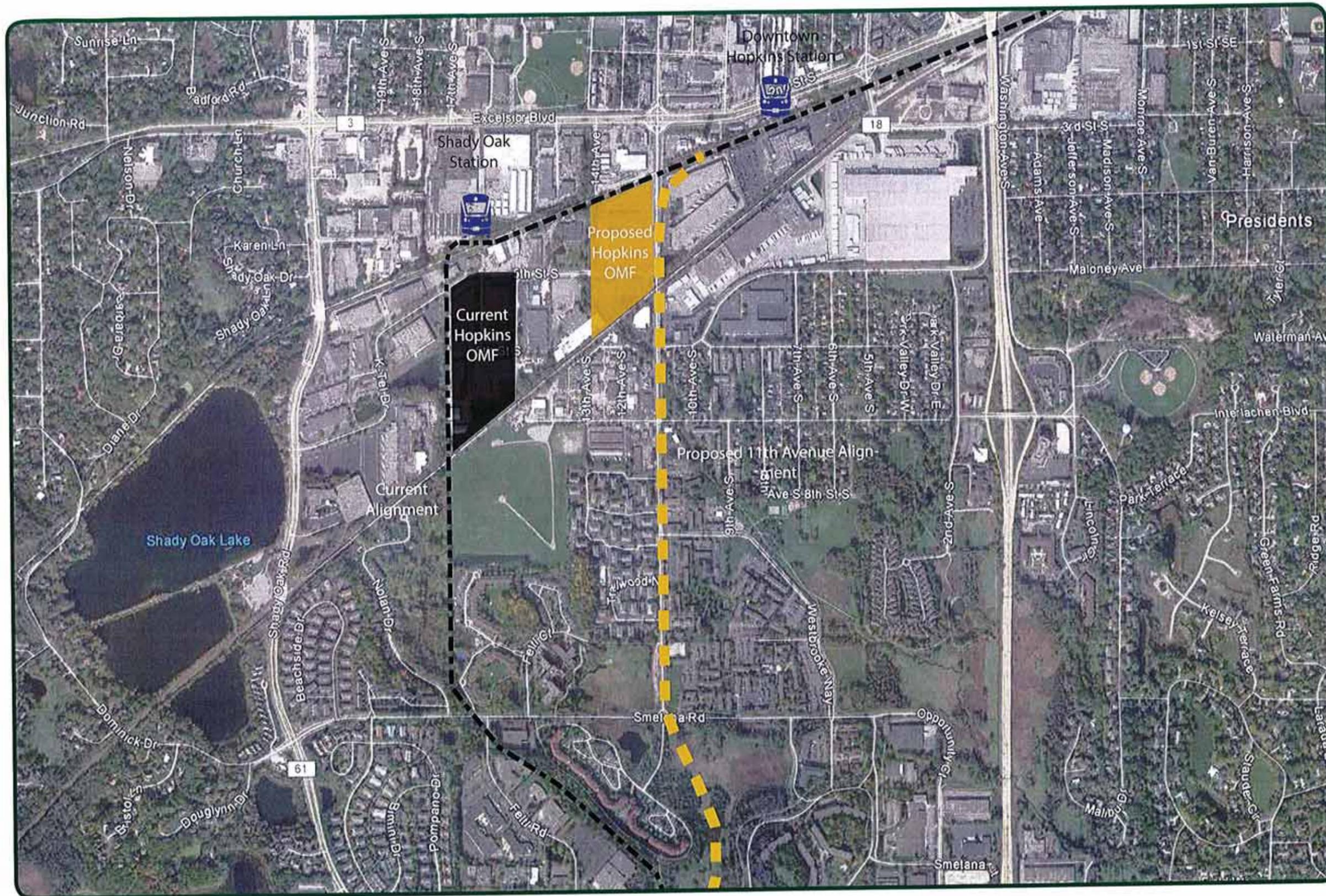
LRT Station Location

 The proposed Smetana Station is centered in the light yellow circles.

**Proposed Alignment Summary:
 Improved Hopkins Coverage**

- Estimated \$24 Million
- Length of track from 11th to OPUS Station - 9,298 feet
 - Reduction of rail line and cost for 2,200 feet
 - Substantial savings in rail and bridge costs
- Reduced rider time
- 11th Avenue Station: Increased Ridership
 - 6,000 people within 1/2 mile radius
 - Large resident population within 1/4 mile walk-shed
 - Numerous transit reliant users within walk-shed
 - Adjacent to St. Theresa's Senior Housing
- Connections to existing bus routes

North  Date: 8/24/2015



Proposed 11th Avenue LRT Alignment: OMF Location

- Proposed OMF was the SDEIS #2 evaluated site
- Proposed OMF had a higher ranking based on the 13 criteria used than current site.
- The cost for the two OMF sites overlap
- Moves OMF away from the landfill and reduces potential for adverse environmental impacts

North  Date: 8/24/2015



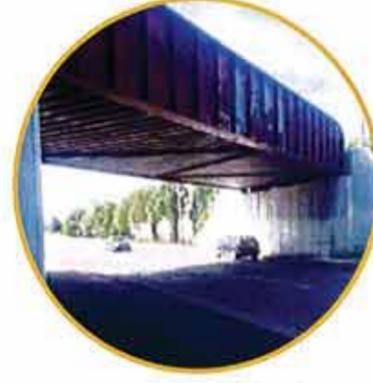
St. Therese Southwest



Residential Townhome Units



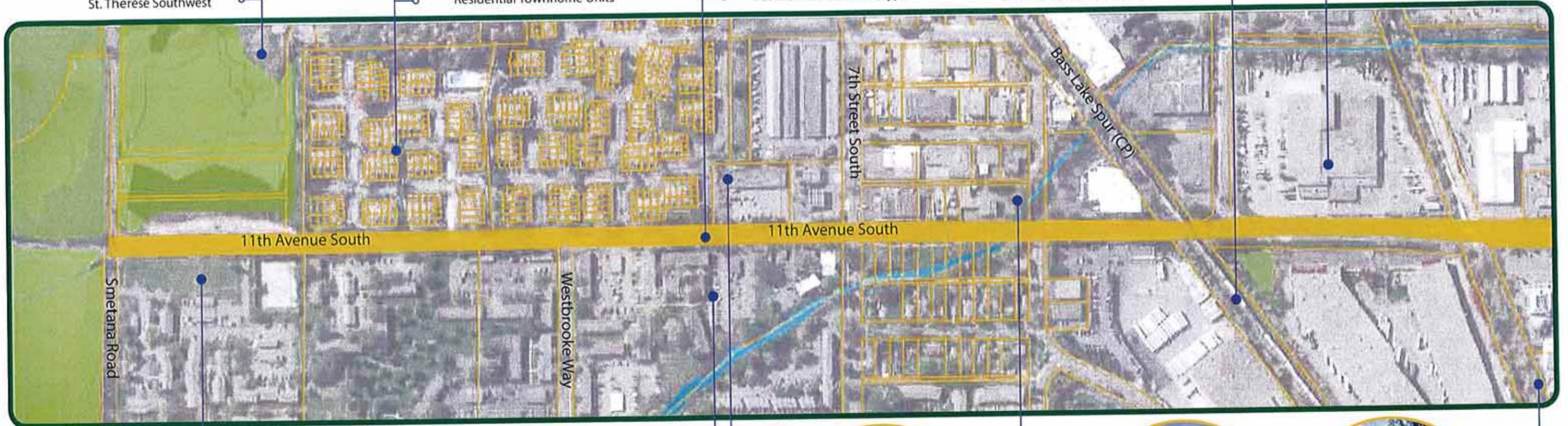
Pedestrian Crosswalk (Typ.)



Overhead Railroad Bridge



Commercial Property



Open Space



Residential Apartment Units



Strip Commercial Structure



Street Front Commercial



Minnesota River Bluffs Trail

Existing Conditions Legend

-  Existing Property Lines
-  Existing Wetland
-  Nine Mile Creek



Date: 8/24/2015



Mixed Use / Affordable Housing



TOD Development



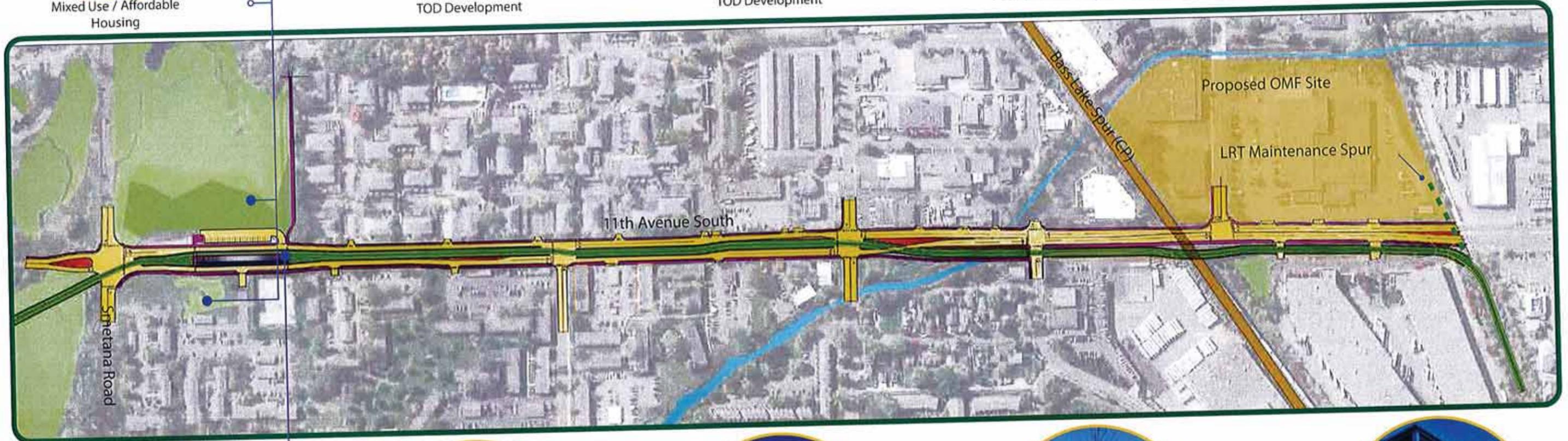
TOD Development



Possible Streetscape Enhancements



TOD Development



Landscape Style Station



Center Platform Allows for Development Offsite



TOD Development



Potential for Public Art



TOD Development



North



Date: 8/24/2015

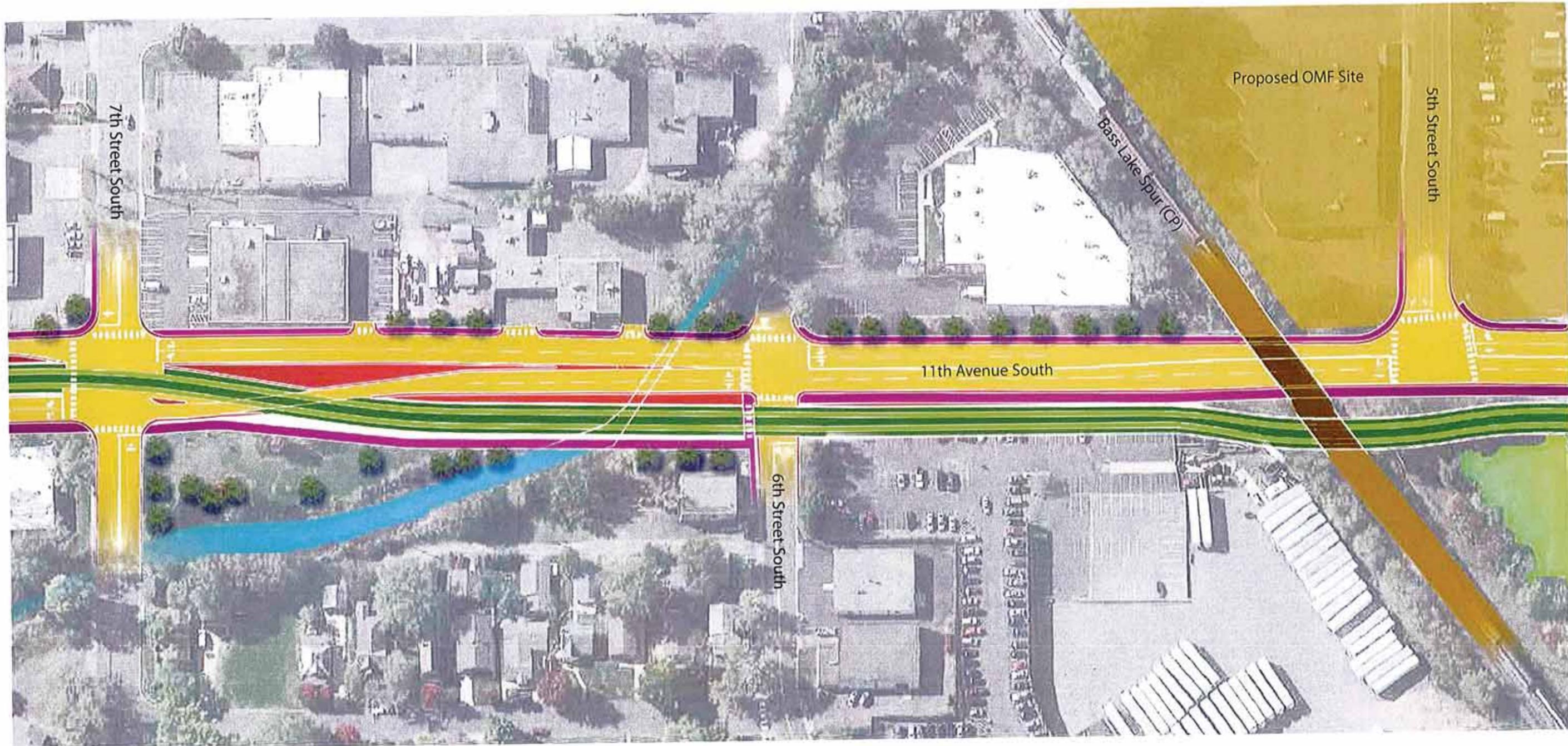
Graphic is Conceptual. For Discussion Purposes Only



Legend

- Proposed Southwest LRT Alignment
- Existing Wetland to Remain
- Roadways
- Sidewalks
- Medians & Curbs
- Existing Train Line
- Existing Railway Bridge
- Nine Mile Creek

North
 Date: 8/24/2015

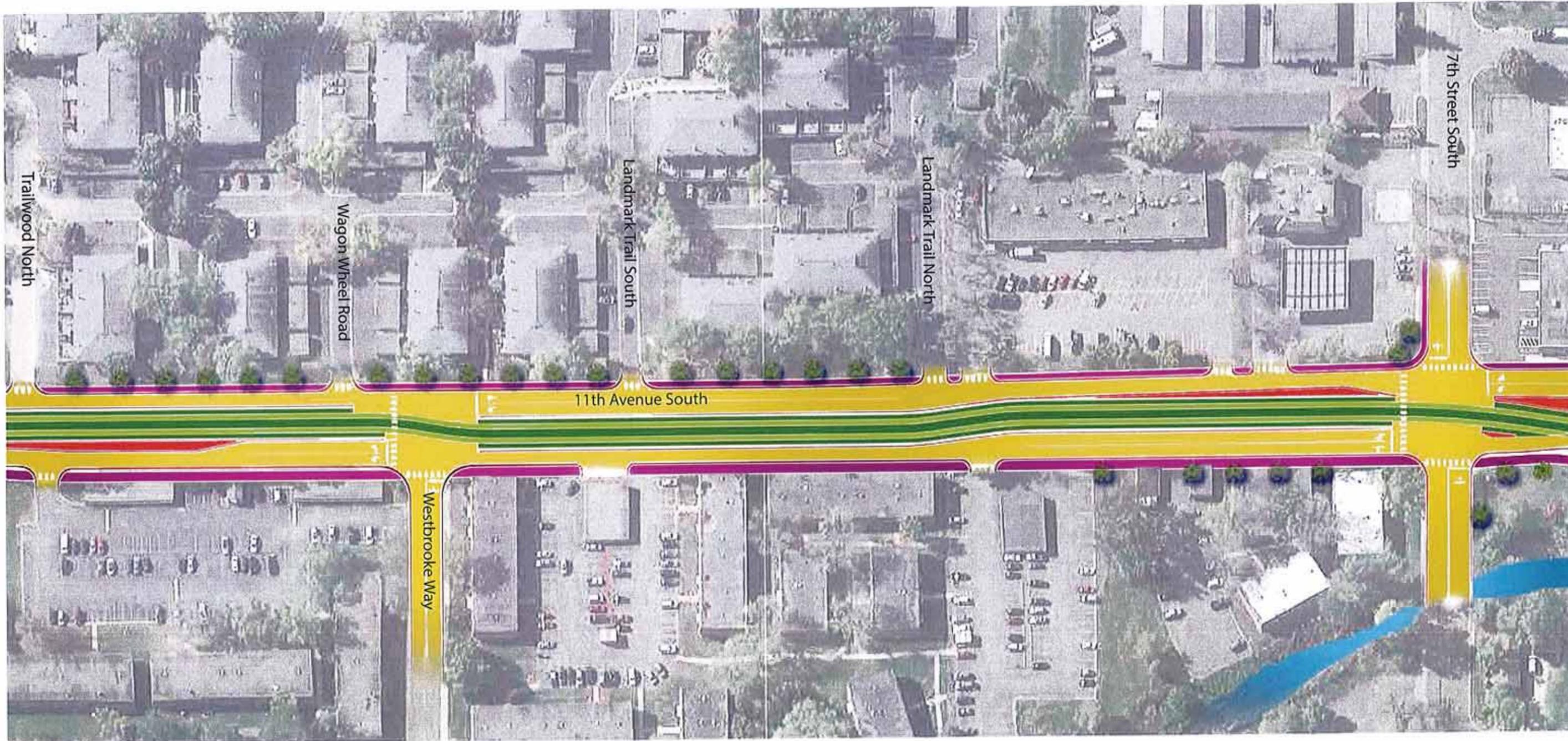


Legend

- Proposed Southwest LRT Alignment
- Existing Wetland to Remain
- Roadways
- Sidewalks
- Medians & Curbs
- Existing Train Line
- Existing Railway Bridge
- Nine Mile Creek

North
 Date: 8/24/2015

Graphic is Conceptual: For Discussion Purposes Only



Legend

- Proposed Southwest LRT Alignment
- Existing Wetland to Remain
- Roadways
- Sidewalks
- Medians & Curbs
- Existing Train Line
- Existing Railway Bridge
- Nine Mile Creek

0 100 North Date: 8/24/2015



Legend

- Proposed Southwest LRT Alignment
- Existing Wetland to Remain
- Roadways
- Sidewalks
- Medians & Curbs
- Existing Train Line
- Existing Railway Bridge
- Nine Mile Creek



Mixed Use / Affordable Housing



Date: 8/24/2015



11th Ave. - Trailwood N. to Smetana Rd. with Possible Future Use
 Proposed 11th Ave SW LRT Corridor Concept
 Hopkins, MN

Graphic is Conceptual: For Discussion Purposes Only



Comment #	#15
Commenter	Richard Weiblen
Commenter Organization	Liberty Property Trust

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The sections below provide responses to the comments received on the Final EIS.

Hopkins Site*OMF Site 9A Selection Evaluation*

Appendix F of the Final EIS summarizes the comprehensive evaluation conducted to identify the proposed OMF site. Visual impacts, land use, and noise were factors considered in the evaluation of potential OMF sites. The proposed site in Hopkins was evaluated in the Supplemental Draft EIS, including assessments related to visual quality and noise, and the evaluation was published in May 2015 with the supporting documentation used to conduct the analysis. The analysis remained unchanged and was included in the Final EIS (refer to Appendix F: Development and Evaluation of Design Adjustments in the Supplemental Draft EIS). Additionally, please refer to Final EIS Appendix M, Attachment 4, Responses #109 and #144, regarding the site evaluation process. Response #144 also provides information about analyses related to noise and the risk of environmental releases near the OMF site.

