



May 5, 2014

Melissa Jenny
United States Army Corps of Engineers
180 5th Street East, Suite 700
St. Paul, MN 55101-1678

Re: NEPA/404 Merger Process for the Southwest Light Rail Transit Project (SWLRT) Project

Dear Ms. Jenny,

The SWLRT Project Office (SPO) is pleased to submit the enclosed NEPA/404 Merger Process Concurrence Points Package (Document) for the SWLRT Project. This document supplements the project's Draft Environmental Impact Statement (DEIS) and subsequent letter received from the Corps on the alternatives included in the DEIS on December 20, 2012.

The Document describes each concurrence point element and provides supporting details. The SPO respectfully requests that the Corps provide, in writing, concurrence that information provided in the Document satisfies Clean Water Act requirements.

The SPO will continue to advance engineering design and intends to share detailed design plans with the Corps during a pre-application meeting and will submit detailed design plans in support of any permit application.

As a designated Cooperating Agency under the National Environmental Policy Act (NEPA), SPO kindly requests that the Corps provide timely review of the Document and response in order to incorporate progress on the Project's Merger Process and streamlining efforts. As discussed during our last coordination meeting on March 11, 2014, the Supplemental Draft Environmental Impact Statement (SDEIS) is currently anticipated to be sent to the Corps for Cooperating Agency review concurrent with FTA's legal sufficiency review. This Cooperating Agency review is anticipated to begin in mid-June and continue for a period of 45-days. I will continue to coordinate with you regarding this anticipated schedule and the Corps' subsequent review. It is our hope and intention to include the Corps response to this Document, including the LEDPA determination, in the SDEIS.

Please feel free to contact me with any questions or needs for additional information at 612.373.3808 or Nani.jacobson@metrotransit.org.

Thank you for your time and assistance.

Sincerely,

A handwritten signature in blue ink that reads "Nani Jacobson". The signature is written in a cursive, flowing style.

Nani Jacobson, Assistant Director, Environmental & Agreements, Southwest LRT Project Office

Cc: Maya Sarna, FTA Headquarters, Office of Planning & Environment
Bill Wheeler, FTA Region V, Office of Planning & Program Development
Ben Hodapp, Anderson Engineering of Minnesota, LLC.

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NEPA/404 Merger Process

Southwest Light Rail Transit (SWLRT) Concurrence Points Package

This report provides documentation of the SWLRT Project's concurrence points for its National Environmental Policy Act (NEPA) and 404 Clean Water Act (CWA) Merger Process (NEPA/404 Merger Process). This process was initiated with the preparation and publication of the Draft Environmental Impact Statement (DEIS) and subsequent comments received from the United States Army Corps of Engineers (USACE) on December 20, 2012.¹ The project's NEPA/404 Merger Process is being conducted under the guidelines provided within the *Guidance for Using the NEPA/404 Merger Process on Proposals Requiring CWA Section 404 Authorization* (MVP Internal Guidance; April 30, 2007). That guidance outlines the following four Concurrence Points used within the NEPA/404 Merger Process to "incorporate CWA Section 404 regulatory review requirements into the project planning/NEPA review process, to achieve an orderly, concurrent review process:" 1) Purpose and Need; 2) Array of Alternatives and Alternatives Carried Forward; 3) Identification of the Selected Alternative; and 4) Design Phase Impact Minimization. Under the NEPA/404 Merger Process, the USACE determines within the third concurrence point if the selected alternative is also the apparent least environmentally damaging practicable alternative (LEDPA) available to the proposer, based on compliance with the CWA Section 404 authorization.

This report addresses each of the four NEPA/404 Merger Process Concurrence Points. The report concludes with a section describing the status of the project relative to the four NEPA/404 Merger Process Concurrence Points, with FTA and the Council seeking the USACE's written concurrence on those Concurrence Points.

1.0 Concurrence Point 1: Project Purpose and Need

1.1 Project Purpose:

The USACE provided an overall project purpose as part of their comment letter on the DEIS on December 20, 2012. The USACE adopted the following overall project purpose for the Southwest LRT Project that will be used to direct the range of reasonable alternatives to be considered in the Clean Water Act Section 404 permit application process:

¹ As background, FTA, Hennepin County Regional Railroad Authority (HCRRA) (the project's local lead agency at the time), and the Metropolitan Council (Council) published the project's Draft Environmental Impact Statement (DEIS) in October 2012. The DEIS identified two alternatives (LRT 3A and LRT 3A-1, each with differing proposed freight rail modifications) that included the project's Locally Preferred Alternative (LPA). The USACE commented on the DEIS in December 2012, during the DEIS public comment period. In January 2013, local lead agency authority was transferred from HCRRA to the Council. FTA and the Council intend to publish a Supplemental DEIS (SDEIS) in the fall of 2014 to address design adjustments to the LPA made by the Council in April 2014, including incorporation of freight rail modifications into the LPA. The SDEIS will document the project's NEPA/404 Merger Process Concurrence Points. FTA and the Council intend to publish the project's combined Final EIS (FEIS) and Record of Decision in the summer of 2015. The USACE is a Federal Cooperating Agency under NEPA for the project.



“The overall project purpose is to provide high-capacity transit service in the Southwest LRT Project study area.”

This purpose differs slightly from the purpose and need statement identified in Chapter 1 of the Draft Environmental Impact Statement (DEIS) to make it broader and more appropriate for CWA Section 404 review. As discussed and agreed upon during the September 10, 2013 Cooperating Agency Coordinating Meeting, the USACE Purpose statement will be included in Chapter 1, Purpose and Need, of the Supplemental Draft EIS as a footnote to the Project’s Purpose and Need statement, thus satisfying USACE’s requirement under the CWA.

1.2 Project Need:

The three project needs described in the DEIS are:

- Need to address declining mobility resulting from high residential and employment growth and limited infrastructure improvements. Due to lack of planned highway capacity additions, future demand increases will not be adequately met by capacity enhancements for cars or buses.
- Need to address limitations on competitive and reliable transit options for choice riders and transit-dependent populations between southwest suburbs and downtown Minneapolis.
- Need to develop and maintain a balanced and economically competitive multimodal freight system.

2.0 Concurrence Point 2: Array of Alternatives and Alternatives Carried Forward

2.1 Alternative Analysis (AA)

Hennepin County Regional Railroad Authority (HCRRA) initiated an AA of the Southwest Corridor in 2005 and completed the Southwest Transitway AA 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. On May 26, 2010, based on the technical documentation produced by the AA and on an extensive public and agency review and comment process, the Council adopted the project’s LPA (known at the time as Alternative 3A) and included the adopted LPA as part of the amendment to the 2030 Transportation Policy Plan. The adopted LPA included LRT as the preferred mode with the following alignment from west to east: from Mitchell Road in Eden Prairie, through the Golden Triangle and Opus employment concentrations in Eden Prairie and Minnetonka, using HCRRA-owned rights-of-way through Hopkins, St. Louis Park, and Minneapolis to downtown Minneapolis, where it would ultimately become through-routed with the planned Metro Green Line (Central Corridor LRT)². See Section 2.1.1 of the DEIS for additional information on the project’s AA.