Total Taking of the Liberty Properties in Hopkins

The property at 1515 Sixth Street South in Hopkins is currently identified as a full acquisition. Field titles have been completed for all the properties owned by Liberty and pertinent information about the acquisition and relocation process has been provided to Liberty Properties and tenants, as available. The Project will follow the requirements of the Uniform Relocation Act and Minnesota law.

Eden Prairie Sites at Golden Triangle Station*Remnant Parcels and Partial Takings:*

All properties will be appraised by independent certified appraisers who will assess the compensation that the property owner may be entitled to for the acquisition. In making the assessment, the appraiser may consider factors such as city regulations, access changes, and parking impacts consistent with state law to determine their effect, if any, on valuation. The property owner will have a chance to review the appraiser's report and has the right to obtain its own appraisal. Remnant parcels remaining after construction because they are no longer needed for public use will follow State Law and FTA's Circular 5010.1D process for future disposition of land.

This response applies to all the properties listed in the Liberty Property Trust comment under Remnant Parcels and Partial Takings, unless the property is specifically discussed below. [A note of clarification - You indicate that you own the property located at 7400 Flying Cloud Dr. We believe you mean the property located at 7300 Flying Cloud Dr. with a PID of 1211622230010.]

7075 Flying Cloud Drive

The property acquisition process will begin with a purchase negotiation process that occurs between the Council and Liberty Property Trust, similar to other private property acquisitions. Buildings and properties that become non-conforming with city codes due to partial property acquisition will be identified in the appraisal process and that factor will be considered to the extent required by law. Liberty Property Trust will receive a copy of the appraisal and can determine whether it believes any non-conformance issues were evaluated appropriately. The Council will review any appraisal obtained by Liberty Property Trust to determine whether the parties can agree to compensation for the acquisition or whether the Council will need to proceed to condemnation.

Sections 3.12 and 3.13 of the Final EIS includes assessments of noise and vibration impacts for sensitive receptors following the procedures in the Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006). Commercial and office properties are typically not considered noise or vibration sensitive receptors unless the main function of the commercial/office property is highly sensitive to noise and/or vibration (e.g., recording studios). Refer to sections 3.1.2 and 8.1 of the *Manual* for more information on noise and vibration impact criteria. As such, the commercial property located at 7075 Flying Cloud Drive was not evaluated as a sensitive receptor under FTA's noise and vibration criteria.

The LRT guideway between Flying Cloud Drive and West 70th Street occupies portions of Outlot B. The design of the LRT system in this area includes a double cross-over south of West 70th Street. Cross-overs are necessary for the operations of LRT. Cross-overs have locational constraints and are placed to be:

- Located at regular intervals along the alignment;
- Located near a station;
- Located within a horizontal tangent section of track; and
- Located within a vertical tangent section of track with relatively flat longitudinal gradient.

The Project's 90 Percent Design Plans identify a retaining wall west of the LRT guideway along the majority of the building at 7075 Flying Cloud Drive. This wall will be a cut section to allow the LRT guideway to be benched into the existing berm east of this building – the track profile will be below the existing ground elevation at this location, with track elevation at the double cross-over approximately 8 feet below the top of the retaining wall along the west side of the LRT alignment. The retaining wall will have the effect of shielding the building from noise generated within the LRT guideway, which is reflected in the related noise analysis included in the Final EIS.

Liberty Plaza Wetland/Road Access

The removal of Liberty Plaza access road resulted from the LRT track alignment in this area, as part of the Project design and environmental processes to further reduce wetland impacts and balance property impacts along this portion of the alignment. Part of this refinement included straightening the proposed tight S-curve north of the Golden Triangle station to satisfy operational safety and LRV occupant comfort aspects associated with this S-curve. The wetland and floodplain impacts associated with this design were then reviewed with local wetland permitting agencies, including the City of Eden Prairie, as part of the Wetland Technical Evaluation Panel (TEP). Further, the City of Eden Prairie has confirmed that city code does not require access to West 70th Street, however its inclusion in the site development plans for the proposed Liberty Plaza Development indicate it's an expected element of the development. Depending on the specific details, a plan change that results in the elimination of this access would likely require an amendment to the Liberty Plaza Developer's Agreement and PUD (Planned Unit Development). During the acquisition process for

the partial taking, Liberty Property Trust will have the opportunity to negotiate and present evidence of any future land value loss associated with the elimination of this access (or requirement for alternative access deriving from an amendment to the Developer's Agreement and PUD).

This design plans were shared with Liberty Property Trust and the City of Eden Prairie at a meeting on February 19, 2016.

Traction Power Substation

The Project's 90 Percent Design Plans include a proposed structure containing a Signal Bungalow/Platform/Crossing House near West 70th Street at 7075 Flying Cloud Drive, not a Traction Power Substation. This structure is needed at this location to support signalization at the station, the crossing at West 70th Street, and the double-crossover just south of this location. The Council has worked to place such structures within transportation right-of-ways when appropriate. In circumstances where the Council could not achieve this due to lack of right-of-way or other constraints, the structures will be placed in private property to be acquired by the Council. The structure was shown in the 90 Percent Design Plans to be oriented parallel to the LRT guideway, which would impact several parking stalls. Liberty Properties raised concerns about the impacts of this proposed structure and the Council explored refinements to further reduce impacts due to the structure. The Council was able to adjust the orientation of this structure to be perpendicular to the LRT guideway and parallel to West 70th Street to minimize impacts. This refined orientation maintains sightlines for vehicles exiting the Liberty Properties driveway on the south side of West 70th Street, reduces parking impacts to two parking stalls, and provides space for landscape plantings to help screen the structure. This refined orientation was discussed at a meeting with Liberty Properties and the City of Eden Prairie on February 19, 2016.

70th Street Impacts and Pedestrian Trail

The Council will continue to coordinate the West 70th Street portion of the Project with the City of Eden Prairie. Under the 90 Percent Design Plans, the driveway to Liberty Properties from West 70th Street just west of the LRT crossing will remain open. The only permanent impact to the parking lot is for the Signal Bungalow/Platform/Crossing House near West 70th Street at 7075 Flying Cloud Drive noted above. The temporary construction impact shown within the parking lot will be further considered as the design is advanced. As with all temporary construction impacts, the Council will work to further reduce the Project's footprint as design advances. During construction, the Council will maintain adequate circulation for tenants at the property, including ingress and egress into the property and tenant loading and unloading.

Vibration

Analysis of vibration impacts is based on screening procedures to identify vibration-sensitive locations, in accordance with the Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006) Section 9: Vibration Screening Procedure. Vibration sensitive properties were identified using aerial photography, GIS data, and field surveys. Vibration sensitive land uses are properties where sensitive equipment is used. The commercial uses specified do not constitute vibration-sensitive uses, and were not included in the vibration analysis for the Project. Mitigation is considered for impacted locations and based on site conditions and existing equipment, and therefore is not considered as a preemptive measure for sites without vibration-sensitive equipment.

Comment #	#16
Commenter	Kenneth Westlake
Commenter Organization	United States Environmental Protection Agency

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council and FTA acknowledge your comments that the U.S. Environmental Protection Agency (EPA) comments on the Draft EIS and Supplemental Draft EIS have been satisfactorily addressed.

Comment #	#17
Commenter	Shawn Smith
Commenter Organization	Kenwood Isles Area Association (KIAA)

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The responses below address the comments received on the Final EIS.

Introduction to SDEIS Comments by the Kenwood Isles Area Association

In response to KIAA's comment on opposition to freight rail co-location, please refer to Final EIS Appendix M, Attachment 3, *Master Response 10: Rationale for incorporating freight rail co-location into the Project*, which addresses concerns with the Project planning process related to co-location.

In response to KIAA's comment on the EIS failing to assess the impact of co-location in the Kenilworth Corridor, the Environmental Impact Statements (EIS) completed fully assess LRT 3A-1 (including freight rail co-location) in accordance with NEPA and MEPA requirements. See Chapters 3 and 4 of the Final EIS for these evaluations and refer to Final EIS Appendix M, Attachment 3, *Master Response 15: Comments Received from Kenwood Isles Area Association (KIAA), Cedar Isles Dean Neighborhood Association (CIDNA), and LRT-Done Right*, which summarizes how co-location was evaluated in the EISs.

In response to KIAA's comment on the duration of the comment period for the Final EIS, please refer to Response 12 of this attachment for responses from FTA and the Council regarding not extending the comment period for the Final EIS.

In response to KIAA's comment on the Council determining the adequacy of the Final EIS under MEPA, Minnesota Rule 4410.2800, subp. 1, states that the Responsible Governmental Unit (RGU) shall determine the adequacy of the Final EIS, unless notified by the Environmental Quality Board (EQB), on its own initiative or at the request of the RGU, or other interested persons, that the EQB will determine the adequacy. Further, the EQB intervenes only if: the RGU is unable to provide an objective appraisal of the potential impacts of the project; the project involves complex issues that the RGU lacks the technical ability to assess; or the project has multijurisdictional effects. The Council is able to provide an objective appraisal of the impacts of the Project and has the technical ability to assess the Project. Further, the Council has completed prior environmental review and adequacy determinations for regional light rail projects and has the jurisdiction to complete these actions.

FEIS Comments: New Concerns/Questions/Issues

In response to KIAA's comment on "the need to maintain a balanced and economically competitive multimodal freight system," the Council and FTA note that the Need statement in question was included in the Draft EIS (Section 1.3.2.3): "Need to Develop and Maintain a Balanced and Economically Competitive Multimodal Freight System," and was revised in the Supplemental Draft EIS (Section 1.2) and Final EIS (Section 1.6) to "Need to Maintain a Balanced and Economically Competitive Multimodal Freight System." This Need statement has been included throughout the Project's design and environmental review processes. Specifically, the Draft EIS included this need statement when it identified LRT 3A, including freight rail relocation, as the Environmentally Preferred Alternative. Further, the Draft EIS included "Goal 6: Support economically competitive freight rail system."

In response to KIAA's comment on the lack of inclusion of freight rail co-location in the Locally Preferred Alternative (LPA) recommendation and the understating of what was included in the LPA by the community and City of Minneapolis, FTA and the Council note Sections 2.3 and 2.4 in this ROD for additional discussion of the LPA and NEPA processes. The January 2010 Minneapolis City Council Resolution 2010R-008 supported the LPA, with no mention of freight. Further, the Minneapolis City Council approved the physical design component of the preliminary design plans of the Project in 2014, and again in 2015, when the proposed scope and budget of the Project included locating LRT next to existing freight rail.

In response to KIAA's comment that moving existing freight rail tracks up to 45 feet in the Bass Lake Spur and upgrading infrastructure is inconsistent with the word "minor," the Council and FTA note that the word "minor" notes the modification to freight rail infrastructure and not impacts associated with the modification to infrastructure. Section 2.1.1.3 of the Final EIS describes the freight rail modifications included in the Project, including the shift of existing freight rail in the Bass Lake Spur by up to approximately 45 feet. Further, Section 4.4 of the Final EIS evaluates the impacts of the freight rail modifications as part of the Project, including the shift of existing freight rail tracks in the Bass Lake Spur (see specifically Table 4.4-2). Section 4.4 notes that the shift in freight rail will not substantially alter operations and will not open access to new freight rail markets; therefore, FTA and the Council assert that the freight rail footprint will remain the same in the Project area. While the Project requires freight rail infrastructure modifications (e.g., re-alignment of freight rail tracks), such modifications are made solely for the purpose of allowing for LRT infrastructure and not associated with upgrading freight rail infrastructure without a need. Further, these modifications are included in the analysis included in the Final EIS.

FTA and the Council acknowledge KIAA's comment that "...it is acceptable that the existing freight rail operation be included in the No Build alternative, and that *in theory* freight rail operations are outside the scope of the project..." Furthermore, FTA and the Council addressed the issue of including freight rail in the baseline assessment under the No Build alternative and relocating freight rail from the Kenilworth Corridor with substantial background information in Appendix M, Attachment 3, *Master Response 6: Freight rail operations should not be considered an existing condition and should be excluded from the baseline data*, and *Master Response 10: Rationale for incorporating freight rail co-location into the Project*. If a condition is utilized in the baseline assumption under the No Build scenario (i.e., existence of freight rail in the corridor), it cannot be added as a "new" condition under the Build scenario (i.e., as a result of the Project and thus requiring the analysis of impacts under NEPA)—this would produce faulty analysis that does not meet the intent of NEPA (see Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations Question 3: No-Action Alternative; CEQ, 1981).

The FTA and the Council note that the scenario of a derailment and subsequent ethanol explosion could occur today, without the Project. Under the Project, Metro Transit's safety program, including plans, exercises and coordination with federal, state, and local authorities, will provide and maintain safety and security during construction and operation of the Project within the vicinity of existing freight rail service. See Final EIS Section 4.6.3.1, *Light Rail Service in the vicinity of Freight Rail Service*, for additional information on measures in place to address safety and security. Specifically, the Council's Operations Emergency Management Plan for light rail sets out procedures for identifying, responding to, and resolving emergency situations. For prior responses on information about emergency response preparations and training, refer to Final EIS Appendix M, Attachment 3, *Master Response 3: General concerns related to safety and security for LRT construction and operations within close vicinity to freight in the Kenilworth Corridor*; *Master Response 11: Safety concerns related to hazardous freight rail cargo within the Kenilworth Corridor*; and *Master Response 15: Comments Received from Kenwood Isles Area Association (KIAA), Cedar Isles*

Dean Neighborhood Association (CIDNA), and LRT-Done Right. Further, as stated in these responses and in Section 4.6 of the Final EIS, the Federal Railroad Administration (FRA) has authority over all areas of railroad transportation safety. As such, FRA regulates and coordinates with freight rail operators regarding railroad safety.

The Council and FTA acknowledge KIAA's comment to see specific plans for a "worst case scenario" in which the derailment of an ethanol train is followed by a spark-induced explosion within Minneapolis city limits. As the Project progresses through construction and into integrated testing and revenue operations, the Light Rail Transit Fire Life Safety and Security Committee (LRT FLSSC), as described in the Project's Safety and Security Management Plan (SSMP) (Council, 2014), will participate in the planning, performance and evaluation of emergency simulation on the system. The LRT FLSSC is a standing committee with membership from local and county police and fire departments and other participating organizations. The LRT FLSSC provides input to and comments on fire protection plans, emergency preparedness plans and procedures, safety plans, and security plans. Emergency response plans are primarily programmed by the first responders (e.g., fire, police and EMS). While the Council will work collaboratively with the jurisdictional first responders through the LRT FLSSC in the Project's corridor and coordinate on activities such as emergency preparedness exercises, emergency response plans usually are not made publically available, unless provided by the jurisdictional first responders. If the emergency response plans are made public, the Council will make them available to the public upon request. Public availability of such plans should be coordinated by the various jurisdictions which serve the localities.

In response to KIAA's comment on who has liability for a crash, derailment or explosion, this depends on the incident. As noted in Final EIS Appendix M, Attachment 3, *Master Response 15, Comments Received from Kenwood Isles Area Association (KIAA), Cedar Isles Dean Neighborhood Association (CIDNA), and LRT-Done Right*, the Council will address potential liability for incidents related to LRT through a combination of self-insurance and third-party insurance. Freight rail operators will continue to respond to claims unrelated to LRT operations as they do now.

In response to KIAA's comment that the adverse effect under Section 106 of the National Historic Preservation Act to the historic Kenilworth Lagoon and the Grand Rounds Historic District is new, this is not a new determination. The Draft EIS published in 2012 identified potential effects, including potential long-term effects to the Kenilworth Lagoon. Preliminary effects determinations were included in the Supplemental Draft EIS in 2015, including a preliminary adverse effect for the Kenilworth Lagoon and Grand Rounds Historic District. Further, the preliminary determinations and final determinations, included in the Final EIS, were developed in consultation with the Project's Section 106 consulting parties; KIAA has served as a consulting party since 2010. Section 106 consultation materials available on the Project's website, swlrt.org, document KIAA's involvement in the process of identifying historic properties, assessing adverse effects, and developing avoidance, minimization and mitigation measures.

Section 106 and the regulations governing the protection of historic properties in 36 CFR Part 800 require federal agencies to take into account the effects of their undertakings on historic properties by identifying historic properties, assessing adverse effects, and resolving adverse effects through measures to avoid, minimize, or mitigate the adverse effects. The Section 106 process requires agencies to define the undertaking and determine the area of potential effects. Additionally, the Section 106 regulations address coordination with NEPA, and explicitly encourage federal agencies to coordinate compliance with Section 106 early in the NEPA process. Evaluation of the Project under Section 106 does not constitute predetermination of a Project decision. The No Build Alternative provides a basis of comparison that would wholly avoid the adverse effect to the Kenilworth Lagoon; however, the FTA has determined that the No Build Alternative does not meet the Project's Purpose and Need.

In response to KIAA's comment on unknown groundwater or soil contamination, contamination to the Chain of Lakes, and contamination from the Cedar Lake Junction, the Council completed Phase I and II Environmental Site Assessments (ESA) of the full corridor to determine the extent of existing contamination. These assessments reduce the risk of encountering contaminated materials during construction. However, it is possible that unknown areas of groundwater or soil contamination may be discovered where ground excavations occur. The Council completed a Construction Response Action Plan (RAP) which includes the Cedar Lake Junction, which was approved by the Minnesota Pollution Control Agency (MPCA) in January 2016. Section 3.14 of the Final EIS describes the regulatory context for the evaluation of hazardous and contaminated materials. The analysis discloses the potential for impacts due to soil and groundwater contamination and the control or cleanup requirements the Project will follow if contaminated materials disclosed by the ESA's or unknown areas are mobilized or released. The proactive exercise of completing a RPA and implementation of these measures as necessary will result in controlled management of hazardous and contaminated materials and a low risk of human exposure to unhealthy contaminants.

Further, the Final EIS discloses that the area near the Cedar Lake Junction will be disturbed by Project construction. The contractor will be required to follow the RAP, which addresses management of contaminated soils and special testing protocols because the site is within a Groundwater Impact Area. Please refer to Final EIS Appendix M, Attachment 3, *Master Response 8: Questions over the extent of hazardous and contaminated materials in the Kenilworth Corridor* for additional information.

In response to KIAA's comment on adverse effects on the ecosystem, please refer to Final EIS Section 3.10 and Appendix L, Attachment 3, *Theme D: Opposition to co-location of freight rail and light rail in the Kenilworth Corridor*, "Wetlands, Wildlife, and Habitat" section for additional information on the assessment of protected species and impacts on habitat. In compliance with Section 106 guidance, the Project considered vegetation removal and changes to the visual setting as part of the adverse effect finding for the Grand Rounds Historic District (see Section 3.5 of the Final EIS and Attachment B to this ROD for additional information on the adverse effect findings for the Grand Rounds Historic District).

In response to KIAA's comment on vibration impacts from the Project, Section 3.13 of the Final EIS describes the methodology and results of the vibration impact assessment. A general assessment of freight vibration was conducted for the area near the Kenilworth Channel where the freight tracks will be shifted closer to sensitive receptors in order to provide room for the LRT tracks; this assessment is included in Appendix H of Appendix K of the Final EIS and is based on current freight operating speeds. The results of the assessment indicated that there would be no vibration impacts from freight trains due to the shift in freight tracks. The vibration assessment used FTA criteria to define vibration impacts, as noted in Section 2.2.2 of Appendix K of the Final EIS; the vibration levels with the Project may be perceptible, but will be below the FTA impact criterion constituting an impact, as noted in Section 5.2.1 of Appendix K of the Final EIS.

Refer to Final EIS Appendix M, Attachment 3, *Master Response 7: Concerns related to vibration impacts from LRT tunnel construction*, which describes mitigation for ground-borne noise impacts. As shown in Table 3.13-5 of the Final EIS, the Project will result in no long-term vibration impacts for residential land uses. Refer to Final EIS Appendix M, *Master Response 15: Comments Received from Kenwood Isles Area Association (KIAA), Cedar Isles Dean Neighborhood Association (CIDNA), and LRT-Done Right*, "Vibration" section, and Appendix M, Attachment 4, Response #171, which states that freight was included as an existing condition in the vibration assessment. The Project's vibration assessment documented in the Final EIS (refer to Table 2 of Appendix K of the Final EIS) was performed based on the current 10 mph operating speed. Pursuant to discussion with Twin Cities and Western Railroad (TC&W), the Council understands that TC&W will limit speed in the

Kenilworth Corridor to 10 mph during Project construction and operations, as it has been operating at.

In response to KIAA's comment that homes near the Kenilworth Channel were excluded from mitigation in the Final EIS, refer to Final EIS Appendix M, Attachment 3, *Master Response 15: Comments Received from Kenwood Isles Area Association (KIAA), Cedar Isles Dean Neighborhood Association (CIDNA), and LRT-Done Right*, "Vibration" section, which explains why these properties were not included in the vibration analysis for the Project. Appendix K of the Final EIS describes the steps in the vibration assessment, including identification of vibration-sensitive land uses, and measurement of vibration-propagation characteristics of the soil in the corridor at sensitive receptors. For corridors with high volumes of freight traffic, the vibration levels from LRT would be much lower than from freight, and would not require an assessment of LRT vibration. Existing vibration levels were assessed only where the existing freight rail tracks will be moved due to the Project. At these locations, vibration from freight trains was intentionally overestimated in order to account for the potential for an increase in vibration impacts due to freight operations being shifted closer to receptors. The primary reason for the determination of no vibration impacts from freight service is the very low speeds of the freight trains in the affected areas. The Detailed Vibration Impact Data table in Final EIS Appendix K, Noise and Vibration Supporting Documentation, includes detailed vibration impact data for properties assessed.

In response to KIAA's comments about the responsiveness of Council staff, the number of meetings held, and the need for specifics about ongoing meetings, the public involvement process is summarized in the *Community Events, Meetings, and Presentations Summary Report* included in Appendix C of the Final EIS. A total of 28 meetings of the Community Advisory Committee (CAC) were held through March 2016. The CAC will continue meeting until Project construction begins. At that time, Construction Communications Committees will begin and will serve as a venue for the Council to meet with interested neighborhood residents who can advise when and where information should be shared. Prior to the start of construction, the Project will prepare a Construction Communication Plan; this is a mitigation measure specified in the ROD and thus is a requirement for federal funding, and FTA will monitor the mitigation implementation of the Project. Outreach coordinators will be designated to facilitate communication between the construction contractor, residents, and businesses. The Council plans to provide a weekly construction update, and will attend community meetings upon request to share information and receive feedback.

In response to KIAA's comment on the cost burden to the City of Minneapolis related to groundwater pumping, groundwater impacts are analyzed in Section 3.8 of the Final EIS. There will be a minor groundwater pumping component to the internal tunnel drainage system for the proposed light rail tunnel in the Kenilworth Corridor, as described below. Water to be removed from the tunnel may include water brought into the tunnel by trains, runoff from melting snow, and water from other sources as well as groundwater that may infiltrate past the tunnel's waterproofing system. Water collected within the tunnel will be pumped to the surface to connect to Minneapolis sanitary sewer facilities. Pumping is needed because water cannot flow from the base of the tunnel up to the pipes without the aid of a pump.

This design value of the allowable infiltration rate of groundwater into the tunnel is 0.002 gallons per square foot per day, a conservative estimate documented in the *Kenilworth Tunnel Basis of Design Report* (Council, 2014). For the size and length of the tunnel, this amounts to about 500 gallons of water collected per day, on average. This small quantity of water will result in no realized costs to the City or impacts on the City's sewer infrastructure. The small pump that will move this water will be owned, maintained, and operated by Metro Transit.

This information has been shared with the City of Minneapolis, which has not expressed any concerns regarding accepting this small amount of water in their system or imposed any costs for handling this small quantity of water.

In response to KIAA's question about development near the 21st Street Station, refer to Final EIS Appendix M, Attachment 3, *Master Response 16: Concerns related to 21st Street Station and related impacts, "Potential development near 21st Street Station"* section, which confirms that no development or redevelopment is currently anticipated at the 21st Street Station because the station area is already developed as single-family residential.

In response to KIAA's comment on the ownership of land adjacent to Cedar Lake Park, refer to Final EIS Appendix M, Attachment 3, *Master Response 15: Comments Received from Kenwood Isles Area Association (KIAA), Cedar Isles Dean Neighborhood Association (CIDNA), and LRT-Done Right, "Potential Acquisitions and Displacements Impacts"* section, which discusses current ownership of the property by BNSF.

In response to KIAA's comment on the impacts of freight rail noise near 21st Street Station, FTA and the Council note that freight rail was included in the Project's noise analysis as noted in Final EIS Appendix K: Noise and Vibration Supporting Documentation.

In response to KIAA's comment on visual quality impacts to the Kenwood neighborhood and impacts due to flashing lights at intersections, the Council analyzed visual impacts using the methods described in FHWA's *Visual Impact Assessment of Highway Projects*. This analysis included a visual assessment of the Project corridor through site visits, analysis of existing conditions, and an evaluation of visual change. The Project will result in changes to the visual environment from the introduction of new visual elements, or the removal or replacement of existing elements, and due to light spill and glare effects. Within the City of Minneapolis, moderate and substantial visual impacts will occur at the following locations:

- Kenilworth Trail north of West Lake Street looking toward the tunnel portal;
- Kenilworth Trail at the Kenilworth Lagoon; and
- Burnham Road Bridge looking towards the Kenilworth Channel.

The Final EIS includes mitigation for moderate and substantial visual impacts. The Council will follow its *Visual Quality Guidelines for Key Structures* (Council, 2015) to ensure a consistent aesthetic element for key structures throughout the proposed light rail alignment, while allowing for some flexibility in wall treatments. Vegetation removal and introduction of built features will be mitigated by designing and implementing landscaping into the Project design at appropriate locations to address identified visual impacts, within available landscape budget and balancing other priorities for landscaping (e.g., surface water quality, habitat preservation, impact on species of concern). Flashing lights at intersections are necessary for safe operation where light rail trains cross roadways. Locations where flashing lights will be used for crossing control are listed in Final EIS Table 4.6-1. The proposed flashing lights at at-grade intersections are considered in the overall visual quality analysis for the Project. Section 3.7 of the Final EIS documents the methodology and results of the Project's visual quality analysis.

In response to KIAA's comment that not allowing informal crossings within the Kenilworth Corridor will impact community cohesion, refer to Final EIS Appendix L, Attachment 3, *Theme E.1: Community cohesion and land use*, which provides FTA and the Council's response that unauthorized paths across existing freight rail tracks will be blocked by fencing to ensure the safety of pedestrians and safe operation of light rail vehicles. The Project will include the operation of LRT

through the Kenilworth Corridor in addition to existing freight, but does not create a new physical barrier.

Summary of Concerns expressed in past responses that remain inadequately addressed in this FEIS:

In response to KIAA's comment on proof of liability insurance by freight rail companies, the Final EIS does not consider this because freight operations are outside the scope of the FTA-funded Project. In regards to emergency responder training, the FTA and Council note that emergency responder training falls within the purview of the first responders from local jurisdictions. Regarding the implementation of positive train control (PTC) technology, the Council has coordinated with freight operators to understand their plans for use of PTC. TC&W does not have plans to implement PTC on the Bass Lake Spur or Kenilworth Corridor because the FRA mandates PTC for Class 1 railroads (which TC&W is not) or for other railroads that operate on railroad track on which Class 1 railroads operate. These other railroads may also be subject to other limitations on their use of the Class 1 railroad's track. Based on this, BNSF is implementing PTC on the Wayzata Subdivision (BNSF is a Class 1 railroad), and since TC&W locomotives access the BNSF-owned Wayzata Subdivision, TC&W has confirmed that their locomotives will have PTC, but only for use on BNSF right-of-way.

In response to comments on Project funding, the Final EIS notes the funding scope in Chapter 7. Funding requirements and obligations are monitored as part of FTA's Capital Investment Grant (CIG) Program.

Construction damage to historic properties is addressed in the Project's Section 106 Memorandum of Agreement (MOA) which requires a Construction Protection Plan (CPP). The CPP includes a vibration monitoring requirement for the following historic properties in the Project's Area of Potential Effect (APE) to avoid adverse effects due to vibration damage: the Chicago, Milwaukee, St. Paul & Pacific Railroad Depot; the Peavey-Haglin Experimental Concrete Elevator; the Minneapolis & St. Louis Railway Depot; and the intact portions of the Grand Rounds Historic District, i.e., the Kenilworth Lagoon's WPA Rustic style retaining walls that are located outside of the construction limits for the Project's crossing of the lagoon. Vibration impacts associated with non-historic properties are evaluated in Section 3.13 of the Final EIS. Construction vibration will be minimized by limiting high-vibration activities, such as impact pile driving and vibratory rolling, and by including vibration limits in the construction specifications. Pre-construction surveys will document the existing conditions of the structures within 60 feet of the construction limits and of stucco and masonry buildings beyond that distance as necessary. If high-vibration construction activities will be performed in locations where there is potential to exceed the damage criteria, the contractor will be required to perform vibration monitoring, and if vibration exceeds the specified limits, the activity will be modified or suspended until an acceptable means and method of construction is identified. The measures in Attachment A of this Record of Decision will mitigate short-term vibration impacts from construction activities.

In response to KIAA's comment on an "equity train," refer to Final EIS Chapter 5 for documentation of the Project's environmental justice compliance, which was completed based on the definition of the Project included in Section 2.1 and illustrated in Appendix E of the Final EIS. Refer to Final EIS Appendix M, Attachment 3, *Master Response 16: Concerns related to 21st Street Station and related impacts* for information about the environmental justice communities served via 21st Street Station. The Council, in coordination with the Corridor Management Committee (CMC) and local jurisdictions (including the City of Minneapolis, which supports the inclusion of the 21st Street Station in the Project), evaluated the option of eliminating or deferring stations in July 2015 based on evaluation of several factors including ridership. The evaluation considered public testimony

received (including testimony from the Native American Community Development Institute), noting that the 21st Street Station will provide members of the Native American community living in the vicinity of Franklin Avenue with a more direct connection to employment centers in the Southwest Corridor than any of the other proposed Southwest LRT stations in Minneapolis. That testimony was provided at the April 2, 2014 CMC meeting (see Section 5.3.2). Based on the evaluation of a range of potential design adjustments and recommendations received, the proposed 21st Street Station was retained by the Council as part of the Project.

Comment #	#18
Commenter	John
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). FTA and the Council appreciate and acknowledge your comment regarding the history of ambient noise levels in the Kenilworth Corridor.

Comment #	#19
Commenter	Tom Goodrum
Commenter Organization	Westwood Professional Services

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The sections below provide responses to the comments received on the Final EIS.

Chapter 2: Alternatives Considered

The Council and FTA acknowledge the continued concerns regarding the LRT alignment in the vicinity of your property, Redstone American Grill. The FTA's and Council's responses provided in Final EIS Appendix M, Attachment 4, Response #134 to the comment letter received from Redstone on July 21, 2015 address concerns regarding this section of the Project alignment in Eden Prairie. Refer also to Final EIS Appendix L, *Theme F: Concerns about Eden Prairie LRT alignment*, which responds to Redstone's comment in support of a Technology Drive LRT alignment, and *Theme F.1 Eden Prairie impacts remaining after design adjustments, Business-Related Acquisitions, Displacements, and Off-Street Parking* section, which summarizes how the Final EIS addresses those impacts.

Chapter 3: Affected Environment, Impacts and Mitigation - Land Use

The road improvements noted in your comment are included as part of the Project analyzed in the Final EIS; refer to Final EIS Appendix E, Table E-4, which includes construction of Main Street from Singletree Lane to Eden Road. The planned park noted in your comments is not designated or planned by the City of Eden Prairie as a park, recreation area, or open space (refer to Final EIS Appendix M, Attachment 4, Response #134, *Parklands, Recreation Areas, and Open Spaces* section); therefore, it is not included in the environmental analysis for the Project. Main Street is part of the Project, as a Locally Requested Capital Investment (LRCI), as reflected in Appendix E of the Final EIS. [Note: Main Street is incorrectly described in Response #134 as not being part of the Project.] See Section 2.1.2 of the Final EIS for additional information on LRCIs.

Parkland, Recreational Areas and Open Spaces

The Council acknowledges your remaining concerns regarding the consideration of the trail around Lake Idlewild, for which the previous response applies. Refer to Final EIS Appendix M, Attachment 4, Response #134, *Parklands, Recreation Areas, and Open Spaces* section. This response acknowledges that this trail is located on multiple private properties and that the Project will not directly affect the trail or change the connectivity for trail users. The trail does not meet the definition for a Section 4(f) protected resource, hence the FTA did not consider it in the Section 4(f) analysis.

The 90 Percent Design Plans available on the Project website (refer to <http://metro council.org/swlrt/feis>, under the heading "Design Plans") present the reconfiguration of the Eden Road area as part of the Project. This reconfiguration includes closure of the easterly Redstone driveway to Eden Road and closure of the sidewalk connection into the Redstone property from the public sidewalk along Eden Road near this location. The sidewalk along the east side of the Redstone property will continue to connect north to the trail around Lake Idlewild, but it will no longer connect to the sidewalk at the southeast corner of the Redstone property.

Based on FTA's *Transit Noise and Vibration Impact Assessment Manual*, the trail around Lake Idlewild is not a "sensitive receptor" for noise. Section 3.12 of the Final EIS provides a description of land use categories and metrics used to identify sensitive receptors according to FTA criteria (see Table 3.12-2). Active use areas, like bike and walking/running trails, are generally not categorized as sensitive receptors because these are areas where quiet is not an essential element and where quiet and solitude are not the intended purpose. Therefore, the Lake Idlewild trail was not categorized and evaluated for noise impacts. Please refer to Final EIS Appendix M, Response #134, *Noise Analysis* section. That response also notes that the Project is not anticipated to have noise or visual impacts to the trail around Lake Idlewild, and presents the rationale for those findings.

Roadway and Traffic

Signalized driveway ingress and egress operations are adequately evaluated under the Synchro/Sim Traffic and VISSIM software packages utilized by the Project, as described in Section 4.2.1.3 of the Final EIS. The traffic analysis for the Final EIS is documented in the *PEC-West Traffic Technical Memorandum*, dated September 10, 2015, available in Appendix C of the Final EIS. The Build analysis, which addresses traffic conditions under the Project, can be found on page 35 of the memorandum and details of the analysis are included in the attachments. The analysis for this intersection, which presently has three legs, includes the relocated Redstone driveway as a fourth leg to the intersection, as proposed under the Project. Based on the intersection configuration under the Project and projected travel demand in 2040, the memorandum concludes that the intersection will operate acceptably under the Project during average weekday peak and off-peak conditions. The intersection level of service (LOS) at the Eden Road/Eden Road Extension/Redstone driveway intersection will operate at LOS C during the morning peak and LOS D during the afternoon peak. The traffic analysis also evaluated queuing issues, and identified no issues in this area. Refer to Final EIS Appendix M, Attachment 4, Response #134, *Roadway and Traffic* section.

Parking

The assessment of impacts to off-street parking at Redstone identified a net loss of 10 off-street parking spaces, based upon conceptual designs of possible parking configurations after the Project is built. See Figure 1 included in this response, which presents the conceptual design used in this analysis. During the property acquisition process, appraisals will be completed which will consider compensation for the property, including any relevant analysis of the loss of parking pursuant to Minnesota law. The property owner will have a chance to review the Council's appraisal and has the right to obtain its own appraisal. The Council will compensate business owners for the loss of off-street parking spaces based on the terms of the purchase agreement between the Council and property owner, in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and Minnesota law.

Noise

Based on FTA's *Transit Noise and Vibration Impact Assessment*, the Redstone restaurant is not considered a "sensitive receptor" for noise, as explained in the response to your previous comments on the Project's Supplemental Draft EIS. Please refer to Final EIS Appendix M, Attachment 4, Response #134, *Noise Analysis* section. That response also notes that the Project is not anticipated to have noise or visual impacts to the trail around Lake Idlewild, and presents the rationale for those findings.

Visual Quality and Aesthetics

The Council continues to work with Eden Prairie regarding the City's plans to implement streetscape elements along Eden Road consistent with Eden Prairie's Master Plan for the Town

Center area. Eden Prairie recognizes the desire to improve visual quality as part of the Master Planning effort, and has therefore identified several Locally Requested Capital Investments (LRCIs) that could potentially be constructed with the construction of the Project or, in some cases, be implemented separately by the City at a future date. These LRCIs include:

- #4 Catenary Poles – upgrade the type and aesthetics of catenary poles at selected locations.
- #5 Decorative Street Lighting – construct decorative street lighting along Eden Road.
- #7 Planter Boxes – construct decorative landscape planter boxes along Eden Road.

These LRCIs are not mitigation for Project impacts. See Section 2.1.2 of the Final EIS for additional information on LRCIs. However, Section 3.7 of the Final EIS describes measures to mitigate visual quality impacts associated with the Project.

The Final EIS and the FTA's Record of Decision (ROD) include mitigation for moderate and substantial visual impacts. The Council will follow the Southwest LRT Visual Quality Guide for Key Structures (referenced in Appendix C of the Final EIS) to ensure aesthetic consistency for key structures throughout the proposed light rail alignment, while allowing for some flexibility in wall treatments. The visual impacts of vegetation removal and introduction of built features will be mitigated by designing and implementing landscaping at appropriate locations, within available landscape budget and balancing other priorities for landscaping (e.g., surface water quality, habitat preservation, effects on species of concern).

Safety and Security

The Council and FTA reiterate that the points noted in Final EIS Appendix M, Attachment 4, Response #134, *Safety and Security* section apply as a response to the concerns raised regarding the safety of patrons of Redstone, pedestrian or vehicular. As noted in the Final EIS, adequate safety measures have been implemented at the access point for Redstone. While pedestrian patrons will need to alter their travel patterns, the change in access ultimately creates a safe crossing situation for all modes of travel in the area. As discussed above, the traffic analysis identified no queuing issues at the Redstone property.

Vibration Impact to Existing Retaining Walls and Building

Based on FTA's *Transit Noise and Vibration Impact Assessment Manual*, the Redstone property is not considered a sensitive receptor for vibration, and therefore this property was not assessed as part of the vibration analysis for the Project. That being said, the general vibration assessment conducted for the Project indicate the vibration generated by LRT operations is approximately two orders of magnitude below even the most stringent damage criteria for extremely fragile buildings; therefore, vibration caused by LRT operation is not anticipated to impact the retaining wall at the north side of the Redstone parking lot.

Jul_16_2015_10:12 am v:\3400_ADC\CAD\SEGMENT_W1\EXHIBITS\ALTERNATIVES\COST REDUCTION MEASURES\PLAN SHEETS\EXHB-W1-TOWN CENTER PARKING IMPACTS.dwg By: V-BorowITP

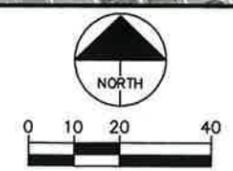


DRAFT-WORK IN PROCESS



SOUTHWEST LRT
 SEGMENT W1 - EDEN PRAIRIE
 REDSTONE PARKING IMPACTS

IRT: 1
 REV: 0
 DATE: 07/15/2015



Comment #	#20
Commenter	Mark Wegner
Commenter Organization	Twin Cities & Western Railroad Company

Response

Retracted comment – please see the response to comment #25.

Comment #	#21
Commenter	Peter K. Beck
Commenter Organization	Beck Law Office

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The responses below are provided in response to the comments received on the Final EIS.

In response to comments on the potential closure or closures of The Luther Company's two access points, the Council will coordinate with the construction contractor to identify and minimize the number of closures of each access point. However, it may be necessary to close each access point more than once on separate occasions due to the nature of the construction work occurring in the area. Construction phasing information will be shared with property owners and municipalities and will be available on the SWLRT website prior to the start of construction in an area. While it will not be feasible to provide a 90-day notice for these closures, the Council will work closely with The Luther Company to coordinate closures in advance.