² The Metro Green Line LRT is planned to begin service in June 2014



2.2 Draft Environmental Impact Statement (DEIS)

HCRRA continued project planning and the environmental process with publication of the federal Notice of Intent to prepare a DEIS and the state Notice of EIS Preparation in September 2008. HCRRA initiated development of the DEIS with a scoping process, including publication of the *Southwest Transitway Scoping Summary Report* in January 2009. The scoping process resulted in the refinement of alternatives for consideration, concluding that four LRT alternatives (LRT 1A, LRT 3A, LRT 3C-1, and LRT 3C-2) would be examined in the DEIS, along with the Enhanced Bus and No Build alternatives. At the request of FTA and in response to public comments received, LRT 3A-1 was added as an additional alternative to address the co-location of freight rail with LRT in the Kenilworth Corridor. Specifically, the DEIS addressed whether to: (1) relocate TC&W freight trains currently operating along the CP-owned Bass Lake Spur and the HCRRA-owned Kenilworth Corridor to the CP-owned MN&S Spur and BNSF-owned Wayzata Subdivision (included in LRT 1A, LRT 3A, LRT 3C-1, and LRT 3C-2); 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 LRT 3A-1).³ The Southwest Transitway DEIS was published in October 2012 with the public comment period concluding on December 31, 2012 (FTA, 2012). See Section 2.1.2 of the DEIS for additional information on the project's Scoping process and Section 2.3 for a more detailed description of the alternatives evaluated in the DEIS.

As part of the USACE's comment letter on the DEIS, the USACE stated "...the USACE concurs with the array of alternatives considered for this project as well as alternatives carried forward in the DEIS..."

2.3 Supplemental Draft EIS (SDEIS)

After the close of the DEIS public comment period, the Metropolitan Council (Council) became the lead for the environmental process and continued Project Development activities including furthering the design and engineering of the project from a conceptual design level to 30% design. As part of this process, the Council's SWLRT Project Office (SPO) developed and evaluated design adjustments to the LPA in response to comments submitted on the DEIS and through a technical issue resolution process, including proposed adjustments to: accommodate local goals and objectives; improve the performance of the proposed alignment; reduce project costs; and avoid or minimize the project's adverse impacts. The Project Development process also developed and evaluated adjustments to freight rail modifications including maintaining TC&W freight trains in the Kenilworth Corridor and relocating TC&W freight trains out of the Kenilworth Corridor.

FTA and the Council published a federal Notice of Intent and a state Notice of Preparation in July 2013 to prepare a SDEIS. Based on adjustments developed during Project Development, input from project stakeholders, and a robust public outreach process leading up to this action, the FTA and the Council identified three areas where there was the potential for new significant adverse impacts that were not

³ Because the LPA is a subset of both LRT 3A and LRT 3A-1 of the Draft EIS, they should both be considered as the LPA, with differing associated freight rail modifications.



addressed in the LPA. In response, FTA and the Council are working to prepare a Supplemental DEIS (SDEIS) that addresses adjustments made in portions of Eden Prairie, St. Louis Park and Minneapolis, as well as identifying the proposed location of the OMF in Hopkins.

As a Cooperating Agency on the project, the USACE will have the opportunity to review and comment on the draft SDEIS concurrent with FTA's legal sufficiency review. This review is currently planned to start in mid-June 2014. Comments from the USACE on the draft SDEIS will be addressed by FTA and the Council prior to publication of the SDEIS, including providing a current status of the NEPA/404 Merger Process and LEDPA determination. To facilitate identification of the LEDPA, all adjustments developed since publication of the DEIS that impact wetland areas throughout the project corridor are discussed in Section 4.0 of this document.

3.0 Concurrence Point 3: Identification of the Selected Alternative

3.1 Locally Preferred Alternative

The DEIS alternatives LRT 3A and LRT 3A-1 both included the LPA (light rail mode and alignment). In the DEIS, LRT 3A included freight rail modifications that would have resulted in the relocation of existing freight rail service from a portion of the Bass Lake Spur and from the Kenilworth Corridor, to the MN&S Spur and Wayzata Subdivision. Within the DEIS, LRT 3A-1 would retain freight rail on its existing location on the Bass Lake Spur and Kenilworth Corridor.

The Project Development process implemented by the Council after publication of the DEIS resulted in the identification of adjustments to the light rail-related improvements and the development, evaluation, and incorporation of freight rail modifications into the LPA. Based on analysis of the design adjustments and freight rail modifications developed during this process, as well as input from the project's advisory committees and the public, the Council passed a resolution on April 9, 2014 identifying the Project's scope and budget, including design adjustments to the LPA that would retain freight rail and trails at-grade through the Kenilworth Corridor (Council, 2014). The Council's adopted scope and budget includes: 16 light rail stations; a light rail vehicle OMF in Hopkins; a westernmost station at Mitchell Road in Eden Prairie; and LRT running in shallow tunnels within portions of the Kenilworth Corridor, with freight rail and trails remaining at-grade throughout the Kenilworth corridor; with a budget of \$1.683 billion (See Figure 3.1-1).

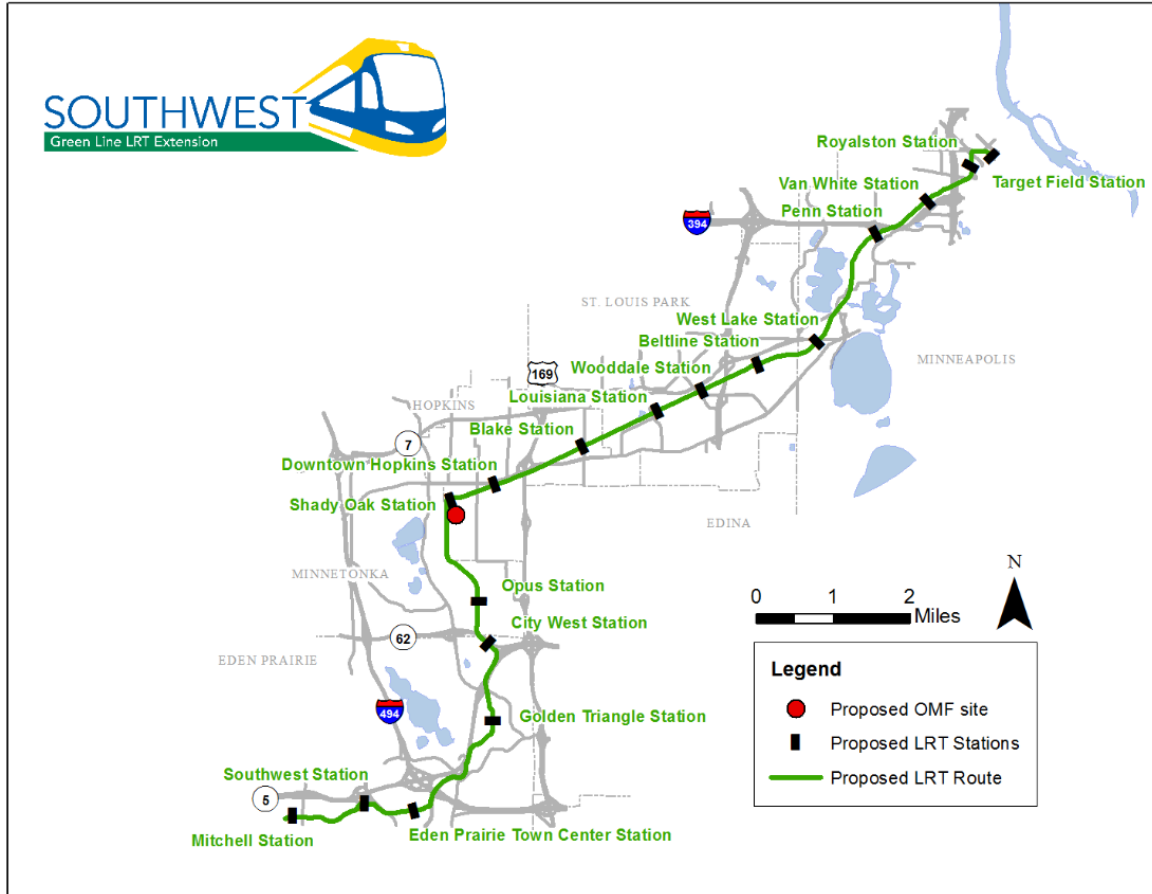


Figure 3.1-1: Current LRT Alignment Map

3.2 LEDPA Determination

The project scope as identified by the Council on April 9, 2014, which would retain existing freight rail service in the Kenilworth Corridor, is consistent with USACE’s comment letter from December 20, 2012, stating that LRT 3A-1, which would also have retained existing freight rail service in the Kenilworth Corridor, meets the USACE project purpose and has the least amount of impact to aquatic resources (see Figure 3.2-1).

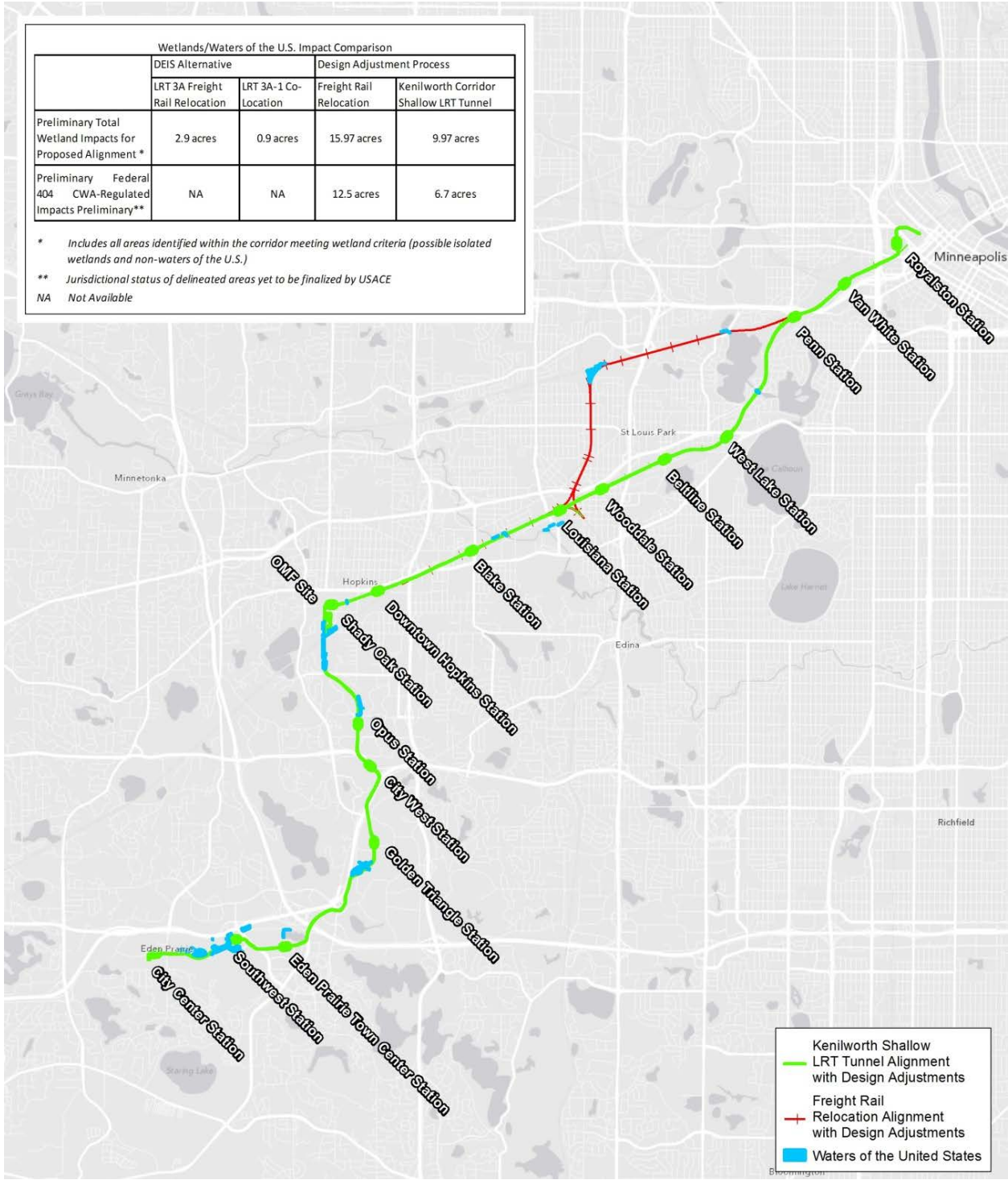


Figure 3.2-1: Wetland Impact Comparison by Alignment

Wetland field delineations were completed within the SWLRT corridor during the period from July 2013 through November 2013. Based on those field delineations, the current estimate of permanent impacts to Waters of the U.S. (WOUS) would be approximately 5.8 acres greater if existing freight rail service were to be relocated from the Kenilworth Corridor, than if existing freight rail service and the existing trail were co-located in the Kenilworth Corridor (USACE Jurisdictional Determination pending). Additionally, the freight rail relocation alternative impacts nearly three times the amount of Type 3, shallow marsh wetlands, as does the co-location alternative (see Figure 3.2-2).

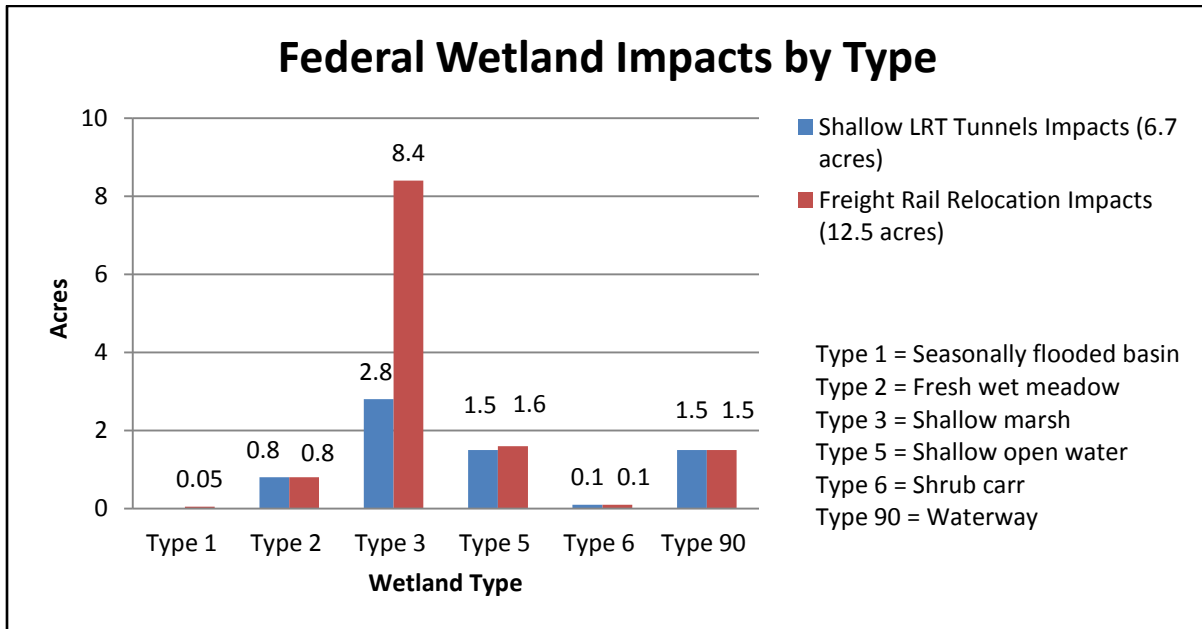


Figure 3.2-2. Wetlands/Waters of the US Impacts Comparison

4.0 Concurrence Point 4: Design Phase Impact Minimization

This section first describes wetland impact avoidance and minimization efforts made during the current design phase, followed by a summary of project-wide best management practices (BMPs). This section concludes with an assessment of impacts to aquatic resources regulated by the CWA.