The Council will develop and implement a Construction Mitigation Plan and a Construction Communication Plan that will address short-term impacts related to temporary construction easements and other construction activities. Communication and mitigation strategies may include:

- Issuing construction updates and post them on the Project website;
- Providing advance notice of roadway closures, driveway closures and utility shutoffs;
- Conducting public meetings;
- Establishing a 24-hour construction hotline;
- Preparing materials with information about construction;
- Addressing property access issues; and,
- Assigning staff to serve as liaisons between the public and contractors during construction.

The Council will also coordinate with The Luther Company as needed during construction. These measures will maintain access to Luther property and communicate access changes to drivers, including your customers.

Comment #	#22
Commenter	Christopher S. Hayhoe
Commenter Organization	Calhoun-Isles Condominium Association - Felhaber Larson

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The responses below are provided in response to the comments received on the Final EIS.

Section 3.13 and Appendix K of the Final EIS document the methodology and results of the Project's vibration analyses. The Project was analyzed using criteria defined in FTA's *Transit Noise and Vibration Impact Assessment Manual* (2006). In summary, the Final EIS identifies the following results from the vibration analysis:

Vibration: no residential land uses will experience vibration impacts as a result of the Project;

Ground-borne Noise: 54 residential units (five buildings) would experience a ground-borne noise impact, without mitigation; however, committed mitigation measures will avoid all of those ground-borne noise impacts.

Ground-borne noise impact and construction vibration mitigation measures that will be incorporated into the Project include the following (see also Attachment A of this ROD and Section 3.13.4.3 of the Final EIS):

- Implement highly resilient rail fasteners in the proposed light rail tunnel section in the Kenilworth Corridor (2,200 feet) to mitigate ground-borne noise impacts (the fasteners will be designed to provide at least 5 dB of reduction in vibration levels at 80 Hertz [Hz] and higher).
- Apply the following measures where feasible to minimize impacts from construction vibration:
 - Limit construction hours: Limit high-vibration activities at night.
 - Construction specifications: Include limits on vibration in the construction specifications, especially at locations with high-vibration activities.
 - Alternative construction methods: Minimize the use of impact and vibratory equipment, where feasible and appropriate.
 - Truck routes: Use truck haul routes that minimize exposure to sensitive receptors and minimize damage to surface roadways, where appropriate.
 - Pre-construction survey: Perform pre-construction surveys to document the existing conditions of structures in the vicinity of sites where high-vibration construction activities will be performed.
 - Vibration monitoring: If a construction activity has the potential to exceed the damage criteria at a building, the contractor will be required to conduct vibration monitoring and, if the vibration exceeds the limit, the activity must be modified or suspended until an acceptable means and method of construction is identified.

Regarding your request for reimbursement for consultant fees, those costs are not eligible for reimbursement as Project costs, per FTA requirements.

Itasca Consulting Group Findings

The following sections respond to the Itasca Consulting Group findings regarding the noise and vibration assessments for the Calhoun-Isles Condominium Association (CICA). CICA claims the Final EIS is significantly deficient in various noise and vibration analysis subjects. The technical memorandum outlines five key potential impacts, as stated above (note that the Final EIS's analysis of construction noise was found by the Itasca Consulting Group to be adequately addressed):

1. Construction Vibration Impacts

The Project will complete a Construction Mitigation Plan, which will reference design and specification information contained in the Project construction documents, prior to construction. This Plan will include requirements for pre-construction photography documentation, site surveys, and vibration monitoring for vibration-sensitive buildings, including the CICA building. The Council will specify the vibration limit for each structure based on review of the building structure type, adjacent soil conditions observed by geotechnical exploration, and existing vibration monitoring data. The vibration threshold for the CICA building will be peak particle velocity (PPV) of 0.5 inches per second.

At the CICA building, the Council's contractor will be required to perform vibration calculations and equipment tests prior to Project construction to demonstrate that the specific vibration limits will not be exceeded for the locations and types of equipment proposed. If calculations and test measurements exceed allowable limits, adjustments to proposed construction methods will be made so construction activities do not exceed the threshold.

During Project construction, continual monitoring and visual inspection of the CICA building will be required to identify if any vibration-caused issues are developing. If any issues are identified, construction activities will be suspended and further adjustments to construction methods will be made.

2. LRT Operational Vibration Impacts

Both vibration and ground-borne noise were assessed for the CICA site. Refer to Final EIS Appendix K: Noise and Vibration Supporting Documentation for a summary of the methodologies, assumptions, and results.

The force mobility inputs into the vibration assessment were adjusted for train speeds, as shown in Table 5.2-1 of the Final EIS (Appendix K: Noise and Vibration Supporting Documentation).

Regarding the concern that field measurements were taken at ground level and that the source mobility transfer function may be different underground, vibration levels from the proposed light rail tunnel depth would be lower than measurements taken through surface tests. Regarding the measurement from the centerline of track to the CICA, the distance reported in the Final EIS is 43 feet. This measurement is a slant distance between the base of the tunnel slab to the edge of the building at the surface. Therefore, the modeled vibration levels reported in Appendix K of the Final EIS are correct.

The comments regarding the effectiveness of the highly resilient fasteners and the tunnel slab correctly assert the challenges in modeling the Project vibration levels. The light rail tunnel's proposed slab accounts for a significant reduction in vibration levels (compared to a tunnel with a smaller tunnel slab); however, due to the limits of the vibration modeling to calculate the vibration reduction, the Project includes the use of highly resilient fasteners to further reduce vibration levels.

In regards to the assertion that the Final EIS assumes ideal wheel and track conditions, regular track maintenance and wheel truing are Project commitments to minimize and avoid vibration impacts.

Vibration levels from LRT is approximately two orders of magnitude below the categories for damages. Human annoyance impacts were the basis for determining mitigation, and the building category is not a factor in assessing human annoyance levels of vibration impacts.

Based on the findings of the vibration and ground-borne noise assessment completed for the Final EIS, the Council and FTA have determined the analysis is adequate. In response to the request for further vibration susceptibility studies, there is no protocol for such a study. The Project has and will continue to follow the FTA's *Transit Noise and Vibration Impact Assessment Manual* (2006).

3. LRT Operational Noise Impacts

Section 3.12.4 of the Final EIS discusses how MPCA noise standards were considered in assessing Project impacts and mitigation. For long-term operational noise, the Project will not exceed the MPCA standards and no mitigation will be required under the standards. The FTA criteria and mitigation methods for long-term operational noise are more protective than the MPCA standards and have been used to determine mitigation locations.

4. Geotechnical Site Investigation

The Final EIS includes documentation of and results from geotechnical site investigations, as described in detail in the *Geology and Groundwater Supporting Documentation* included in Appendix C. The geotechnical site investigation reports were conducted to support development of the Kenilworth Shallow LRT Tunnel Basis of Design Report (Council, 2014).

As part of advancing the design of the proposed light rail tunnel in the Kenilworth Corridor, additional borings and geotechnical explorations have been performed adjacent to the CICA building parking structure and the CICA building. This additional geotechnical exploration identifies soil conditions beneath the base of tunnel excavation and provides additional information to identify the location of buried swamp and weak clay layers, both of which are south and west of the parking structure. In addition, the Council is considering the suggested soil improvement recommendation using jet-grouting within the sheet pile support of excavation along the limits of the parking structure and condominium building.

The additional borings performed by the Council were Standard Penetration Test borings. Additional Cone Penetration Test (CPT) borings may be performed if needed during final design to further identify more detail on the location of weak clay layers in this location. Additional CPT borings would be used to collect shear wave velocities to support the design evaluations.

5. Sheet pile wall constructability

As part of evaluating the need for additional borings and geotechnical explorations referenced above, additional techniques that address cobbles and hard soils will be specified in construction documents for the press-in sheet pile method.

Comment #	#23
Commenter	Carol Braegelmann
Commenter Organization	United States Department of the Interior

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council and FTA acknowledge U.S Department of Interior (DOI) concurrence with the FTA determinations regarding Section 4(f) properties. As requested, the executed Section 106 Memorandum of Agreement is included in Attachment B of this Record of Decision.

Comment #	#24
Commenter	Judy Meath
Commenter Organization	LRT-Done Right

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The responses below address the comments received on the Final EIS.

In response to LRT-Done Right's comment on the duration of the written comment period for the Final EIS, please refer to Response #12 in this attachment, which provides a response from FTA and the Council regarding this request.

In response to LRT-Done Right's comment on the Council determining the adequacy of the Final EIS under MEPA, Minnesota Rule 4410.2800, subp. 1, states that the Responsible Government Unit (RGU) shall determine the adequacy of the Final EIS, unless notified by the Environmental Quality Board (EQB), on its own initiative or at the request of the RGU, or other interested persons, that the EQB will determine the adequacy of the Final EIS. Further, the EQB intervenes only if: the RGU is unable to provide an objective appraisal of the potential impacts of the project; the project involves complex issues that the RGU lacks the technical ability to assess; or the project has multijurisdictional effects. The Council is able to provide an objective appraisal of the impacts of the Project and has the technical ability to assess the Project. Further, the Council has completed prior environmental review and adequacy determinations for regional light rail projects and has the jurisdiction to complete these actions.

LRT Done Right Comment: Purpose and Need for SWLRT

In response to LRT-Done Right's comment on the Purpose and Need for the proposed Project rejecting that the area experiences daily congestion, FTA and the Council respond that increasing congestion is a problem for the region as well as within the Project area. Section 1.4 of the Final EIS describes that the Southwest LRT Corridor will continue to experience increasing levels of traffic congestion as a result of strong residential and employment growth and limited funding for continue expansion of the Regions' arterial highway system.

In addition to providing a competitive, cost-effective travel option to attract choice riders, the Project Purpose also addresses issues such as improving access and mobility to jobs and becoming part of the region's integrated transitway system to support regional transitway efficiency. Further, the Project is one of several transit corridors identified in the Council's 2040 Transportation Policy Plan, and serves the purpose of expanding the light rail system for the region. In addition to the regional and local planning documents discussed in Section 1.7 of the Final EIS, transportation infrastructure investments are planned via the State Transportation Improvement Program (STIP). The STIP identifies the schedule and funding for transportation projects, which are planned on a state level and prioritized after considering public input and is approved by the Federal Highway Authority (FHWA) and the Federal Transit Authority (FTA). The FHWA and FTA approval of the STIP is based on meeting regulatory framework and is unbiased in terms of preferential treatment for certain areas within a state.

In response to comments that the Council should encourage carpooling as an alternative to relieve congestion, the Council engages in efforts to encourage carpooling via Metro Transit's Commuter Outreach program. However, carpooling would not address Project need factors related to limited travel options for people who rely on public transportation, or regional/local plans calling for investment in additional light rail transit projects in the region.

SWLRT Planning: Performance of Place Disparity

In response to comments on concerns about city-suburb place disparity and how alternatives were selected, specifically due to statements in news articles or from elected officials, FTA and the Council acknowledge that while Project stakeholders have made statements regarding the Project benefits and concerns related to their constituents, those statements do not form the official record of Project Development. Chapter 2 of the Final EIS includes the official Project summary of alternatives considered and the process to identify a Locally Preferred Alternative. Travel time and reliability were primary factors in the advantage of the Project over other alternatives. The diagonal nature of the alignment contributed to this, but was not the only factor considered.

In response to comments that the Project alignment was chosen to serve southwest suburban business needs, the FTA and the Council have considered input from Project stakeholders throughout the history of the Project, as summarized in Chapter 9 of the Final EIS. As described in Section 2.2 of the Final EIS, the Council and HCRRA have been evaluating mobility issues and high-capacity transit improvements in the Project area since the mid-1980s. HCRRA initiated an AA of the Southwest Corridor in 2005 and completed the *Southwest Transitway Alternatives Analysis Report* in 2007. In that study, multiple transportation modes and alignments were evaluated against detailed performance criteria, including ridership, community impacts, environmental impacts, and cost. Goal 5: Support Economic Development, evaluated alternatives based on the number of jobs within 0.5 mile of stations, consistent with the Project purpose to improve access and mobility to job centers in the Minneapolis central business district, as well as along the entire length of the corridor for reverse-commute trips to the expanding suburban job centers.

The alignment through Eden Prairie and Minnetonka was determined irrespective of the alignment through Minneapolis, as both were based on analyses completed as part of the AA process and evaluation of alternatives in Draft EIS. The Draft EIS analyzed environmental impacts for five light rail alternatives, as well as the Enhanced Bus Alternative and the No Build Alternative, based on six goals that included improving mobility and supporting economic development. These goals were applied to all alternatives, including LRT 1A, which would operate from TH 5 on the HCRRA-owned right-of way through Eden Prairie. LRT 1A had the lowest projected ridership and lack of compatibility with area comprehensive plans; as a result, this alternative was not recommended. The recommendations from the Draft EIS considered improved access and mobility to jobs and activity centers in the Minneapolis central business district, as well as along the entire length of the corridor for reverse-commute trips to expanding suburban employment centers. FTA and the Council acknowledge LRT-Done Right statements regarding the growing employment centers in southwestern suburbs of Minneapolis, and as noted in Chapter 1 of the Final EIS, the Project provides a critical link to key activity centers in Eden Prairie, Minnetonka, Hopkins, St. Louis Park, and downtown Minneapolis through high-capacity transit service. The FTA and the Council refute LRT-Done Right statement that Southwest LRT is a "... strategy to keep or attract businesses to the southwest suburbs, rather than to provide needed transit to "expanding southwest suburban employment centers...". As noted in Tables 1.3-1 and 1.3-2 of the Final EIS, growth projections for Eden Prairie and Minnetonka were used as the basis for determining the need to provide transit service to two of the region's largest employment centers.

In response to comments about the additional Project costs identified in 2015 and a bias towards investment in Eden Prairie and Minnetonka, in April 2015 the Council released a revised project cost estimate of approximately \$1.994 billion – an approximately \$341 million increase over the previous estimate. These costs were primarily related to poor ground conditions along the proposed Southwest light rail line, soil contamination in St. Louis Park and Hopkins, Project delays due to additional studies, and property acquisitions and relocations. The Final EIS does not evaluate

the Project investment based on the individual municipalities because it is intended as a regional investment.

While wetland mitigation was identified as a cost driver for the increase in the Project cost estimate, wetland mitigation was not a primary driver for the 2015 cost escalation. Impacts to wetlands have been analyzed as part of federal and state processes in conjunction with the USACE and Local Government Units (LGU) responsible for making regulatory decision regarding impacts to wetlands. In December 2012, the USACE concurred with the array of alternatives considered for the Project¹, including LRT 1A, and in January 2015 the USACE concurred that LRT 3A-1 “is the least environmentally damaging practicable alternative (LEDPA) for this project, as defined in the 404(b)(1) guidelines.” The Council continued to identify impacts to wetlands and then worked to avoid and minimize these impacts throughout the Project area. These efforts led to design adjustments that reduced permanent and temporary impacts to wetlands by approximately 25 percent and 75 percent, respectively. Refer to Section 3.9 of the Final EIS, the *NEPA/404 Merger Process – Southwest LRT Concurrence Points Package*² and the Section 404 CWA permit application³ for additional information on measures to avoid, minimize and mitigate impacts to wetlands.

Furthermore, in July 2015, the Council identified \$250 million in reductions to the Project’s scope and cost estimate. In doing so, the Council considered recommendations from the CMC, BAC and CAC.⁴ The reductions in the Project’s scope included the elimination of the Mitchell Station (also identified in the Supplemental Draft EIS) and deferral of the Eden Prairie Town Center Station (until after 2020 and before 2040), both of which occur within the City of Eden Prairie.

Minneapolis Disenfranchised from Alignment Selection: No SWLRT in Urban Density

In response to LRT-Done Right’s comment that the City of Minneapolis was disenfranchised from the alignment selection process, the FTA and Council have engaged the City of Minneapolis in the Project Development phase of the project, including design and environmental processes, as summarized in Chapter 9 of the Final EIS. The following responses address LRT-Done Right’s comments, which primarily focus on other alignments through Minneapolis that it asserts should have been selected and its assertion that the decision making process related to co-location of freight rail and the Project was flawed.

In response to LRT-Done Right’s comment that “The routes through density favored by the City could not be and were not fairly or accurately evaluated,” Section 2.2 of the Final EIS documents the alternatives considered, the basis of evaluating alternatives, and involvement of Project stakeholders, including the City of Minneapolis, in evaluating alternatives. As shown in Table 2.2-1 of the Final EIS, the alternatives evaluation process included ridership and land use as factors in the evaluation process.

In response to comments about a preference for an alignment through uptown Minneapolis, as documented in Section 11.2.6 of the Draft EIS, LRT 3C-1 was determined to be the least cost effective of the alternatives considered in the Draft EIS, due to its relative high costs and low ridership estimates. LRT 3C-1 was not compatible with approved comprehensive plans because of potential disruptions to regional roadways, such as Nicollet Mall, and impacts to pedestrian facilities. Further, LRT 3C-1 would have had greater construction impacts, due to extensive in-street construction. Finally, LRT 3C-1 was found to have disproportionately high and adverse impacts to

² Final EIS, Appendix C, *Surface Water Resources Evaluation Supporting Documentation Technical Memorandum* (Council, 2015)

³ Final EIS, Appendix D (Council, 2015d)

low-income and minority populations due to acquisitions and displacements, impacts to community cohesion, and increased traffic congestion in environmental justice communities, as identified in the Draft EIS. Travel time was one of many factors used to evaluate alternatives, as listed in Table 2.2-1 of the Final EIS. Refer to Final EIS Appendix L, *Theme G.1: Preference for alternatives considered in the Draft EIS other than LRT 3A1*, which summarizes why LRT C3-1 was not selected.

In response to LRT-Done Right's comment that the Project will not improve the efficiency of the regional transit system, the total systemwide transit trips reported in the Final EIS shows an increase of 13,240 transit trips for the Project, compared to the No Build Alternative (refer to Table 4.1-2 of the Final EIS). The "barely measureable 200 trips" referenced in LRT Done-Right's comment is calculated by comparing the PM peak-hour, peak-direction peak load point⁵ for the No Build and Project on the total light rail system only (refer to Table 4.1-3). The values represented under PM peak-hour, peak-direction, peak load point does not represent the increase in total systemwide transit trips as LRT-Done Right asserts, but rather notes the maximum utilization on a station-to-station segment for the two LRT lines currently operating in the region (Blue Line and Green Line) and Northstar. The conclusion in Section 4.1.4 of the Final EIS is that the Project will expand transit service. The Final EIS does not report a specific calculation for efficiency of the regional transit system. Refer to Final EIS Appendix L, Theme B: Opposition to the Project, which discusses Project benefits in addition to ridership.

In response to assertions that the recommendations in the *SWLRT Engineering Evaluation of Freight Rail Relocation Alternatives* (TranSystems, 2014) report is unrefuted by any credible source, upon completion of the independent report, the Council dismissed MN&S North adjustments from further study based on the following findings. First, the MN&S North adjustments were opposed by the affected freight rail operator (TC&W), primarily based on safety and operational concerns, including three reverse curves in the proposed freight rail alignment that would be especially problematic (the operator did not express similar concerns about the Shallow LRT Tunnels – Over Kenilworth Lagoon adjustment). Second, the advantage of the Shallow LRT Tunnels – Over Kenilworth Lagoon, relative to the MN&S North adjustment, is that it would avoid the following: the potential displacement of approximately six residences and seven businesses; the partial acquisition of St. Louis Park High School property; additional cost increases due to project delays of approximately \$45 to \$50 million; closure of local streets; and extension of the project's construction schedule by up to two years. FTA and the Council reiterate that the re-route of freight rail operations is outside of the scope of the federally funded Project. Relocating freight rail operations from portions of the Bass Lake Spur and Kenilworth Corridor is possible if the local jurisdictions and freight owners/operators are able to find a suitable replacement route acceptable to railroad owners and operators outside of the Bass Lake Spur and Kenilworth Corridor. Further, this relocation of freight rail operations would be under the jurisdiction of the Surface Transportation Board (STB), and could be brought separately to the STB in the future as a proposed action.