4.1 Wetland Impact Avoidance & Minimization Made During the Design Phase

In identifying the design adjustments and freight rail modifications to the LPA, which includes retention of freight rail service in the Kenilworth Corridor, the Council has taken measures during the current design phase to further avoid and minimize impacts to aquatic resources. The following are key areas where aquatic resources are located within the project area and the Council has considered impact avoidance and minimization efforts to identified aquatic resources. Project design and engineering continues to advance and the Council will continue to implement avoidance and minimization efforts throughout the project footprint.

This section addresses the following areas where there would be impacts to wetlands under USACE jurisdiction, describing project efforts to avoid and minimize wetland impacts relative to the project



















scope as identified in April 2014 by the Council and comparing these to the proposed design of the LPA in the DEIS:

- Eden Prairie: Technology Drive Area
- Eden Prairie: Flying Cloud Drive and Nine Mile Creek (South Fork) Crossing
- Eden Prairie: Golden Triangle Station
- Minnetonka: Bren Road West
- Minnetonka/Hopkins: Minnetonka-Hopkins Crossing Area
- Hopkins: Operations and Maintenance Facility Site
- Hopkins: Nine Mile Creek Crossing
- St. Louis Park: Minnehaha Creek Crossing
- Minneapolis: Kenilworth Channel Crossing

4.1.1 Design Phase Impact Minimization Figures

The figures in Section 4.1 illustrate the DEIS LPA and adjustments made to the LPA since publication of the DEIS. Some of these adjustments are still under development, but represent the Project’s efforts to avoid and minimize impacts to aquatic resources.

Each of the figures includes a legend. The typical legend is shown below.

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		TOTAL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		RIGHT OF WAY
	RETAINING WALL		PROPERTY LINE

The legend items that are most pertinent to the review of avoidance and minimization are:

- The LRT Track Area (current alignment shown in dark green)
- Portions of the alignment that are bridged over aquatic resources (shown in gold)
- The shaded circles showing traction power substations and signal bungalows. These shaded circles indicate the potential location siting radius of traction power substations or signal bungalow. These elements will be sited somewhere within the radius and the project will make every effort to locate these structures outside of delineated wetlands.

Pertinent items not included on the legend, but shown on figures include:

- The DEIS alignment (shown in light green and call-out note)
- Wetland boundary lines (shown in cyan dashed-dot line and call-out note)
- Alternative intermediate alignments (shown by call-out note)

4.1.2 Eden Prairie: Technology Drive Area

In the DEIS, the LPA alignment extended west from the existing SouthWest Transit Station (existing bus terminal, parking ramp, and office space) along the south side of Highway 212 to a proposed LRT station at Mitchell Road. The DEIS identified impacts to the SouthWest Station condominium buildings, located immediately west of the SouthWest Station, including significant noise, vibration and visual impacts. This alignment would also have resulted in severe operational impacts to SouthWest Transit due to the at-grade crossing of LRT over bus access routes to and from the SouthWest Station. The frequency and timing of the LRT trains crossing the bus access roads would result in significant delays to the passenger bus system. Increased congestion at the SouthWest Station bus station would also create safety concerns for both bus and LRT passengers.

Due to these reasons stated above, in addition to comments received on the DEIS and stakeholder input, the proposed Mitchell Station was moved adjacent to Eden Prairie City Center on Technology Drive. This station relocation allows for additional parking where park and ride trips would originate and would occur on publicly-owned land as well as reduce parking needs at SouthWest Station. The SPO also evaluated SouthWest Station as the western LRT terminus to address operational, cost and environmental issues, including the noise and visual impacts to SouthWest Station condominiums noted above. Detailed analysis determined that terminating at SouthWest Station was not a feasible option to meet project need. Extending the LRT alignment west to Mitchell Station would: 1) result in a 3.5% increase in light rail ridership, compared to stopping at SouthWest Station; 2) meet the City of Eden Prairie's goal of serving the City Center area with light rail service; and 3) require less parking at SouthWest Station, (i.e. shorter parking ramp height and width), resulting in reduced visual impacts to the adjacent condominiums and less traffic impacts to the neighboring retail area.

Under the Mitchell Station western terminus alignment, the project team evaluated several options. Various iterations of the Highway 212 alignment were analyzed to serve the relocated Mitchell Station at City Center. These options were eliminated due to severe right-of-way impacts to existing businesses (i.e. bisecting existing corporate campuses or buildings), the pedestrian safety concerns at SouthWest Station due to required bus circulation within the facility, and the noise and visual impacts to the SouthWest Station condominiums.



















Various iterations were also analyzed for a Technology Drive alignment, including track alignment located in the center of the street and to the north and to the south of Technology Drive between SouthWest Station and Mitchell Station at Eden Prairie City Center. The center-running LRT option would require that Technology Drive itself be widened and would have resulted in greater impacts to aquatic resources in the area, most notably the Purgatory Creek Conservation Area. Additionally, an alignment located in the center of Technology Drive would result in increased traffic and safety concerns due to

numerous at-grade track crossings of the road. The north-side running LRT option would have significant impacts to driveway access to the Southwest Station Condominiums.

The south-side running LRT option would not require the widening of Technology Drive; and therefore, would result in fewer impacts to aquatic resources than the center-road option. The south-side running option would also have significantly fewer at-grade crossings than the center-road option, and would have fewer at-grade driveway crossings than the north-side running option. The south-side running option meets the project purpose of providing high-capacity transit service in an area of high residential and employment growth (see Figures 4.1.2-1 through 4.1.2-3).

Portions of the current Technology Drive alignment are proposed to have the track elevated to reduce wetland and floodplain impacts in the Purgatory Creek Conservation Area. The City of Eden Prairie prefers that the existing pedestrian/bike trail be elevated above existing floodplain elevation and be located on the south side of Technology Drive, south of the proposed SWLRT for safety reasons including to avoid several trail crossings of SWLRT track.

Permanent adverse aquatic resource impacts would result from bridge pier footing construction for the proposed bridges and some temporary adverse impacts during the course of construction activities. Some adverse permanent impacts would be a result of the realignment of an access road on the north side of Technology Drive at MTS Systems Corporation to achieve required traffic, access, and safety requirements. The final design of the light rail alignment and related improvements will incorporate detailed methods to further minimize impacts to the greatest extent practicable such as incorporating steeper slopes, retaining walls, etc. The following figures show the adjustments for this section of the alignment.

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		TOTAL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		RIGHT OF WAY
	RETAINING WALL		PROPERTY LINE

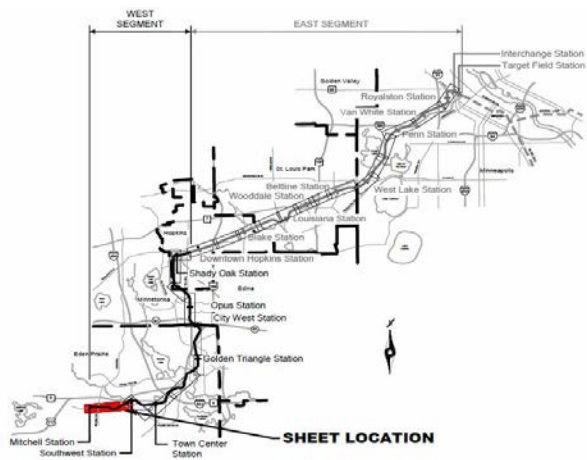




Figure 4.1.2-1: Southwest Station



Figure 4.1.2-2: Technology Drive

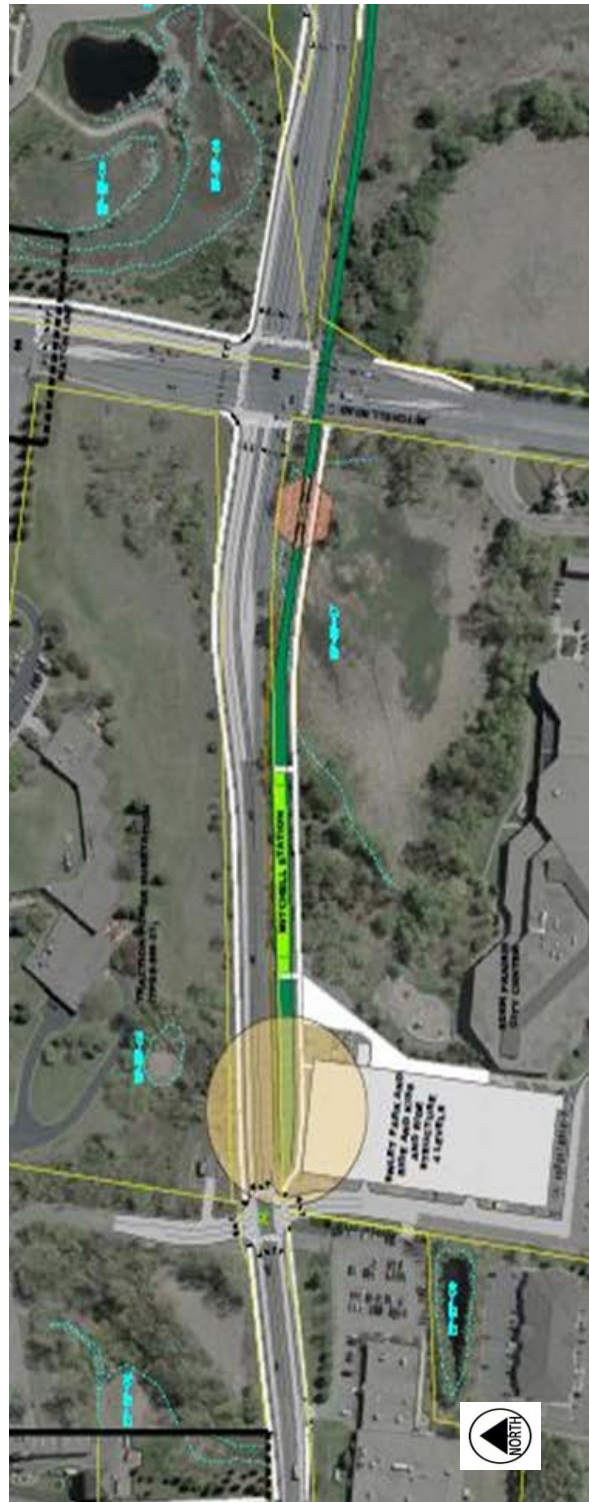



















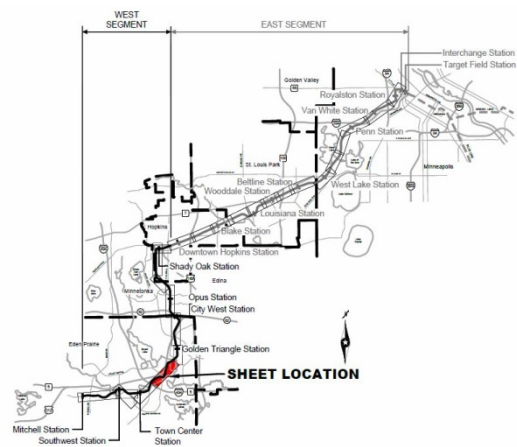
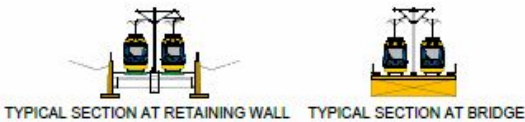
Figure 4.1.2-3 Mitchell Road

4.1.3 Eden Prairie: Flying Cloud Drive and Nine Mile Creek (South Fork) Crossing

The LPA in the DEIS was identified as having an at-grade light rail crossing of the Nine Mile Creek Conservation area, generally paralleling and adjacent to the west side of Flying Cloud Drive. This alignment would have resulted in safety and traffic concerns with an at-grade crossing of Flying Cloud Drive, as well as property and wetland impacts.

Following publication of the DEIS, several adjustments were developed and evaluated to minimize wetland and property impacts and potential safety issues with the at-grade road crossing of Flying Cloud Drive. Several different adjustment options were developed, which were variations of bridging the Nine Mile Creek Conservation Area.

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		TOTAL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		RIGHT OF WAY
	RETAINING WALL		PROPERTY LINE



Design Adjustment 40B resulted in reduced impacts to the parking area at the building located at 7400 Flying Cloud Drive by shifting the alignment west towards Highway 212. This option would retain the flexibility to raise Flying Cloud Drive in the future without impacting the LRT and would also eliminate the safety concern of an at-grade crossing. Adjustment 40B would also reduce the floodplain and permanent adverse wetland impacts, compared to the at-grade DEIS LPA. No reconstruction of Flying Cloud Drive would be required for Adjustment 40B. The existing box culvert under Flying Cloud Drive would not be affected and could remain in place. Adjustment 40B was eliminated from further evaluation however due to the aquatic resource impacts.