In July 2014, the Council and City of Minneapolis proposed a set of additional adjustments to the design of the Shallow LRT Tunnels – Over Kenilworth Lagoon option. The proposed additional design adjustments were outlined in a memorandum of understanding between the Council and the City (Council and City, 2014) included in Final EIS Appendix D: Sources and References Cites. The additional design elements reduced Project capital costs by eliminating the northern of the two proposed light rail tunnels in the Kenilworth Corridor, and incorporated a variety of bicycle and

⁵ The peak load point is the station location where the maximum utilization of a transit line occurs, or the station-to-station segment with the highest passenger loads.

pedestrian improvements associated with proposed light rail stations in the City of Minneapolis; refer to Section 2.2.4 of the Final EIS.

As noted in Section of 2.3.3.2 of the Supplemental Draft EIS, a deep bore tunnel option under the Kenilworth Channel/Lagoon was dismissed within Step 2 of the St. Louis Park/Minneapolis Segment Design Adjustment process because, among other reasons, it had the highest capital costs of all options, which was determined economically infeasible at the regional level. Furthermore, this tunnel option is not an avoidance alternative because it would have resulted (like all other tunnel and bridge options) in a use of the Kenilworth Channel/Lagoon and because it would have an associated Section 106 adverse effect on the existing historic bridge structure.

In response to comments that the shallow tunnel will not be built, the tunnel design is in the Project's scope and budget; therefore, it is a condition of the Project receiving federal funding. The Council has studied the tunnel design in great detail, and the Final EIS includes geotechnical site investigations in the Geology and Groundwater Supporting Documentation included in Appendix C that demonstrate the technical feasibility of the shallow tunnel construction. The geotechnical site investigation reports were conducted to support development of the Kenilworth Shallow LRT Tunnel Basis of Design Report. As part of advancing the design of the Kenilworth Tunnel, additional borings and geotechnical explorations have been performed to identify soil conditions beneath the base of tunnel excavation and provide additional information to identify the location of buried swamp and weak clay layers to support the design of the Kenilworth Tunnel.

In response to the comments regarding previous objections from the Minneapolis Park and Recreation Board (MPRB) regarding impacts to the Chain of Lakes and Grand Rounds, the Council has coordinated with MPRB extensively in development of the Project design, where applicable. Additionally, MPRB served as a consulting party in the Section 106 process, during which MPRB provided feedback integral to the process to avoid, minimize, and mitigate the adverse effect to the Kenilworth Lagoon and the Grand Rounds Historic District. Refer also to Response 26 of this attachment, which provides responses to MPRB's comments on the Final EIS.

Section 1.5, Purpose and Need: Limited Competitive, Reliable Transit Options for Choice Riders and Transit Dependent Populations including Reverse Commute Riders

In response to comments that the current transit travel times from Eden Prairie are overstated, Table 1.5-1 reports the results of the Travel Demand Methodology & Forecast Report, available in Appendix C of the Final EIS. The transit travel times listed in the table are based on trip generation, which uses demographic data, including where transit users live and work. Therefore, the table accounts for the travel time for transit users starting from their home, which adds travel time.

In response to questions about seniors who would use the Project and comments that the metric of serving transit-dependent populations provides insufficient justification for the Project, the Final EIS describes both serving transit-dependent populations and seniors as one of multiple factors. Table 1.5-2 of the Final EIS summarizes data for zero-vehicle households ages 65 and older. While it does not include a travel demand analysis for senior populations, it acknowledges the senior population living along the corridor, as one of multiple need factors articulated in Chapter 1 of the Final EIS.

In response to comments on the scoping process and that the Council improperly limited the study and choice of reasonable alternatives during the scoping process, on September 25, 2012, HCRRA amended the Southwest Transitway Scoping Summary Report (which serves as the Scoping Decision Document under MEPA) to include the impacts of relocating freight rail for each of the build alternatives, and for a co-location alternative in which freight rail, light rail and the commuter bike trail would be co-located between Louisiana Avenue and Penn Avenue. The FTA and the

Council determined that design adjustments made to the LPA following publication of the Draft EIS had the potential to result in new adverse impacts and needed to be evaluated in a Supplemental Draft EIS. A Supplemental Draft EIS was published in May 2015 that documented the design adjustments to the Project, with the co-location of freight rail and light rail in the Kenilworth Corridor. In the St. Louis Park/Minneapolis Segment, the LPA was adjusted to include the following:

- A proposed light rail tunnel in the Kenilworth Corridor (generally between West Lake Street and the Kenilworth Lagoon);
- Retention of existing freight rail service in the Kenilworth Corridor, with some modification to freight rail tracks to accommodate light rail; and
- Adjustments to the location and capacity of proposed park-and-ride lots.

In response to the comment about inclusion of the statement “Need to maintain a balanced and economically competitive multimodal freight system,” the Council and FTA note that the following Need statement was included in the Draft EIS (Section 1.3.2.3): “Need to Develop and Maintain a Balanced and Economically Competitive Multimodal Freight System,” and was revised in the Supplemental Draft EIS (Section 1.2) and Final EIS (Section 1.6) to “Need to Maintain a Balanced and Economically Competitive Multimodal Freight System.” This Need statement has been included throughout the Project design and environmental review processes. Specifically, the Draft EIS included this need statement when it identified LRT 3A, including freight rail relocation, as the Environmentally Preferred Alternative. Further, the Draft EIS included “Goal 6: Support economically competitive freight rail system.” Finally, note that while the Project will result in various modifications to existing freight rail facilities to accommodate the introduction of light rail into the corridor, those modifications are not intended to “improve” freight rail facilities.

In response to the comment that that ridership estimates in the Final EIS are lower than previous estimates, the following provides clarification in which LRT-Done Right incorrectly compares the ridership data reported in the Final EIS. The purpose of the ridership information in Section 4.1 of the Final EIS is to disclose impacts to the regional transit system, rather than to demonstrate project effectiveness. FTA determines the competitiveness and cost effectiveness of the Project based on various evaluation criteria, including ridership, when providing a project rating and making a funding recommendation to Congress. Ultimately, funding for individual projects is subject to Congressional appropriations.

As the comments from LRT-Done Right correctly state, Table 4.1-3 of the Final EIS reports the 2040 forecast average weekday light rail boardings on the METRO Green Line and Green Line Extension as 66,581 boardings, an increase of 32,679 boardings compared to the No Build Alternative. It should be noted that the “nearly 34,000 additional boardings” number reported on page 4-18 of the Final EIS represents the increase in average weekday boardings for the total rail system (2040 ridership of 120,020, as reported in Table 4.1-3 of the Final EIS). The increase of 33,617 boardings is calculated by subtracting the No Build boardings from the Project boardings for the Total Rail System. Regarding the assertion that ridership estimates in the Final EIS are lower than “previous estimates,” ridership estimates continue to be updated to reflect the Project improvements; changes such as parking availability and travel time can change ridership estimates. The ridership data provided in the Final EIS are based on the Project definition as described in Chapter 2 of the Final EIS, and form the basis for analysis of Project impacts.

Chapter 3: Environmental Analysis

Section 3.3: Neighborhood and Community

In response to comments that the Project introduces a new physical barrier to community cohesion, the rationale for the findings is included in Section 3.3 of the Final EIS. Table 3.3-16 in the Final EIS lists impacts to community cohesion for each neighborhood along the LRT alignment, including those in the Kenilworth Corridor. The Project will include the operation of light rail through the Kenilworth Corridor, but will not create a new physical barrier. All existing connections crossing the Kenilworth Corridor will be maintained and will include safety features and treatments that will maintain or improve safety, such as flashing lights and gates (refer to Section 4.6.3 for more information on safety for at-grade crossings). Unauthorized paths across existing freight rail tracks will be blocked by fencing included as part of Project safety features separating trail users from the adjacent freight or light rail alignments, with openings at officially designated crossings across the freight and/or light rail alignments (e.g., at-grade roadway intersections) (see Appendix E).

Visual changes are not considered as a community cohesion impact because they do not represent a new physical barrier that would impede connections within and between communities. Rather, visual changes are evaluated in Section 3.7 of the Final EIS under visual quality and aesthetic impacts. The analysis shows that the level of impact in the Kenilworth Corridor will be low, moderate and substantial. Attachment A of this Record of Decision includes mitigation measures related to visual impacts that will be incorporated into the Project.

In response to comments that there will be no changes to vehicle parking or adverse effects on traffic near 21st Street Station, a traffic analysis was completed in September 2015 for the 21st Street Station area and provided through the Section 106 Consultation process. This analysis included review of existing roadway networks and parking restrictions in the vicinity of 21st Street Station, as well as planned bus connections and traffic projections. The analysis reflected no change in annual average daily volumes at the 21st Street/Railroad intersection between 2040 No Build and 2040 Build. Refer to the September 23, 2015, Consultation Package posted under the Section 106 Consultation materials section of the Project website for a copy of this memorandum (AECOM, 2015). Additionally, as noted in Section 4.4 of the Final EIS, the Project could lead to indirect impacts related to “spillover” parking in neighborhoods adjacent to proposed light rail stations. The Council will complete a Regional Park-and-Ride System Report on an annual basis to attenuate the impacts related to spillover parking. As part of this effort, the Council and Metro Transit will collaborate with regional transit partners, local governments, and the Minnesota Department of Transportation to conduct an annual regional park-and-ride survey, which tracks facility use and emerging travel patterns by park-and-ride users across the region to identify the appropriate mitigation. The results of this survey are published in the annual report. Spillover parking impacts can also be curbed by the local jurisdictions and residents by implementing a “residents parking” permit program, which would allow unlimited time parking for residents and visitors of residents.

Section 3.11 Air Quality and Greenhouse Gases

3.11.3.3 Greenhouse Gas

In response to the comment that that the Final EIS did not adequately consider the Greenhouse Gas (GHG) reductions related to tree removals, there is currently no federal requirement to account for carbon sequestration or sinks in GHG emissions; however, the Project notes the net loss of 18.8 acres of woodlands (see Section 3.10 of the Final EIS) which may cause a potential change to carbon sequestration. The Final EIS describes state goals for GHG reductions, but there are no specific thresholds that a project must meet. Section 3.11.3.3 of the Final EIS identifies impacts from the removal of a limited number of trees and vegetated areas along the rail corridor. Because the

number of trees and the area of vegetation disturbance would be limited during Project construction, the effects on the sequestered CO₂ or the loss of carbon stored in the removed trees or vegetation was not quantified for the Project. However, FTA and the Council acknowledge that the Project will not contribute towards State GHG reduction goals.

In response to comments that tree removals were not accurately evaluated in the Final EIS, Section 3.10 of the Final EIS describes the Project's impacts to habitat, including woodlands. The Project will remove 18.8 acres of woodlands and have short term impacts (woodlands that will be removed and replaced) to 5.1 acres of woodlands Project-wide. The Project will result in a loss and/or degradation of vegetated areas, which could result in a decrease in wildlife foraging areas, breeding habitats, and nesting areas. Additionally, the Project will result in a short-term loss of vegetated areas. To mitigate for habitat loss, native landscaping will be incorporated into the Project's design during Engineering, where applicable and appropriate.

The Construction Mitigation Plan, which will reference design and specification information contained in the Project construction documents, will include requirements such as vegetation protection, invasive species management, compliance with State and Federal rules for vegetation and wildlife protection, and use of wildlife friendly erosion control materials. The Plan will also include requirements for restoration of disturbed areas to meet requirements of the Local, State and Federal rules and permits. The Council finds that the analysis and mitigation measures identified are sufficient in addressing tree and vegetation impacts.

3.11.3.2 Mobile Source Air Toxics Analysis

In response to comments that the Final EIS did not evaluate air quality impacts due to congestion on local roads surrounding stations, Section 3.11.1.2 of the Final EIS and the *Air Quality and Greenhouse Gases Analysis Methodology and Results Technical Memorandum*, listed in Appendix C of the Final EIS summarize the methodology related to the Project's impact on Mobile Source Air Toxics. The analysis methodology considered the Project's traffic impacts on local roads. The analysis found that the Project in 2040 is expected to be associated with lower levels of MSAT emissions relative to the No Build Alternative. The Project will provide more options for public transportation; therefore, the reliance on passenger cars for daily work commute and recreational trips will be reduced as people choose transit instead of driving. The reduced vehicle travel on highways and local streets will help to relieve traffic congestion. Because air pollution tends to accumulate at locations with many vehicles idling or traveling at low speeds, the improved traffic conditions will reduce vehicle emissions and contribute to indirect air quality improvements. There could be slightly higher MSAT levels in localized areas where Project-related activities (e.g., automobile trips to park-and-ride lots) will occur closer to homes, schools, and businesses. Under all alternatives, MSAT levels are likely to decrease over time due to nationally mandated cleaner vehicles and fuels.

3.12.1 Noise Regulatory Context and Methodology

In response to the comment that freight should not be considered as an existing condition for the noise analysis, the Final EIS assesses the impact of the Project by comparing the projected future noise levels with existing noise levels using the FTA noise impact criteria in Chapter 3 of FTA's *Transit Noise and Vibration Impact Assessment* guidance manual (FTA, 2006). The FTA assessment methodology is based on a comparison of the existing noise with the Project noise. This includes assessing the existing noise as it is, and not excluding any source, such as freight rail. To exclude freight rail, which is an existing noise source as part of the baseline condition, would invalidate the assessment. FTA requires that existing conditions be used as the baseline for assessing impacts.

Please refer to Final EIS Appendix M, Attachment 3, *Master Response 6: Freight rail operations should not be considered an existing condition and should be excluded from the baseline data*, for further explanation of the requirement that existing conditions be used as the baseline for assessing impacts.

In response to assertions that modifications made to freight as part of the Project make freight rail infrastructure permanent, the FTA and the Council reiterate that the permanency of freight rail is outside the scope of the federally funded Project. Relocating freight rail operations from portions of the Bass Lake Spur and Kenilworth Corridor is possible if the local jurisdictions and freight owners/operators are able to find a suitable replacement route acceptable to railroad owners and operators outside of the Bass Lake Spur and Kenilworth Corridor. Further, this relocation of freight rail operations would be under the jurisdiction of the Surface Transportation Board. In response to the comment on opposition to freight rail co-location, please refer to Final EIS Appendix M, Attachment 3, *Master Response 10: Rationale for incorporating freight rail co-location into the Project*, which addresses the Project planning process related to co-location. In response to comments on Minneapolis support of the Project, the Minneapolis City Council approved the physical design component of the preliminary design plans of the Project in 2014, and again in 2015, when the proposed scope and budget of the Project included locating LRT next to existing freight rail. In approving the physical design component of the proposed Project in 2014 and 2015, FTA noted the approval as an explicit acceptance from the City of Minneapolis of the physical design component proposed, which accommodated freight rail operating as it currently does on the Kenilworth Corridor.

3.12.1.2 Noise Criteria

In response to comments that the noise analysis mis-categorized the Kenilworth Lagoon, the noise assessment for the Final EIS was conducted in accordance with the Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006). The assessment at the Kenilworth Channel/Lagoon indicated a moderate noise impact to the channel, but not to the banks of the lagoon which are located further from the tracks (refer to Appendix K of the Final EIS). Mitigation for the noise impact to the channel is a two-foot parapet wall on the bridge and rail dampers on the LRT tracks to minimize the noise. While the banks of the lagoon were not identified as having noise impacts, the mitigation for the channel impacts would reduce the noise levels at the banks as well. The noise assessment considers site conditions, including the presence of open water; the screening distance for sensitive receptors is 350 feet which reflects the distance noise travels in unobstructed areas; the area within 350 feet of the alignment is within the Kenilworth Channel, which does not have the characteristics of open water. See Section 3.12 and Appendix K of the Final EIS for a complete listing of noise impacts and mitigation measures.

FEIS Table 3.12-7 Summary of Mitigation Measures and Residual Impacts for Residential and Institutional Locations

Regarding the request for noise walls to be built higher on the LRT bridge across the Kenilworth Channel to further mitigate noise impacts, Project mitigation is designed to address the impacts of the Project in accordance with the FTA *Transit Noise and Vibration Impact Assessment Manual* and the Council's *Regional Transitway Guidelines* (March 2016). In response to the comparison shown in LRT-Done Right's comment letter under this section heading, the mitigation measures identified for Minnetonka and Hopkins were for residential land use, which has a higher criteria for performance compared to institutional land use, which is the land use category for the Kenilworth Channel.

3.15.3.1: Electromagnetic Fields and Electromagnetic Interference

In response to comments that the Final EIS does not adequately consider human health impacts due to electromagnetic fields (EMF), the Final EIS considers the potential for human health impacts related to EMF. Section 3.15.3.1.A of the Final EIS states that people riding the LRT could be exposed to DC magnetic fields as high as 1,000 milli Gauss, which is well below acceptable international guidelines for public exposure to DC magnetic fields of 400,000 to 1,180,000 milli Gauss (FTA, 2008). People in buildings adjacent to the LRT alignment would be exposed to lower levels of EMF, so there would be no EMF effect from the Project on people either riding the LRT or in buildings adjacent to the light rail alignment.

3.17: Cumulative Impacts

In response to the comment that safety concerns raised by co-location of light rail and freight rail are not addressed in the Final EIS, please refer to Response #34 in this attachment for the Council's responses to the comments from Citizens Acting for Rail Safety – Twin Cities.

Chapter 7: Financial Analysis

In response to comments that the Council obtained funds that the Legislature did not appropriate in 2016 by using reserve funds and using motor vehicle sales tax (MVST) revenue, Table 7.1-3 of the Final EIS identifies the Capital Costs Funding by source. The Council continues to work with local funding partners to secure the outstanding funding. MVST funds are permitted for transit purposes.

In response to the comment that the \$165 million funded by HCRRA does not include the value of land that HCRRA is donating to the Project, the FTA and Council acknowledge that the land transfer is accounted for as an in-kind contribution from Hennepin County and is not part of the \$165 million HCRRA contribution.

In response to the comment that the Council should disclose who is financially responsible for the cost of a derailment or other incident, this depends on the incident. As noted in Final EIS Appendix M, Attachment 3, *Master Response 15, Comments Received from Kenwood Isles Area Association (KIAA), Cedar Isles Dean Neighborhood Association (CIDNA), and LRT-Done Right*, the Council will address potential liability for incidents related to LRT through a combination of self-insurance and third-party insurance. Freight rail operators will continue to respond to claims unrelated to LRT operations as they do now.

In response to the request to clarify the increase in subsidies needed from the State and CTIB in 2040 (increase of \$18.93 million each), versus the New Starts rating summary from November 2015 which shows different operating costs (\$20.8 million), the difference in the figures are due to the New Starts Reporting, which shows opening year 2020 dollars, while the Final EIS reports the operating costs for the horizon year 2040. In addition, the New Starts Reporting is only for the months the Project is operating in year 2020, while the Final EIS is for a full year of operation. New Starts reporting is utilized for FTA's CIG program and factors into the full funding grant agreement prior to the start of Project construction.

In response to questions about changes to SouthWest Transit ridership due to the Project, the Final EIS does not specify ridership changes for SouthWest Transit specifically. Rather, ridership changes are described as part of the increase in transit trips on a corridor basis, as shown in Table 4.2-1 of the Final EIS. As described in Section 2.1 and Section 4.1 of the Final EIS, bus service will be modified as appropriate to meet demand and provide connections to the Southwest LRT stations. The conceptual bus service plan for SouthWest Transit, with the implementation of the Project, includes the provision of new local bus routes to provide enhanced access to the proposed SouthWest, Golden Triangle, and Opus stations in Eden Prairie and Minnetonka. In response to questions about the additional subsidy needed for SouthWest Transit, Table 7.2-2 of the Final EIS

includes the annual system-wide operations and maintenance revenue for 2040, including SouthWest Transit. The purpose of Table 7.2-2 is to disclose the changes in cost and revenue for the Project compared to the No-Build Alternative. The “other regional revenue sources to be determined” reported in Table 7.2-2 have not been determined for that portion of the SouthWest Transit increased operations and maintenance costs for the Project in 2040. The increased costs reported in these tables reflect added service for SouthWest Transit, as well as increased farebox revenue.

In response to the request for clarification on the statement in section 7.3, “Across all scenarios, it is noteworthy that the financial structure of the Metropolitan Council Transportation Division and the Southwest LRT Project are dynamically resilient,” Section 7.3 of the Final EIS describes three scenarios used to determine the ability of the region to withstand negative circumstances during the construction of the Project. The statement above is meant to indicate that the region is resilient in its ability to withstand the risks identified in all three scenarios.

Comment #	#25
Commenter	Mark Wegner
Commenter Organization	Twin Cities & Western Railroad Company

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The sections below provide responses to the comments received on the Final EIS.

FTA and the Council acknowledge that TC&W must continue to meet its federally-mandated responsibility to serve its freight customers. Chapter 1 of the Final EIS identifies one of the four need factors for the Project as, the “need to maintain a balanced and economically competitive multimodal freight system.” Accordingly, the Council will continue to coordinate with TC&W throughout the Engineering and construction phases of the Project on matters related to TC&W’s freight rail operations.

Regarding freight track siding, as stated in response to TC&W’s comment letter on the Supplemental Draft EIS (see Final EIS, Appendix M, Attachment 4, Comment #110), the Project will result in the removal of freight rail siding track along the Bass Lake Spur. The removal of siding tracks will be addressed in negotiations between the Council and CP Railway, the owner of the Bass Lake Spur. Any agreement regarding Council acquisition of the Bass Lake Spur will be executed after the Project’s Record of Decision (ROD), as required by federal law.

Regarding TC&W’s comment on the length of the comment period, please refer to Response #12 in this attachment for responses from FTA and the Council regarding not extending the comment period for the Final EIS.

FTA and the Council acknowledge TC&W’s comment regarding the loss of access to freight rail for the southern properties and the loss of siding track. The STB is a participating agency for the Project, and FTA has coordinated with STB on its role in the NEPA process (see Chapter 2 of the Final EIS). FTA and the Council are not aware of any existing shippers along the TC&W route who would be denied service due to the alignment shift between freight rail and LRT; however, we recognize that TC&W may be able to seek relief from the STB if it believes that the Project will interfere with its ability to fulfill its rail service obligations as a common carrier.

Please refer to the following for responses to comments on safety concerns related to the co-location of freight rail and the Project:

- Final EIS, Section 4.6, Safety and Security;
- Final EIS, Appendix M, Attachment 3, *Master Response 3, General concerns related to safety and security for LRT construction and operations within close vicinity to freight in the Kenilworth Corridor*; and
- ROD, Attachment A, Category 4.6, Safety and Security.

The mitigation measures included in Attachment A of the ROD will be incorporated into the Project, included in the Project budget, and must be implemented by the Council for the Project to proceed with FTA financial assistance.

FTA and the Council acknowledge TC&W’s comment regarding TC&W’s concerns with respect to freight rail relocation are about the physics of rerouting freight trains and the safety issues associated with the proposed re-routes.

FTA and the Council acknowledge TC&W's comment regarding replacement of siding track, which was identified in the Supplemental Draft EIS and Final EIS, and have responded to this comment above and in the Final EIS.

FTA and the Council acknowledge TC&W's comment regarding the duration of freight rail operations in the Kenilworth Corridor.

FTA and the Council acknowledge TC&W's comment on the need to ensure safety measures meet freight rail standards and have responded to this comment with safety measures included in Section 4.6 of the Final EIS and Attachment A of this ROD.

FTA and the Council acknowledge TC&W's comment that a southerly connection must be maintained from the Bass Lake Spur. The Project design includes a Southerly Connector that maintains the connection between the Bass Lake Spur and MN&S Spur.

Regarding TC&W's comment on the Final EIS including responses to comments received on the Supplemental Draft EIS, Appendix M of the Final EIS includes all comments received on the Supplemental Draft EIS and responses to those comments.

FTA and the Council acknowledge TC&W's comment on STB actions and have responded to this comment above. Further, Table 2.1-3 in the Final EIS identifies anticipated filings with STB regarding acquisition of railroad property in connection with the Project.

FTA and the Council acknowledge TC&W's comment on storing freight rail cars in St. Louis Park and Hopkins while customers determine where freight is to be sent, then hauling cars back to Saint Paul.

FTA and the Council acknowledge TC&W's comment that the design of the Southerly Connector does not impact the amount of freight rail traffic over that connection, and that the amount of such traffic is affected by market conditions. As discussed in Section 4.4.4.2 of the Final EIS, future freight rail operations are subject to a range of market forces and are dependent on the business plans of freight railroad operators, both of which are outside of the jurisdiction of the FTA and the Council.

Regarding TC&W's comment on the need to replace 11,700 feet of existing freight rail track, the Table 4.4-2 of the Final EIS identified 11,770 feet of siding track that would be removed by the Project. Since the completion of that analysis, two changes have occurred that affect the length of siding track to be removed by the Project. First, the Council and TC&W identified an additional 1,829 feet of existing siding track that will need to be removed by the Project. Second, a spur track east of Blake Road was incorrectly included in the Final EIS siding track count and has been removed, resulting in a reduction of 154 feet of siding track removed under the Project. The result of these two changes equates to a revised total of 13,445 feet of siding track that would be removed by the Project. Table 3.2-4, Economic Effects on Freight Rail Owners/Operators, states that the removal of the siding tracks will be addressed with CP (owner) and TC&W (operator) under a purchase agreement that will be negotiated after publication of the Final EIS. Additionally, refer to Final EIS Appendix M, Attachment 4, Response #110 that identifies the Project will remove approximately 13,600 feet of freight rail siding track that will be addressed under a purchase agreement to be negotiated after the Final EIS.

Comment #	#26
Commenter	Liz Wielinski
Commenter Organization	Minneapolis Park and Recreation Board

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The sections below provide responses to the comments received on the Final EIS.

Kenilworth Channel Bridges

The Council will continue to coordinate with the MPRB on the design of the three bridges that will cross the Kenilworth Channel, per the terms of the September 2014 Memorandum of Understanding between MPRB and the Council, and the Council will adhere to the stipulations of the Section 106 Memorandum of Agreement (refer to Attachment B of this ROD) that apply to these bridges. The Council and FTA will continue to consult with the Minnesota Historic Preservation Office (MnHPO), MPRB and other Section 106 consulting parties regarding design details of the bridges that will cross the Kenilworth Channel.

Kenilworth Corridor Landscape Design

The Council will continue to coordinate with MPRB regarding post-planting vegetation management activities on MPRB property.

Detours during construction

The Project's Construction Communication Plan, which the Council will develop and implement in coordination with MPRB, will include strategies to provide advance notice of trail closures and detours.

Continuation of freight operations in the Kenilworth Corridor

In response to the comment on the lack of understanding in the Locally Preferred Alternative (LPA) recommendation and the understating of what was included in the LPA by the community and MPRB, FTA and the Council note Sections 2.3 and 2.4 in this ROD for additional discussion of the LPA and NEPA processes. The January 2010 Minneapolis City Council Resolution 2010R-008 supported the LPA, with no mention of freight. Further, the Minneapolis City Council approved the physical design component of the preliminary design plans of the Project in 2014, and again in 2015, when the proposed scope and budget of the Project included locating LRT next to existing freight rail.

During Project Development, the Council considered the relocation of freight rail operations from portions of the Bass Lake Spur and Kenilworth Corridor to the MN&S Spur as part of the federally funded Project. Accordingly, the environmental review included the relocation of freight rail operations in the alternatives for the Project. FTA and the Council reiterate that the permanency of freight rail is outside the scope of the federally funded Project. Relocating freight rail operations from portions of the Bass Lake Spur and Kenilworth Corridor is possible if the local jurisdictions and freight owners/operators are able to find a suitable replacement route acceptable to railroad owners and operators outside of the Bass Lake Spur and Kenilworth Corridor. Further, this relocation of freight rail operations would be under the jurisdiction of the STB, and could be brought separately to the STB in the future as a proposed action.

FTA and the Council addressed the issue of including freight rail in the baseline assessment under the No Build and relocating freight rail from the Kenilworth Corridor with substantial background

information in Appendix M, Attachment 3, *Master Response 6: Freight rail operations should not be considered an existing condition and should be excluded from the baseline data*, and *10: Rationale for incorporating freight rail co-location into the Project*. If a condition is utilized in the baseline assumption under the No Build scenario, it cannot be added as a new condition under the Build scenario – this would produce faulty analysis which does not meet the intent of NEPA analysis and guidance (Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, Question 3: No-Action Alternative; CEQ, 1981).

Intrusion detection and crash walls are safety measures that are used in many freight and commuter rail projects throughout the country. The appropriate use of such measures improves safety. Refer to Final EIS Appendix M, Attachment 3, *Master Response 3: General concerns related to safety and security for LRT construction and operations within close vicinity to freight in the Kenilworth Corridor*, which addresses safety concerns related to co-location of freight and LRT.

Cultural resources and visual quality

The Council will develop a Construction Protection Plan (CPP) in consultation with MPRB, as required by the Section 106 Memorandum of Agreement (MOA). As stated in the Section 106 MOA, the CPP for historic properties will detail the measures to be implemented during construction to protect properties from physical damage; the CPP will be provided to MPRB for review as stipulated in the MOA. The Project's Section 106 MOA is included in Attachment B of the ROD.

Section 3.7 of the Final EIS documents the methodology and results of the Project's visual impacts analysis. The Council's methodology, which was based on the FHWA's *Visual Impact Assessment of Highway Projects*, included a visual assessment of the Project corridor through site visits, an analysis of existing conditions, and an evaluation of visual change. The Project will result in changes to the visual environment due to the introduction of new visual elements, the removal or replacement of existing elements, and light spill and glare effects. Within Minneapolis, moderate and substantial visual impacts will occur at the following locations:

- Kenilworth Trail north of West Lake Street looking toward the tunnel portal;
- Kenilworth Trail at the Kenilworth Lagoon; and
- Burnham Road Bridge looking toward the Kenilworth Channel.

The visual impact assessment included in the Final EIS for the Project included structures, such as corridor protection barriers and traction power substations (TPSS), as well as removal of vegetation. The Council understands and acknowledges MPRB's concerns about changes to viewshed related to the Grand Rounds Historic District and extensive tree clearing in the Kenilworth Corridor. While FTA and the Council may not be able to replicate the current views related to the Grand Rounds Historic District and from within the Kenilworth Corridor, the Project will incorporate mitigation for visual impacts including:

- following design guidelines found in the Council's *Visual Quality Guide for Key Structures* for key structures throughout the proposed light rail alignment; and
- designing and implementing landscaping at appropriate locations to address identified visual impacts, within available landscape budget and balancing other priorities for landscaping (e.g., surface water quality, habitat preservation, impact on species of concern).

The Council acknowledges MPRB's comment regarding the need to pursue appropriate mitigation measures for all viewsheds; however, in order to maintain consistency in the application of mitigation for the entire Project alignment, the Final EIS and ROD include mitigation for only the

moderate and substantial impacts. In addition to the mitigation listed above, the Council will also coordinate with MPRB on management of new plantings and landscaping.

Public Waters and Surface Water Quality

Leaching from curing concrete will be addressed by the National Pollutant Discharge Elimination System Permit.

Cedar Lake Park

FTA and the Council acknowledge and agree with MPRB's comment that Cedar Lake Park is part of the Minneapolis Chain of Lakes Regional Park.

Cedar Lake Junction

Section 4.5 of the Final EIS provides additional detail regarding the Cedar Lake Junction at-grade LRT crossing, which provides room for at least 100 bicyclists in the queuing area. This will be more than adequate to accommodate projected queues of approximately 30 to 40 bicyclists during a light rail vehicle crossing. The Council will continue to coordinate with MPRB regarding this crossing design.

Bryn Mawr Meadows

FTA and the Council acknowledge and agree with MPRB's comment that Bryn Mawr Meadows is part of MPRB's neighborhood park system.

The *Visual Quality Guidelines for Key Structures* (Council, 2015) were shared with MPRB at a Project design meeting in 2015. The Council has coordinated with MPRB on the bridge design throughout the Project Development phase, and MPRB provided comments on the appearance of the approach ramps and main truss span during this process. The Council will continue to coordinate with the MPRB during the Engineering phase and during construction.

Comment #	#27
Commenter	Scott Dibble / Frank Hornstein
Commenter Organization	Minnesota State Senate, Minnesota House of Representatives

Response

Retracted comment – please see the response to comment #35.

Comment #	#28
Commenter	Joan Vanhala
Commenter Organization	Alliance for Metropolitan Stability

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) Final Environmental Impact Statement (EIS). The responses below are provided in response to the comments received on the Final EIS.

Environmental justice (EJ) compliance is analyzed in Chapter 5 of the Final EIS. In particular, the Final EIS documents the Project's compliance with Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994). Within the EJ assessment, a range of sources were used to identify the presence of low-income and minority populations within the Project study area, including data, public involvement, and information regarding affordable housing within two miles of proposed stations that was gathered by the Hennepin County Department of Housing, Community Works & Transit as part of the Southwest Corridor Investment Framework (Framework) (Hennepin County, 2013), included in Appendix D of the Final EIS.

Meadowbrook Manor property was not listed in the Framework which served as the basis for Table 5.2-5 of the Final EIS which reflects low-income properties listed in the Framework. The Project's EJ analysis does discuss concerns related to affordable housing near proposed light rail stations in St. Louis Park, including near Louisiana Station. In particular, Table 5.3-1 of the Final EIS summarizes major environmental justice issues raised during public involvement efforts, and notes that, within St. Louis Park, specific concerns were raised by the public and agencies about potential reduction in the availability of affordable housing related to station area development. The EJ analysis notes that the Council will coordinate with Project partners to help preserve a mix of affordable housing and to help protect housing options for existing low-income residents. The Final EIS acknowledges the potential for development and/or redevelopment to result in the displacement of EJ populations due to the loss of affordable housing options.

Hennepin County is proactively working with the cities along the corridor to consider land use policies and strategies that retain existing affordable housing, minimize teardowns and promote redevelopment of underutilized properties to a mix of housing options. This work is supported in Hennepin County's Framework effort, which sought input from the public, including EJ populations, to create the Framework plan for potential development that aligns with the community goals and preferences.

Table 1 below shows the amount of affordable housing by city identified in Table 5.2-5 of the Final EIS, and each city's allocation of affordable housing needed in its next comprehensive plan update. The affordable housing is divided between households whose total income is at or below 30 to 80 percent of the area median income (AMI).

TABLE 1:
Affordable Housing Need Allocation of Corridor Cities, 2021-2030

Station	Affordable Rental Housing (Total Number of Affordable Units) ¹	City	Total Units of Affordable Housing Needed by City ²
SouthWest	1 multifamily low-income development – 70 units	Eden Prairie	1,408
Eden Prairie Town Center	2 multifamily low-income developments – 435 units	Eden Prairie	
Golden Triangle	1 multifamily low-income development – 163 units	Eden Prairie	
City West	1 multifamily low-income development – 280 units	Eden Prairie	
Opus	2 multifamily low-income developments – 367 units	Minnetonka	1,064
Shady Oak	5 multifamily low-income developments – 580 units	Hopkins	158
Downtown Hopkins	4 multifamily low-income development – 167 units	Hopkins	
Blake Road	No low-income housing identified	Hopkins	
Louisiana	No low-income housing identified	St. Louis Park	366
Wooddale	No low-income housing identified	St. Louis Park	
Beltline	No low-income housing identified	St. Louis Park	
West Lake	No low-income housing identified	Minneapolis	3,499
21st Street	No low-income housing identified	Minneapolis	
Penn	No low-income housing identified	Minneapolis	
Van White	No low-income housing identified	Minneapolis	
Royalston	No low-income housing identified	Minneapolis	
	No low-income housing identified	Minneapolis	

¹ Source: Hennepin County, Southwest Corridor Investment Framework (2015).

²Source: Metropolitan Council 2015 System Statements www.metrocouncil.org/Communities/Planning/Local-Planning-Assistance/System-Statements.aspx

Furthermore, the Council has established programs to encourage affordable housing planning. Implementation of these programs may offset potential indirect impacts from the Project to low-income populations. The Council has identified a need to address equity in affordable housing, and equity policies are included in the *Thrive MSP 2040* Housing Policy Plan (www.metrocouncil.org/Housing/Planning/2040-Housing-Policy-Plan.aspx). Under *Thrive MSP 2040*, the Council's role is to:

- Work with communities to create a mix of housing affordability, including subsidies to strategically locate market-rate housing in areas that lack such options as well as affordable housing in areas that lack affordability.
- Use Livable Communities Act resources to both catalyze private investment in areas of concentrated poverty and attract affordable housing to higher-income areas.
- Work with our partners and stakeholders to identify indicators to measure how projects supported with Council resources, advance equity, including providing opportunities to residents of areas of concentrated poverty, lower-income households, and people with disabilities.
- Identify and address institutional challenges and barriers, including a lack of funding, to affordable housing development in Suburban, Suburban Edge, and Emerging Suburban Edge locations.
- Encourage private market interest in these targeted areas through transit investments, education, and marketing support to local communities.

To comply with the Minnesota requirement for cities to prepare comprehensive plans, and to remain consistent with *Thrive MSP 2040*, the Council requires cities to demonstrate how affordable housing needs can be met in their local comprehensive plan updates. Cities must demonstrate how their comprehensive plans:

- Address the future housing need for forecasted growth;
- Acknowledge its allocation for future affordable housing need; and,
- Guide sufficient land at minimum residential densities of 8 units/acre to support the city's total allocation of affordable housing need.

The Council and FTA recognize that some of the specific impacts of the Project may adversely affect both EJ and non-EJ populations. Therefore, where appropriate, the Project alignment has been refined through the NEPA process to minimize impacts to both the human and the natural environments. Commitments to avoid, minimize, or mitigate adverse environmental impacts, including impacts from light rail construction and operation that will affect both EJ and non-EJ populations, are described throughout Chapters 3 and 4 of the Final EIS. Taking into account the adverse impacts on EJ populations, committed mitigation measures, and benefits to EJ populations, the Council and FTA have concluded that the Project as a whole will not result in disproportionately high and adverse impacts to EJ populations.

Comment #	#29
Commenter	Rob Stefonowicz
Commenter Organization	EVINE - Larkin Hoffman

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The sections below provide responses to the comments received on the Final EIS. The noise and vibration assessment for the Project are included in Sections 3.12 and 3.13 and Appendix K, Noise and Vibration Supporting Documentation, of the Final EIS. Note that in these documents, EVINE is identified by its former names ShopNBC and ShopHQ.

1. The Project alignment is within 76 feet of the EVINE building; however, the proposed TPSS will be located over 500 feet from the outdoor studio referenced in your letter, and over 300 feet from the edge of the building in which the indoor studio is located. The Final EIS accounted for the location of the light rail traction power substation located (TPSS) near the EVINE property in the noise assessment. The Federal Transit Administration's (FTA's) *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006) used for the Project's noise analysis states the screening distance for a potential noise impact is 250 feet for a TPSS (refer to Table 4-1 in *FTA Manual*). Based on this screening threshold, there will be no noise impacts to the property (including the EVINE indoor and outdoor studios) from the proposed traction power substation that warrant further analysis.

Electromagnetic interference (EMI) is assessed in Section 3.15 of the Final EIS. The Project area was surveyed for the presence of facilities that could be sensitive to EMI exposure. No EMI-sensitive equipment was identified at the EVINE site, and therefore EVINE is not listed in Table 3.15-1: Potential EMI Sensitive Receptors, and no assessment is warranted.