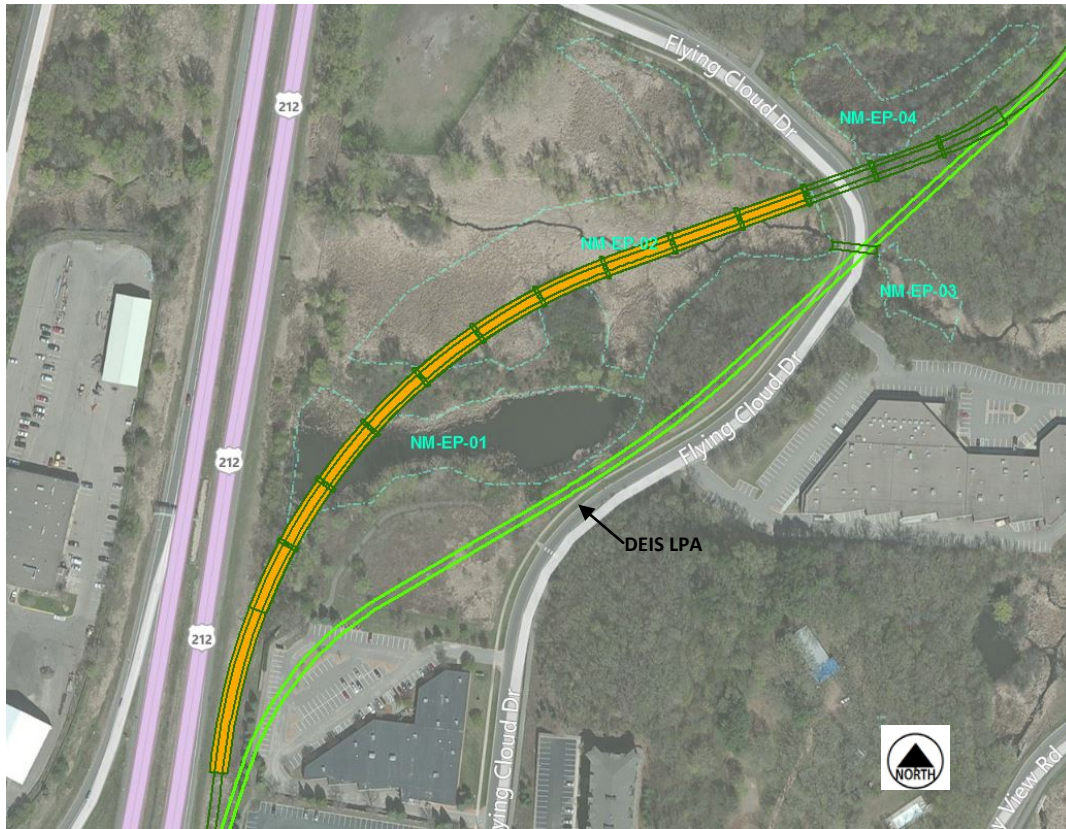


Figure 4.1.3-1: Intermediate Design Adjustment 40B

While similar to the Adjustment 40B design for crossing over the creek channel, wetland areas and Flying Cloud Drive, the current alignment is to utilize elevated alignment generally paralleling and adjacent to the west side of Flying Cloud Drive and bridge over Flying Cloud Drive. This option would also avoid impacts to the existing parking lot at 7400 Flying Cloud Drive and would allow the flexibility to raise Flying Cloud Drive in the future without impacting the LRT. This alignment would result in less wetland and floodplain impacts than Adjustment 40B. No road reconstruction of Flying Cloud Drive is required. The existing box culvert under Flying Cloud Drive would not be affected and could remain in place. Permanent adverse impacts would result from bridge pier footing construction for the proposed bridges and some temporary adverse impacts during the course of construction activities.

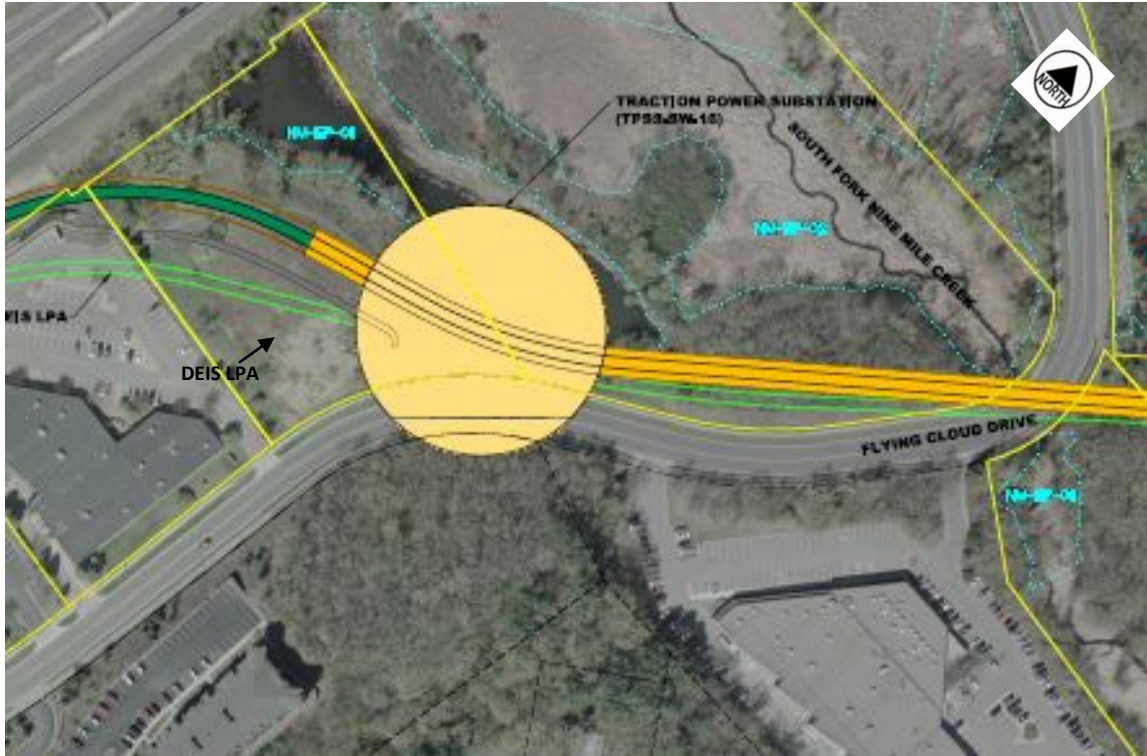


Figure 4.1.3-2: Current Alignment - West



Figure 4.1.3-3: Current Alignment – East

4.1.4 Eden Prairie: Golden Triangle Station

The DEIS LPA at the Golden Triangle Station area of Eden Prairie would have required that the LRT alignment be placed on retained fill to cross the wetland north of the station which would result in significant adverse wetland impacts. Retaining walls would be necessary to allow for the volume of fill required to achieve an acceptable grade for the LRT track alignment due to the existing topography and low wetland area north of the proposed Golden Triangle Station.

The Golden Triangle area was listed as a differentiator in the DEIS and in determining the LPA as a result of planned commercial and mixed use development. The current alignment is an adjustment to the DEIS LPA alignment, showing a station platform north of 70th Street. This adjustment minimizes the wetland impacts north of the station by utilizing a bridge to cross the wetland. It also shifts the station platform and reduces the footprint of the park and ride parking lot, thereby reducing adverse wetland impacts. Permanent adverse impacts would result from bridge pier footing construction for the proposed bridges and some temporary adverse impacts during the course of bridge construction activities.