2.
 - a. Train bells were considered in the noise assessment for the property, however noise associated with bells is not an input to the detailed noise assessment for EVINE because the EVINE buildings is beyond the 200-foot screening distance specified in FTA guidance for station-associated noise (refer to Table 4-1 in *FTA Manual*). This screening distance accounts for bells on the train sounding when entering and exiting the station. Additionally, the outdoor studio is more than 500 feet from the proposed station.
 - b. Regarding the comment that the noise assessment in the Final EIS included an adjustment for soft soils, the Council is noting the analysis using a "hard" surface (e.g. asphalt, concrete) ground assumption at this location, as compared to a "soft" surface ground assumption, based on the proximity of the Project near the EVINE parking lot. This reassessment provides an overestimation of noise impacts due to some areas of "soft" (e.g., soil or grass) ground surface, however by assessing as "hard" ground surface, this accounts for sound traveling over acoustically "hard" surfaces, such as the parking lot. Additionally, the speed was increased from 35 to 40 mph to reflect current speed assumptions. The effects of the existing wall around the outdoor studio were also included in the assessment to determine the effectiveness of the existing wall on projected noise levels from LRT operations. This existing noise wall provides approximately a 3 dB reduction in noise. The results of the assessment show that the noise levels from LRT operations will be approximately 1 dB higher than reported in Final EIS Appendix K: Noise and Vibration Supporting Documentation, but still below the impact threshold of 54 dB, not triggering the need for mitigation at the EVINE property.

Input Parameter	Soft Surface Assessment	Hard Surface Assessment
Speed	35 mph	40 mph
Distance to near track	100 feet	95 feet
Ground type	Soft	Hard
Existing wall around outdoor studio	Not included	Included
Project Noise	52 dBA	53 dBA
Impact Criteria	Moderate: 54 dBA Severe: 60 dBA	

c. The noise assessment used peak hour train volumes for assessing impacts, not an average.

3. The Final EIS assessed impacts for the EVINE outdoor studio, which is located approximately 100 feet away from the LRT alignment (refer to Appendix J: Detailed Noise Impact Data within Appendix K of the Final EIS). The outdoor studio was assessed as an FTA Category 1 receptor, which is the most stringent category available for land uses. It is used where quiet is an essential element in the intended purpose of the land use. Further, the analysis took into consideration that the outdoor studio requires a low level of ambient noise for live broadcasts. Even at this most stringent level, the Project noise levels from LRT operations are approximately 1 dBA below the moderate impact threshold.

4. The Final EIS vibration assessment was performed in accordance with the methods set out in the FTA's *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006). The indoor studio is not vibration sensitive because there is no vibration-sensitive equipment in the building. Nonetheless, vibration propagation testing (as described in Appendix K of the Final EIS) was conducted at the site in July 2013 to determine ground-borne noise levels in the studio. The testing included generating ground-borne vibration outside of the building and testing for ground-borne noise impacts inside the building at the specific location of the studio. The distance listed in the Final EIS is the distance from the track centerline to the edge of the building (approximately 100 feet), however site specific testing was performed at the location of the studio inside the building, farther from the track. The results of the testing inside the building were combined with information about the noise and vibration produced by light rail vehicles to model the ground-borne noise levels inside the studio at that specific location, closest to the location of the tracks. The results (17 dBA) are below the threshold for ground borne noise impacts (25 dBA), as shown in Table 5.2-4 in Appendix K of the Final EIS. The vibration and ground-borne noise assessments also considered the soil conditions as part of the analysis of Project, as described under #2 above.

5. Prior to the start of construction, the Council will develop a Noise Control Plan and a vibration monitoring plan for the construction phase of the Project. For noise/vibration sensitive locations, these plans will include appropriate attenuation measures to mitigate excessive construction noise and vibration impacts. The Council will coordinate with EVINE during the construction phase to understand the audio broadcast schedule and appropriately address concerns that may impact EVINE broadcasts. The Council will also develop and implement a Construction Mitigation Plan, which will reference design and specification information contained in the Project construction documents, and a Construction Communication Plan that will address short-term impacts related to temporary construction easements and other construction activities. See Attachment A, Section 3.1 of this Record of Decision for strategies included in the Construction Mitigation Plan.

6. Regarding the concern that soil settlement due to construction and long-term vibration will impact the EVINE building, the vibration assessments conducted properly accounted for soil conditions.

The Council will develop a vibration monitoring plan for susceptible properties within 60 feet of the construction limits in order to monitor for construction damages; this distance includes the maximum distance for the range of construction activities listed in Table 5.2-7 of Appendix K of the Final EIS, based on the construction methods used in each location. The EVINE property was not identified as a property that will need vibration monitoring during Project construction because the distance between construction activities and the building exceed the distance for a potential impact.

Comment #	#30
Commenter	Cathy Deikman
Commenter Organization	LRT-Done Right

Response

Duplicate comment – please see the response to comment #24.

Comment #	#31
Commenter	Bob Strandquist
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The responses below are provided in response to the comments received on the Final EIS.

The LRT track elevation at the north end of the Kenilworth Tunnel area begins to descend below existing grades more than 100 feet from the top of the Kenilworth Channel banks. Between this location and the top of the Kenilworth Channel banks, there is no construction that would connect the surface water in the channel with the excavation required for the tunnel. The channel and the tunnel excavation area are completely independent and separated, as noted in Appendix E of the Final EIS.

As with most tunnel construction exposed to a high water table, the construction consists of sheet piles and a concrete seal at the base of excavation that minimizes the amount of surrounding groundwater that would need to be removed from the excavation in order to build the tunnel.

The lowest portion of the tunnel is below the water table. A waterproofing system around the outside of the concrete tunnel wall prevents surrounding groundwater from entering the tunnel. The soil that surrounds the tunnel has been tested and evaluated, and the tunnel design is based on these soil properties. Refer to the *Kenilworth Shallow LRT Tunnel Basis of Design Technical Report* included in the *Geology and Groundwater Supporting Documentation* in Appendix C of the Final EIS.

Comment #	#32
Commenter	Nance Duffy
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The Council and FTA note your opposition to the Project and concerns regarding environmental impacts in the Kenilworth Corridor. Refer to Final EIS Appendix M, Attachment 3, *Master Response 10: Rationale for incorporating freight rail co-location into the Project* for a response to your comments regarding opposition to co-location. Also refer to Section 5.1 of this Record of Decision for FTA's findings regarding the environmental review of the Project.

In regards to concerns about the impacts of the Project, including tree removals, vegetation impacts, water quality, noise, and light pollution, the Final EIS evaluates the categories listed, discloses impacts, and identifies mitigation, which addresses Project impacts. Refer also to Final EIS Appendix L, Attachment 3, *Theme D: Opposition to co-location of freight rail and light rail in the Kenilworth Corridor*, and *Theme E: Concerns about LRT within the Kenilworth Corridor*, which provide summaries of impacts and mitigation related to co-location of freight and LRT in the Kenilworth Corridor, including for the resource areas mentioned as concerns.

Comment #	#33
Commenter	Karen Kromar
Commenter Organization	Minnesota Pollution Control Agency

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). FTA and the Council appreciate the Minnesota Pollution Control Agency (MPCA) review of the Final EIS and acknowledge that MPCA has no comments. Further, FTA and the Council acknowledge that MPCA's comment letter does not constitute approval of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA.

Comment #	#34
Commenter	Claire Ruebeck
Commenter Organization	Citizens Acting for Rail Safety - Twin Cities

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The sections below provide responses to the comments received on the Final EIS.

Light Rail Transit Located with High Hazard Flammable Trains is Incompatible with Public Safety

Refer to Section 4.4.2.2 of the Final EIS and Appendix M, Attachment 4, Response #69 for information regarding FRA's jurisdiction determination for the Project, including which FRA regulations apply to the Project. FRA's jurisdiction determination for the Project is limited to its regulatory role over at-grade light rail crossings of roadways in the vicinity of existing at-grade freight rail crossings of roadways. FRA will retain full jurisdiction over freight rail that is co-located and all safety measures which apply to freight rail will still be applicable. Further, the Final EIS states that the Council may petition FRA's Safety Board for a waiver of those regulations under the procedures set forth in 49 CFR Part 211. If waivers are pursued, they will be completed in coordination with FRA, FTA, and the Council in accordance with FRA guidelines.

As you correctly state, the *U.S. Department of Transportation Regulations Requiring Risk Analysis of Rail Route Selection* applies to freight rail carriers. However, the Project has taken the applicable factors identified in Exhibit II to CARS-TC's letter into consideration for the route design and analysis for LRT and freight rail co-location in portions of the Bass Lake Spur and Kenilworth Corridor. For example, Table 4.6-1 of the Final EIS identifies the number and type of grade freight rail and light rail crossings, and Table 4.4-1 of the Final EIS identifies the speed of train operations throughout the Project corridor. Please refer to Final EIS Section 4.6 and Appendix M, Attachment 3, *Master Response 11: Safety concerns related to hazardous freight rail cargo within the Kenilworth Corridor*, for information on the co-location of LRT and freight rail operations and transport of hazardous cargo. Final EIS Appendix M, Attachment 4, Response #195 provides additional information about the co-location of LRT and freight.

High Hazard Freight Trail Liability Insurance Gaps and Indemnity

The Final EIS does not address the liability insurance and/or self-reserve requirements for railroads/shippers of Class 3 flammable liquids because liability requirements associated with freight rail operations are outside the scope of the Federally-funded Project. FTA and the Council have no jurisdiction over liability insurance carried by freight rail operators. However, freight rail operators will continue to respond to claims, as they do now, for claims unrelated to LRT operations.

Electromagnetic Fields Created by LRT can Impede Transit and Freight Rail Signaling

Section 3.15 of the Final EIS addressed the Council's analysis of Electromagnetic Fields (EMF) and Electromagnetic Interference (EMI). The Project anticipates the generation of electromagnetic energy at various levels in the shared use corridor that would be caused by the LRT traction electrification system and the light rail vehicle motors. As such, the design of both of these light rail associated sources accommodates both current freight rail operating conditions and potential future freight rail technology in the Wayzata Subdivision, Bass Lake Spur and Kenilworth Corridor, including Positive Train Control.

The design of the LRT electrification system and the light rail vehicle motors is in accordance with the Metro *Light Rail Transit Design Criteria* (Council, 2015) and the Project includes provisions to operate without interference with the LRT's own signal and communications systems. LRT startup activities will include an EMI study and testing to verify there are no EMI impacts on the LRT Rail Signal System from the 750 V DC LRT power supply or catenary lines and/or other nearby utilities. Because of additional separation between LRT and adjacent freight rail tracks in the Wayzata Subdivision, Bass Lake Spur and Kenilworth Corridor, potential interference between LRT and freight systems will be addressed as well.

As discussed in Section 4.6, *Light Rail Service in the Vicinity of Freight Rail Service*, of the Final EIS, the design of the Project will include safeguards in the catenary system for the Project to help minimize the possibility of sparking occurring in the overhead catenary wires. Electrical sparks, or arcing, occurs when there is a gap between the overhead contact wire and the vehicles pantograph. Numerous safeguards are included in the design of the Project to address and minimize electrical sparking. Ice cutters will be utilized to maintain positive contact between the contact wire and pantograph during winter weather. Additionally, Metro Transit will regularly inspect pantographs for grooves along the pantograph's carbon strip (as it does on its existing light rail lines), which could cause arcing. Included in the design of the Project to minimize arcing are contact wire gradients, which meet or exceed American Railway Engineering and Maintenance-of-Way Association (AREMA) recommendations, staggering or zig-zags of the contact wire to ensure even wear, and overlaps between power sections. Finally, the design accounts for the Occupational Safety and Health Administration (OSHA) 10-foot zone of influence, and meets or exceeds National Electrical Safety Code (NESC) requirements along the proposed shared light rail and freight rail corridor.

Risks of High Hazard Freight Train Operations During Construction and Operation of SWLRT

Refer to the Final EIS Appendix M, Attachment 3, *Master Response 3: General concerns related to safety and security for LRT construction and operations within close vicinity to freight in the Kenilworth Corridor*, which discusses freight rail safety coordination during construction.

Responses to your specific comments are as follows:

1. Shallow Tunnel Construction Pit to be Located Adjacent to Active Freight Rail

The Council will require the contractor to monitor the track structure and geotechnical conditions, including site conditions and drainage during tunnel construction activities, to address the safe passage of trains adjacent to the shallow tunnel construction area. The track will be monitored using on-track electronic sensors combined with visual inspection prior to passage of trains. The geotechnical conditions will be monitored using inclinometer devices that measure changes in track profile. The monitoring devices will be reviewed at regular intervals and prior to passage of each train and results coordinated with TC&W. If the monitoring devices and inspections determine that thresholds for track or geotechnical movement have been exceeded or that other site conditions have been disturbed, train operations will be halted until corrective measures have been taken and it is determined that the track structure is safe for passage of trains. Inspections of site conditions will include looking for snow accumulation, washouts, and erosion issues.

2. Lack of Crash Walls and Intrusion Fence

The response to #1 above describes measures to address the safe passage of trains adjacent to the tunnel construction. The track and geotechnical monitoring indicated in the response to #1 above will be in place for the duration of construction of the tunnel and as such, the Project does not need crash walls or intrusion detection adjacent to the tunnel construction.

Crash walls and intrusion detection system installations are permanent installations. Crash walls are installed when LRT and freight rail tracks are at grade and separated by less than 25 feet and intrusion detection systems to alert freight or LRT operations of a derailed train are installed where tracks are separated by less than 50 feet and more than 25 feet.

3. Construction Site Impediments and Drainage

The response to #1 above describes measures to address the safe passage of trains adjacent to the light rail tunnel construction in the Kenilworth Corridor. As reflected in Attachment A to this Record of Decision, the limits of freight rail guardrail shown in Appendix E of the Final EIS will be adjusted such that guardrail in the Kenilworth Corridor will only be located at the freight rail bridge over the Kenilworth Lagoon. The risk of derailments due to snow buildup on guardrail tips has been minimized by reducing the overall quantity of guardrail on the project and limiting its use to only at freight rail bridges. Additionally inspecting site conditions and drainage prior to passage of trains during construction will further reduce this risk. Further, the Project will implement other freight rail safety measures including replacing existing rail with continuously welded rail and tie replacements. See Category 4.6 in Attachment A to this Record of Decisions for mitigation measures. These measures will be included in the Project's construction documents and will be constructed in coordination with the adjacent tunnel and other Project elements.

4. Separation of Adjacent Freight and SWLRT Track

The AREMA does not publish guidelines for the separation between passenger and freight rail operations. However, where the light rail alignment will be at grade and adjacent to at-grade freight track, the minimum dimension between centerline of LRT track and freight track will be 25 feet. In locations where the dimension will be less than 25 feet, the LRT track and freight track will be grade-separated (i.e. LRT on a bridge over freight, or freight on a bridge over LRT) or crash walls will be installed.

5. Operation Times and Speed Restrictions

Train operations will be permitted to pass the construction of the tunnel 24 hours a day. Response to #1 above addresses measures to address the safe passage of trains adjacent to the tunnel construction. These measures will be implemented for all train passage events. Per discussion with TC&W, it is the Council's understanding that TC&W will limit speed in the Kenilworth Corridor to 10 mph during Project construction and operations.

Refer to the Final EIS Section 4.6.3.1, *Light Rail Service in the vicinity of Freight Rail Service*, for a description of emergency plans, exercises and safety measures the Council will have in place for light rail service in the vicinity of freight rail service. Specifically, the Council will work with local jurisdictions, who serve as first responders, on emergency preparedness and response plans, and the Council will conduct a comprehensive emergency preparedness exercise prior to commencing LRT operations. Mitigation measures for safety and security are included in Attachment A to this Record of Decision.

Emergency Planning and Incident Response Capabilities

As noted above, the Council will coordinate with first responders on emergency planning and preparedness, including emergency preparedness exercises conducted prior to operation of the Project. The safety measures for the Project are detailed in Section 4.6 of the Final EIS and Attachment A to this Record of Decision. Additionally, please refer to Final EIS, Appendix M, Attachment 3, *Master Response 3: General concerns related to safety and security for LRT construction and operations within close vicinity to freight in the Kenilworth Corridor*, which discusses freight rail safety coordination during construction, and *Master Response 11: Safety*

concerns related to hazardous freight rail cargo within the Kenilworth Corridor, which addresses concerns about emergency planning specific to freight cargo and emergency response preparedness.

Final EIS Adequacy Determination and Oversight

Minnesota Rule 4410.2800, subp. 1, states that the Responsible Government Unit (RGU) shall determine the adequacy of the Final EIS under MEPA, unless notified by the Environmental Quality Board (EQB), on its own initiative or at the request of the RGU, or other interested persons, that the EQB will determine the adequacy. Further, the EQB intervenes only if: the RGU is unable to provide an objective appraisal of the potential impacts of the project; the project involves complex issues that the RGU lacks the technical ability to assess; or the project has multijurisdictional effects. The Council is able to provide an objective appraisal of the impacts of the Project and has the technical ability to assess the Project. Further, the Council has completed prior environmental review and adequacy determinations for regional light rail projects and has the jurisdiction to complete these actions.

Comment #	#35
Commenter	Scott Dibble / Frank Hornstein
Commenter Organization	Minnesota State Senate, Minnesota House of Representatives

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) Final Environmental Impact Statement (EIS). The responses below address the comments received on the Final EIS.

Regarding the comment that the Final EIS should address potential adverse human impacts of likely increased rail operations, neither FTA nor the Council has jurisdiction over freight rail operations. FTA and the Council addressed the issue of including freight rail in the baseline assessment under the No Build Alternative and relocating freight rail from the Kenilworth Corridor with substantial background information in Final EIS Appendix M, Attachment 3, *Master Response 6: Freight rail operations should not be considered an existing condition and should be excluded from the baseline data* and *Master Response 10: Rationale for incorporating freight rail co-location into the Project*. If a condition is utilized in the baseline assumption under the No Build scenario (i.e., existence of freight rail in the corridor), it cannot be added as a “new” condition under the Build scenario (i.e., as a result of the Project and thus requiring the analysis of impacts under NEPA)—this would produce faulty analysis that does not meet the intent of NEPA (see Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations Question 3: No-Action Alternative; CEQ, 1981). Furthermore, in order to sufficiently analyze the indirect impacts associated with an action, FTA and the Council would need information on future rail operations that would fall under a speculative measure (see Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations Question 18: Uncertainties About Indirect Effects of A Proposal; CEQ, 1981). As noted in Section 4.0 of the Final EIS, there would be no direct changes to freight rail facilities and operations in the corridor under the 2040 No-Build Alternative. Forecasting changes in freight rail operations from existing conditions to conditions under the No-Build Alternative in 2040 is outside the scope of the Project's EIS.

In response to the comment that the Council should request information from railroads concerning level of insurance, disaster planning, and routing criteria, the Council has not requested that information. However, regarding level of insurance, the Council will have a combination of third-party insurance and self-insurance to respond to claims for incidents related to LRT. Freight rail operators will continue to respond to claims unrelated to LRT operations as they do now.

Regarding comments on emergency response and disaster planning, the Council will continue to coordinate with local jurisdictions, who serve as the first responders, on emergency preparedness and the development and implementation of emergency response plans for light rail incidents in the vicinity of freight rail. Prior to commencing LRT operations, the Council will conduct a comprehensive emergency preparedness exercise including operations in the vicinity of freight rail. Refer to Final EIS Section 4.6 for information on emergency plans, exercises and safety measures to be incorporated into the Project. In addition, emergency response planning is described in the Council's response to your previous comments in Final EIS Appendix M, Attachment 4, Response #196. Commitments and mitigation measures for safety and security are included in Attachment A to this Record of Decision. The safety and security measures identified under Transportation Category 4.6 of Attachment A of this ROD are requirements of the Project.

The Freight Rail Administration (FRA) has authority over all areas of railroad transportation safety. As such, FRA regulates and coordinates with the freight rail operators on safety regulations. The Council will coordinate with FRA as specified in the FRA jurisdiction determination (see Final EIS

Appendix N: Agency Coordination Letters). Freight rail operators are required to coordinate with applicable federal agencies, including the Pipeline and Hazardous Materials Safety Administration (PHMSA), on federal regulations. As discussed above, the Council will conduct emergency preparedness exercises and continue to coordinate with local jurisdictions, as well as follow communication procedures according to the Council's Operations Emergency Management Plan. Further, as the Project progresses through construction and into integrated testing and revenue operations, the Light Rail Transit Fire Life Safety and Security Committee (LRT FLSSC), as described in the Project's SSMP (Council, 2014), will participate in the planning, performance and evaluation of emergency simulation on the system. The LRT FLSSC is a standing committee with membership from local and county police and fire departments and other participating organizations. The LRT FLSSC provides input to and comments on fire protection, emergency preparedness plans and procedures, safety plans, and security plans. Emergency response plans are primarily programmed by the first responders (e.g., fire, police and EMS). While the Council will work collaboratively with the jurisdictional first responders through the LRT FLSSC in the Project's corridor and coordinate on activities such as emergency preparedness exercises, emergency response plans usually are not made publically available, unless provided by the jurisdictional first responders. If the emergency response plans are made public, the Council will make them available to the public upon request. Public availability of such plans should be coordinated by the various jurisdictions which serve the localities.