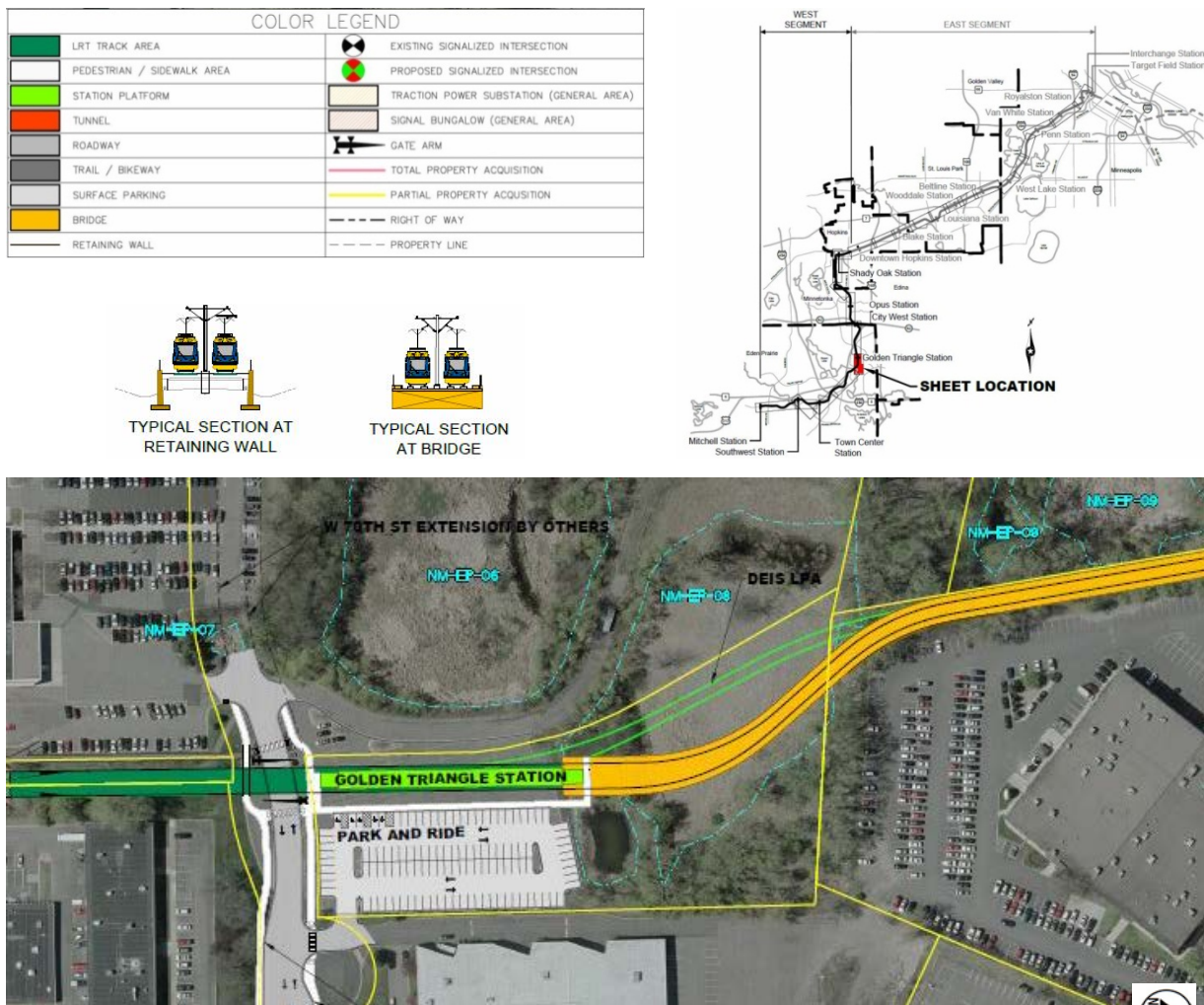


Figure 4.1.4-1: Golden Triangle Station

4.1.5 Minnetonka: Bren Road West

In the DEIS, the light rail alignment under the LPA would have resulted in permanent impacts to a portion of wetland MTA-MTA-09. Subsequent to the DEIS, the light rail alignment was moved west to completely avoid permanent adverse impacts to wetland MTA-MTA-09.

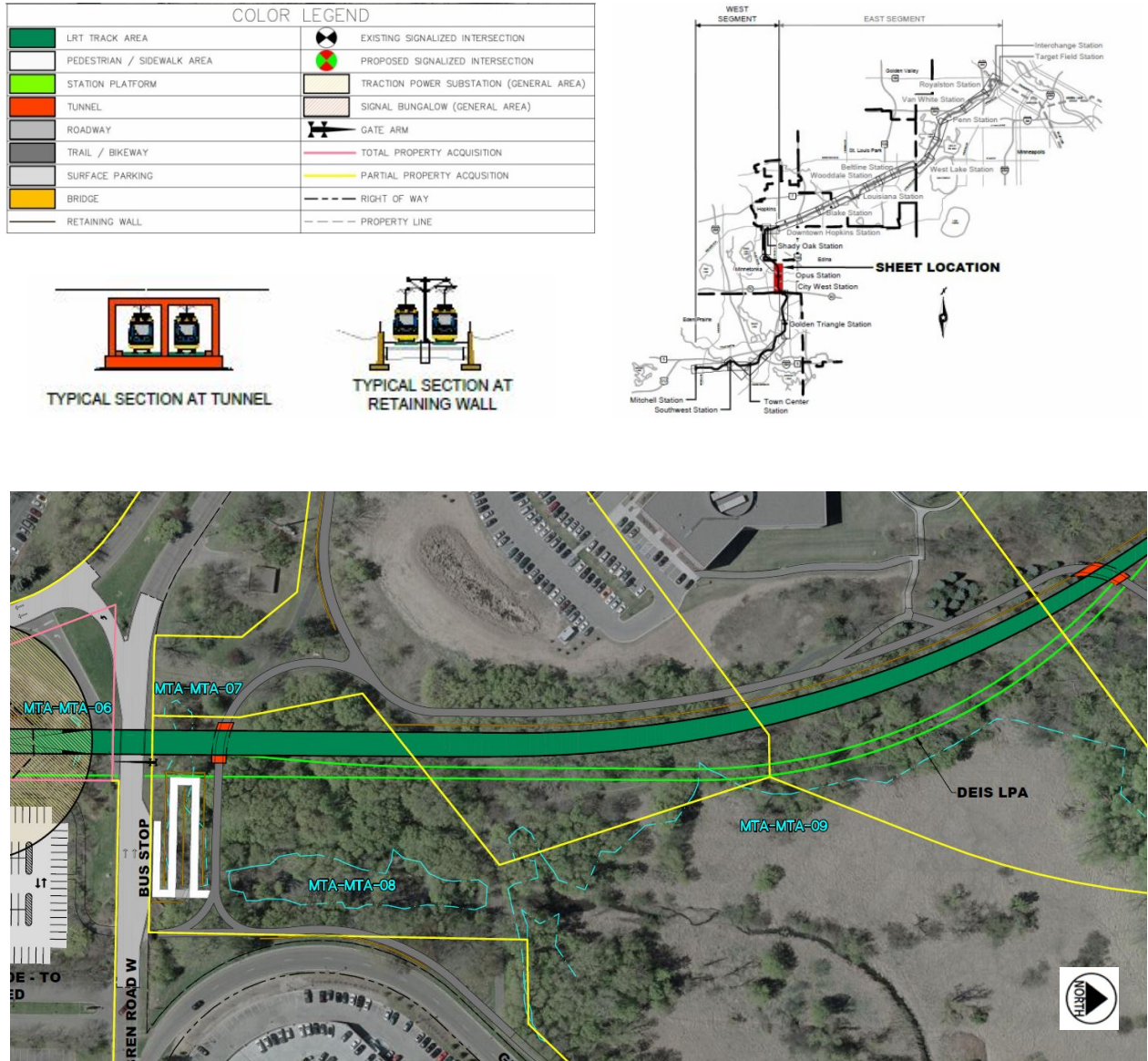
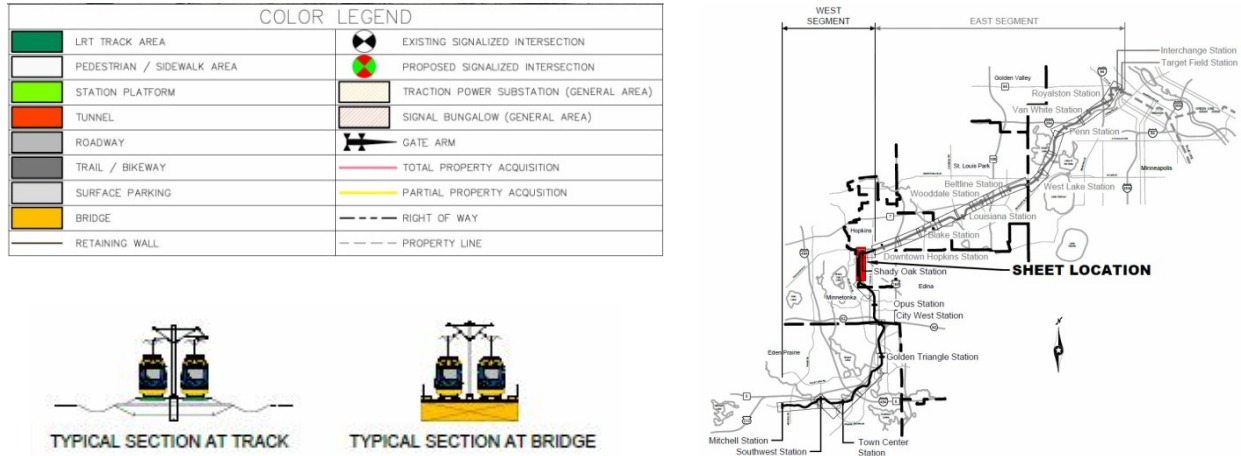


Figure 4.1.5-1: Bren Road West

Note on legend: Typical Section at Tunnel - LRT is in a tunnel under Highway 62, south of Bren Road West and this figure.