Regarding the location of safety related information, refer to Attachment A of the ROD that includes mitigation measures to be implemented as part of the Project, including:

- Implement safeguards from the Metro Light Rail Transit Design Criteria, including emergency guardrails for LRT tracks on retained fill and bridges;
- Implement freight rail safety improvements in the Kenilworth Corridor, including:
- Install emergency freight rail guardrails at new freight rail track located on the new freight rail bridge over the Kenilworth Lagoon
- Replace existing 115 RE rail with new 136 RE continuous welded rail east of Beltline Boulevard to north of 21st Street
- Replace existing railroad ties east of Beltline Boulevard to near Cedar Lake Junction
- Install intrusion detection for possible freight derailment where clearance between the centerline of the LRT tracks and the centerline of the freight tracks is less than 50 feet; and
- Install corridor protection barriers between freight rail and light rail tracks where clearance between centerlines is less than 25 feet.

These measures are requirements for receipt of federal funds, and FTA will monitor the Project to ensure that they are incorporated into the Project. These measures are also included in the Project cost estimate.

Regarding the comment on the "original law requiring the return of freight rail to a western alignment," Minnesota Statutes §383B.81 does not require freight rail to be relocated (refer to Final EIS, Appendix M, Attachment 4, Response #196 for additional information).

Regarding comments on safety improvements identified in the independently prepared SWLRT Engineering Evaluation of Freight Rail Relocation Alternatives (TranSystems, 2014), these recommendations were general recommendations from the freight rail report, subject to technical evaluations and input from the freight railroads regarding whether they could be properly

maintained as part of freight rail operations and their likely effectiveness considering their past performance in similar conditions.

Based on communications with TC&W, the Council understands that TC&W has not implemented Centralized Traffic Control (CTC), nor is it planning to install the infrastructure to operate and maintain this kind of train operations system; therefore, TC&W will not have the infrastructure to operate broken rail detection. However, regular freight rail track inspection and maintenance will be conducted by the freight rail owners and/or operators. Electronic equipment defect detectors (i.e. hotbox and dragging equipment detection) are being considered as part of the Project. Regarding the implementation of positive train control (PTC) technology, the Council has coordinated with freight operators to understand their plans for use of PTC. TC&W does not have plans to implement PTC on the Bass Lake Spur or Kenilworth Corridor because FRA mandates PTC for Class 1 railroads or other railroads that operate on Class 1 railroad track, subject to other limitations on the freight operators' use of the Class 1 track. Based on this, BNSF is implementing PTC on the Wayzata Subdivision, and since TC&W locomotives access the BNSF-owned Wayzata Subdivision, TC&W has confirmed that their locomotives will have PTC, but only for use on BNSF right-of-way.

Additionally, the MN&S North design adjustment identified in the TranSystems report was dismissed from further analysis due to opposition from TC&W (freight rail operator) primarily due to safety and operational concerns, as well as fewer impacts from the shallow LRT tunnel alignment in the Kenilworth Corridor, including fewer displacements which included the acquisition of some St. Louis Park High School property. See Chapter 2 and Appendix F of the Final EIS for additional information on the analysis of alignments and design adjustments, including adjustments analyzed in the TranSystems report.

Based on meeting the conditions under Minnesota Rule 4410.2800, Subp. 4, Council staff will be recommending that the Council finds the Final EIS to be adequate under MEPA. The Council will make its determination after issuance of the ROD.

Comment #	#36
Commenter	Stuart Nolan / Lisa Moe
Commenter Organization	StuartCo

Response

Duplicate comment – please see the response to comment #14.

Comment #	#37
Commenter	Craig Oberlander
Commenter Organization	Redstone American Grill, Inc.

Response

Duplicate comment – please see the response to comment #19.

Comment #	#38
Commenter	Christopher S. Hayhoe
Commenter Organization	Calhoun-Isles Condominium Association - Felhaber Larson

Response

Duplicate comment – please see the response to comment #22.

Comment #	#39
Commenter	Shawn Smith
Commenter Organization	Kenwood Isles Area Association (KIAA)

Response

Duplicate comment – please see the response to comment #17.

Comment #	#40
Commenter	Judy Meath
Commenter Organization	LRT-Done Right

Response

Duplicate comment – please see the response to comment #24.

Comment #	#41
Commenter	Richard Weiblen
Commenter Organization	Liberty Property Trust

Response

Duplicate comment – please see the response to comment #15.

Comment #	#42
Commenter	Arlene Fried
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). In regards to your concerns about freight derailments and opposition to co-location of freight rail and LRT, refer to Final EIS Appendix M, Attachment 3, *Master Response 10: Rationale for incorporating freight rail co-location into the Project*, and *Master Response 11: Safety concerns related to hazardous freight rail cargo within the Kenilworth Corridor*.

Comment #	#43
Commenter	Anonymous
Commenter Organization	None

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). In regards to your request for the Council to consider lowering the volumes of the wayside bells to minimize noise impacts, the volume of wayside bells were analyzed at the same noise level as a bell on a LRT vehicle, as shown in Table 3.1-1 of Appendix K of the Final EIS. Use of the bell is required by Metro Transit LRT Operational Rules, and any adjustments to the intensity of the bell noise would be subject to a rail safety review.

Comment #	#44
Commenter	Shawn Smith
Commenter Organization	Kenwood Isles Area Association (KIAA)

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The response below addresses the comments received on the Final EIS.

In response to concerns about light rail derailments, the Project includes mitigation measures in Attachment A to this Record of Decision, which include safety measures to prevent light rail derailments.

In response to safety concerns and the likelihood of a freight derailment at the 21st Street Station area, the scenario described in KIAA's comment of a freight rail derailment of an ethanol train is a scenario that is possible today, as freight rail currently operates in the Project area and in other areas throughout Minnesota and across the country where ethanol is transported by train. The Project will not result in a change to this condition, nor is the transportation of ethanol by freight rail near buildings, transit systems, or inhabited areas unique to the Project.

The Council will continue to coordinate with first responders from local jurisdictions on emergency preparedness and response plans for incidents affecting light rail in the vicinity of freight rail. The Council will conduct a comprehensive emergency preparedness exercise prior to commencing LRT operations, including operations in the vicinity of freight rail. Refer to Final EIS Section 4.6 for information on emergency plans, exercises and safety measures to be incorporated into the Project.

Comment #	#45
Commenter	Richard Weicher
Commenter Organization	BNSF Railway

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The sections below provide responses to the comments received on the Final EIS.

Regarding Shared Use Of The Existing Bnsf Right Of Way

Agreements related to ownership of the freight rail infrastructure and right-of-way will be negotiated as part of the Project's acquisition process. Those agreements will be negotiated and executed after FTA issues the Project's Record of Decision (ROD), as required by law. Currently, the Council anticipates developing three such agreements for access to, construction activities in, and shared-corridor use of the Wayzata Subdivision that will be required to construct and operate the Project adjacent to BNSF freight operations. The nature and form of any transfer of rights by BNSF for the construction and operation of the Project remains to be determined. The Council acknowledges that any such transaction must provide adequate provisions to enable BNSF to fully utilize its remaining right-of-way for permanent freight operation, with adequate capacity to safely meet freight shipper demand. The negotiations for this transaction will also address BNSF's capacity to meet future freight shipper demand.

Regarding The Overhead Catenary

The Project anticipates the generation of electromagnetic energy at various levels in the shared use corridor that would be caused by the LRT traction electrification system and the light rail vehicle motors. As such, the design of both of these light rail associated sources accommodates both current freight rail operating conditions and potential future freight rail technology in the Wayzata Subdivision, including Positive Train Control.

The design of the LRT electrification system and the light rail vehicle motors is in accordance with the Metro *Light Rail Transit Design Criteria* (Council, 2015) and the Project includes provisions to operate without interference with the LRT's own signal and communications systems. LRT startup activities will include an EMI study and testing to verify there are no EMI impacts on the LRT Rail Signal System from the 750 V DC LRT power supply or catenary lines and/or other nearby utilities. Because of additional separation between LRT and adjacent freight rail tracks in the Wayzata Subdivision, potential interference between LRT and freight systems will be addressed as well.

With respect to grounding and stray current concerns, additional coordination with BNSF regarding grounding and stray current design details and testing will be addressed in construction documents and in agreements between the Council and BNSF that will be negotiated and executed after the publication of the ROD. The Council is designing the Project to address the effects of stray current in accordance with the Metro *Light Rail Transit Design Criteria* (Council, 2015) and the Project includes a stray current collector system to protect new and relocated buried, pressurized, metallic piping systems, trackwork, and adjacent retaining walls and bridges. The stray current collector system addresses electrical continuity of reinforcing steel, permanent test stations for measuring electrical continuity and stray current levels, embedded monitoring components, grounding beds for discharge of stray current, and requirements for electrical isolation of LRT track. While no study on stray current has been conducted, the Project includes testing requirements for all materials and components necessary for construction of the stray current collector system.

Testing is performed at various stages of construction of the system to provide assurance the system is performing properly and meeting specifications. The results of this testing will be made available to BNSF.

Regarding Intrusion Protection

As described in Section 4.6 of the Final EIS, the Project will incorporate numerous features and safeguards to maintain safety and security during operation of the Project within the vicinity of existing freight rail service. Specific to Project operations with BNSF, a combination of the following treatments will be implemented to keep freight and passenger rail operations separate, prevent derailments of LRT vehicles, and minimize the dispersion of rolling stock in the event of a derailment:

1. At locations where LRT will be off BNSF right-of-way and the mainline freight track, and the nearest LRT track center separation distance will be between 58.2 feet and 74 feet, the Project will have a ditch between LRT and freight rail;
2. At locations where LRT will be on BNSF right-of-way, the Project will include a corridor protection barrier, retained embankment, or LRT on structure; these features will be designed to keep freight separate from LRT in the event of a freight derailment and to withstand the force of a freight derailment following criteria specified in the AREMA Manual for Railway Engineering; and,
3. At locations where LRT will be on retained embankment or on structure, the Project will include emergency guardrail on the LRT tracks.

The design of the corridor protection barriers will be developed during the Engineering phase, and the Council will coordinate with BNSF on the standards for design of these barriers to ensure they provide adequate protection between freight rail and light rail in the event of a freight derailment.

Other Outstanding Issues

The Project limits do not extend into the area beneath Target Field. The Council reviewed the Target Field area and confirmed that the Project will not impact fluidity or capacity of freight traffic on the BNSF Wayzata Subdivision if future transit projects are constructed in that vicinity.

FTA and the Council acknowledge and agree with BNSF's comments that the Project must allow BNSF the ability to continue to meet its obligations as an interstate common carrier and preserve its ability to meet current and future freight needs. Chapter 1 of the Final EIS identifies one of the four need factors for the Project as, "need to maintain a balanced and economically competitive multimodal freight system". Accordingly, the Council contemplates the following, if agreement is reached with BNSF:

1. BNSF will continue to maintain ownership of the Wayzata Subdivision right-of-way;
2. BNSF will continue to operate freight service on a single mainline track, which will be shifted up to 25 feet north of the existing freight track to accommodate the light rail alignment between mile post 12.24 and mile post 11.79; and
3. The Council will preserve BNSF's capacity to build a future second main line track, as well as the prospect of relocating existing Northstar commuter rail storage track to provide additional space.

Comment #	#46
Commenter	Scott Dibble / Frank Hornstein
Commenter Organization	Minnesota State Senate, Minnesota House of Representatives

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). Please refer to Response #35 of this attachment for FTA and the Council's response to this comment.

Regarding the additional statement included on page 2 of this comment letter, "There is little specific information in the FEIS on whether or where this safety infrastructure will be installed and its cost", Section 4.6 of the Final EIS describes safety features that are included as part of the Project. As such these safety features are included in Attachment A of the ROD and will be incorporated into the Project, included in the Project budget, and must be implemented by the Council for the Project to proceed with FTA financial assistance.

Comment #	#47
Commenter	Richard Weicher
Commenter Organization	BNSF Railway

Response

Duplicate comment – please see the response to comment #45.

Comment #	#48
Commenter	Karen Kromar
Commenter Organization	Minnesota Pollution Control Agency

Response

Duplicate comment – please see the response to comment #33.

Comment #	#49
Commenter	Paul Miller
Commenter Organization	City of Minneapolis

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The following sections provide responses to the City's comments received on the Final EIS.

Preface to Staff Comments

In response to the City's support for the Project, contingent on the Council and City adhering to the August 2014 Memoranda of Understanding (MOU) between the City and the Council and between the City and Hennepin County, the Council acknowledges the MOU with the City of Minneapolis. While not a legally binding agreement, the Council intends to honor its terms consistent with applicable law. The Council also acknowledges the MOU between the City and Hennepin County.

In response to the City's comment that the Final EIS does not accurately describe the process by which the route for the Project was selected or the development of the Project to date, Section 2.2 of the Final EIS describes the decision-making process leading to the Final EIS, including the alternative development, evaluation, and screening process for the Alternatives Analysis, the Draft EIS, the Supplemental Draft EIS and the Final EIS. FTA and the Council acknowledge the following City resolutions noted in the City's comment letter: 1) 2014R-362, Resolution to Approve the Physical Design Component of the Preliminary Design Plans for the Southwest Corridor Light Rail Project in the City of Minneapolis; 2) 2015R-384, Resolution of the City of Minneapolis Approving the Physical Design Component of the Preliminary Design Plans for the Southwest Corridor Light Rail Project in the City of Minneapolis; and 3) 2015R-385, Resolution of the City of Minneapolis Conveying the City's concerns to the railroad companies and the Metropolitan Council regarding freight safety in the Southwest Light Rail Corridor and the City of Minneapolis.

A. Safety and Security:

Freight Rail Safety:

FTA and the Council acknowledge the City's request for coordination between the Council and freight railroads to minimize risk of a derailment. Further, the Council acknowledges that emergency vehicle access to Project construction sites must be coordinated with applicable first responders prior to construction. The Council will coordinate with the Minneapolis Fire Department and Minneapolis Police Department as part of emergency planning, including emergency response planning. Further, these agencies are members of the Light Rail Transit Fire Life Safety and Security Committee (LRT FLSSC), a standing interagency committee with membership from local and county police and fire departments and other participating organizations. The LRT FLSSC provides input to and comments on fire protection, emergency preparedness plans and procedures, safety plans, and security plans. Additionally, please refer to Final EIS Section 4.6.3.1 and Final EIS Appendix M, Attachment 3, *Master Response 3: General concerns related to safety and security within close vicinity to freight in the Kenilworth Corridor*, which describe coordination with emergency service providers, including the City of Minneapolis Fire and Police departments.

LRT Operation:

The Council will include the Minneapolis Fire Department and Police Department in future emergency response planning for both construction and long term operations of the Project.

Pedestrian Connections:

The Project's *Safety and Security Management Plan* (SSMP) will address safety and security of pedestrian connections during operations of the Project. Please refer to Section 4.6 of the Final EIS, which describes measures to address bicycle and pedestrian safety and security, including a description of design features to prevent encroachments.

B. Construction Impacts:

The Council will coordinate with the City on the review of tunnel construction methods. Additionally, please refer to Final EIS, Appendix M, Attachment 3, *Master Response 7: Concerns related to vibration impacts from LRT tunnel construction*. The Council acknowledges that the City will enforce the City's Noise Ordinance for restrictions on hours of operation. As identified in Section 3.12.3.3 of the Final EIS, the Council may seek approval of a noise-related waiver from applicable local jurisdictions for some nighttime construction to occur. Please also refer to Final EIS, Appendix M, Attachment 4, Response #171, which discusses nighttime construction. If nighttime construction is necessary, a construction nighttime mitigation plan will be developed by the Council and coordinated with the City. The Council will also require construction contractors to minimize, to the extent possible, tree removals and incorporate measures to control dust, maintain safe truck routes, and comply with truck weight limits, as requested by the City. The Council will coordinate with the City on the development of the Construction Mitigation Plan, which will reference design and specification information contained in the Project construction documents. These and other mitigation measures for the Project are located in Attachment A to this Record of Decision.

C. LRT Operation – Noise:

The Project's noise and vibration analysis was conducted in accordance with FTA's *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006) and is contained in Final EIS Sections 3.12 and 3.13 and Appendix K Noise and Vibration Supporting Documentation. The Council will continue to evaluate noise and vibration levels throughout the construction phase of the Project. The Council will respond to complaints on noise after LRT operations begin and will work with City staff to resolve these complaints.

D. Visual Impact:

FTA and the Council acknowledge the City's comments on visual impacts. The mitigation measures in Attachment A of this Record of Decision include minimizing vegetation removal and restoring areas disturbed during construction.

Staff Comments on the Adequacy of the FEIS

The Council acknowledges the City's finding that the Final EIS is adequate under Minnesota law, and the Council will consider that finding when making its determination of adequacy under the Minnesota Environmental Policy Act (MEPA).

Comment #	#50
Commenter	Dale Bachman
Commenter Organization	Bachman's

Response

Thank you for your comments on the Southwest LRT (METRO Green Line Extension) (Project) *Final Environmental Impact Statement* (EIS). The following response provides additional information in response to the comment received.

Section 3.13 and Appendix K of the Final EIS document the methodology and results of the Project's vibration analyses. The Project was analyzed using criteria defined in FTA's *Transit Noise and Vibration Impact Assessment Manual* (2006). Refer to Final EIS Appendix K: Noise and Vibration Supporting Documentation for a summary of the methodologies, assumptions, and results. As per the FTA guidelines, vibration levels from LRT operation are projected to be approximately two orders of magnitude below the categories where damage to structures could occur; therefore, LRT operations will not impact the Bachman's retaining wall.

FTA and the Council agree that the Bachman's retaining wall will be monitored throughout Project construction. Regarding impacts during construction, the following mitigation measures to minimize vibration impacts are applicable (see also Attachment A of this ROD):

- The construction specifications will include limits on vibration, including in the area of the retaining wall
- The Project will minimize the use of impact and vibratory equipment, where feasible and appropriate.
- The Project will perform pre-construction survey to document the existing conditions of retaining wall.
- If a construction activity has the potential to exceed the damage criteria set for the retaining wall, the contractor will be required to conduct vibration monitoring and, if the vibration exceeds the limit, the activity must be modified or suspended until an acceptable means and method of construction is identified.

Prior to the start of construction, the Project will complete a Construction Mitigation Plan, which will reference design and specification information contained in the Project construction documents, including pre-construction photography documentation, site surveys, and vibration monitoring for vibration-sensitive buildings, including the Bachman's retaining wall. The screening distances to determine which properties will be monitored are specified in Section 5.2.7 of Appendix K of the Final EIS. While the specific construction activities at the Bachman's site have not been fully determined, it is anticipated that construction activities will occur close to the retaining wall location, and therefore the Bachman's retaining wall is included in the Construction Mitigation Plan as described above.

At the Bachman's property, the Council's construction contractor will be required to perform vibration calculations and equipment tests prior to Project construction to demonstrate that the specific vibration limits will not be exceeded for the locations and types of equipment proposed. If calculations and test measurements exceed allowable limits, adjustments to proposed construction methods will be made so construction activities do not exceed the threshold.

During Project construction, the contractor will be required to conduct continual monitoring and visual inspection of the retaining wall to identify if any vibration-caused issues with the structure are developing. If any vibration-related issues are identified, construction activities will be suspended and further adjustments to construction methods will be made as appropriate.