4.1.6 Minnetonka/Hopkins: Minnetonka-Hopkins Crossing Area



DEIS Alignment – Bridged Alignment from Smetana Road to CP Rail Line

The DEIS specified a 3,200' long, 120'-span pre-stressed beam light rail bridge over the wetlands south of the Canadian Pacific (CP) Bass Lake Spur Rail alignment and over the CP line towards K-Tel Road. This initial light rail alignment would temporarily impact wetlands due to bridge construction activities. Substantial permanent adverse wetland impacts would result from placement of bridge columns and a required an emergency and maintenance access road at-grade and paralleling the length of the bridge. Due to visual and noise impacts, maintenance and safety access considerations and cost concerns, the SWLRT team developed and evaluated adjustments to the alignment in the DEIS as part of the Project Development process.



Figure 4.1.6-1: DEIS Bridge Alignment

At-Grade Option

The first adjustment considered was the At-grade concept between Smetana Road and the CP Rail Line, with a tunnel beneath the CP Rail Line. The At-grade option would result in significantly more adverse wetland impacts than the DEIS bridge alignment due to at-grade (fill) crossing for the entire alignment across portions of three wetlands. There would also be adverse wetland impacts in the direct footprint of the excavated tunnel beneath CP Rail line and potential adverse impacts due to active de-watering or lateral drainage effect as result of the tunnel underneath the CP Rail Line.

While the At-grade option would have been more cost effective and would have required significantly less maintenance than the DEIS Bridge Alignment, it was dismissed from further study due primarily to aquatic resource impacts and CP Rail not supporting a light rail tunnel underneath their existing freight rail line.



Figure 4.1.6-2: At-Grade Option

At-Grade & Bridge Option

The current proposed alignment is the At-Grade & Bridge option which would result in the least amount of adverse impacts, while still meeting other needs of the project. This alignment is a hybrid of the previously considered options, incorporating an at-grade alignment, low bridge spans over portions of two wetlands and a high bridge section that would span over both wetland and the existing CP rail line. Some temporary adverse impacts would result from bridge pier footing construction for the three proposed bridges. Permanent adverse impacts would result from some at-grade fill, placement of columns for the bridges, and the construction of required emergency access roads for the high bridge over the existing CP rail line. This option would result in substantially less adverse wetland impact, compared to the DEIS Bridge alignment, due to less bridge maintenance being required, thus minimizing impacts from inspections, routine maintenance, and other repairs. This option also reduces the footprint of a safety access road compared to the DEIS Bridge alignment due to overall reduced bridge length requiring maintenance and life and safety access. When compared to the At-Grade option, this alignment would also result in substantially less adverse wetland impacts by eliminating the tunnel under the CP rail, thus avoiding potential issues related to aquatic resource impacts in the low lying area adjacent to the tunnel and reducing the amount of fill across three wetlands. The current maintenance and emergency access roads have been designed and sited to minimize wetland impacts and service only the elevated portions of the alignment. Access road locations are constrained by the Hopkins Landfill adjacent to the east. Final design activities will continue to work to minimize wetland impacts to the greatest extent practicable.



Figure 4.1.6-3: At-Grade & Bridge Option



Figure 4.1.6-4: At-Grade & Bridge Option - Service and Emergency Rd Connection



Figure 4.1.7-1: Hopkins Operations and Maintenance Facility - Initial Layout

Further evaluation of the initial site layout was conducted and the design was reconfigured to reduce wetland impacts. The current site layout for the Hopkins OMF would include a single reconfigured loop track that would reduce adverse wetland impacts.

A conceptual maintenance/emergency access road is depicted in the southwest portion of the OMF site to provide required emergency access to the proposed LRT bridge over CP Rail. The details of this bridge are still in design. The location, size and type of access road will seek to meet minimum emergency access requirements and minimize impacts to aquatic resources.

The SWLRT project will reduce indirect temporary and permanent impacts to the wetland by incorporating erosion/sediment control and groundwater pumping BMPs (if necessary due to high water table) during construction.

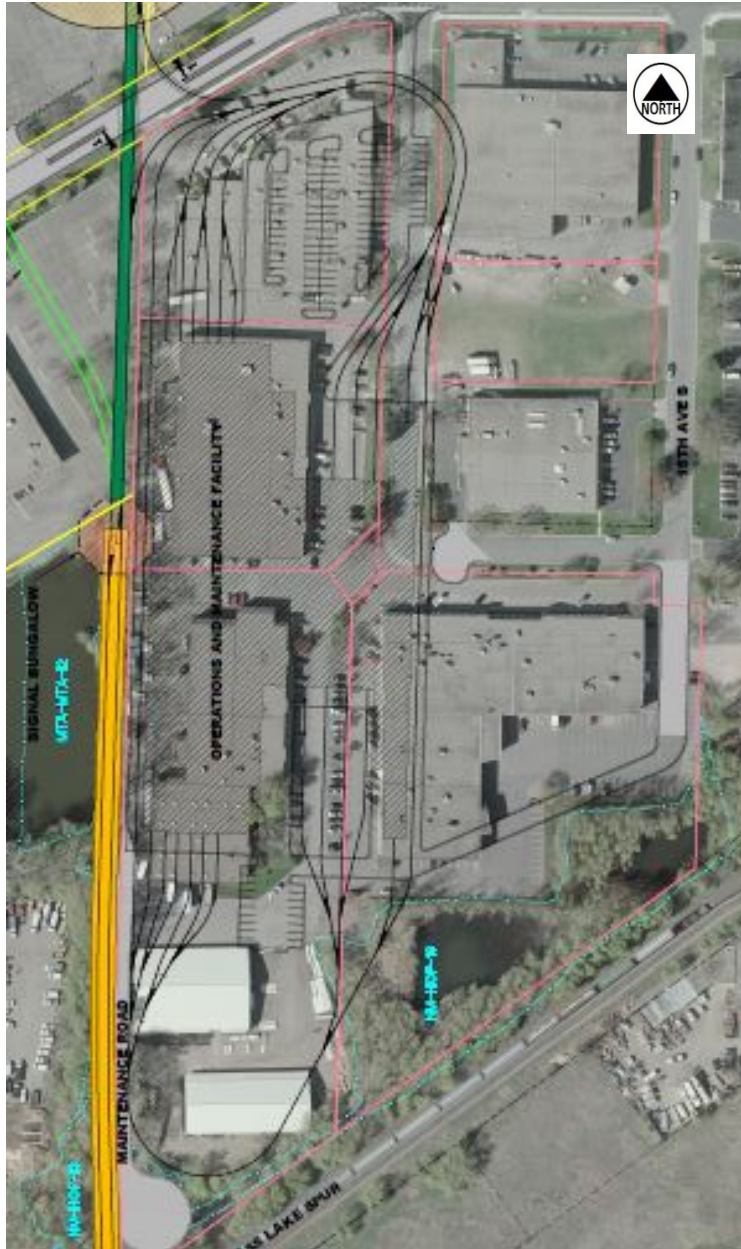


Figure 4.1.7-2: Hopkins Operations and Maintenance Facility – Current Layout

4.1.8 Hopkins: Nine Mile Creek Crossing

The LPA included in the DEIS proposed crossing over Nine Mile Creek within Hopkins. This segment of Nine Mile Creek currently has rock rip-rap banks, with no associated wetland. There is currently a concrete box-culvert structure accommodating a pedestrian/bike trail. The current alignment proposes to utilize a longer box-culvert crossing to accommodate the pedestrian trail and two LRT track alignments.

Potential adverse impacts to federally-regulated aquatic resources would be limited to below the ordinary high water mark of Nine Mile Creek. There may be some temporary impacts during the course

of construction of the culvert crossing, and negligible permanent impacts associated with potential alterations to the culvert. Final crossing design is still pending and will seek to minimize impacts.

The SWLRT project will reduce indirect temporary and permanent impacts to Nine Mile Creek by incorporating erosion/sediment control and BMPs related to the pumping of water from the construction site during construction.

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

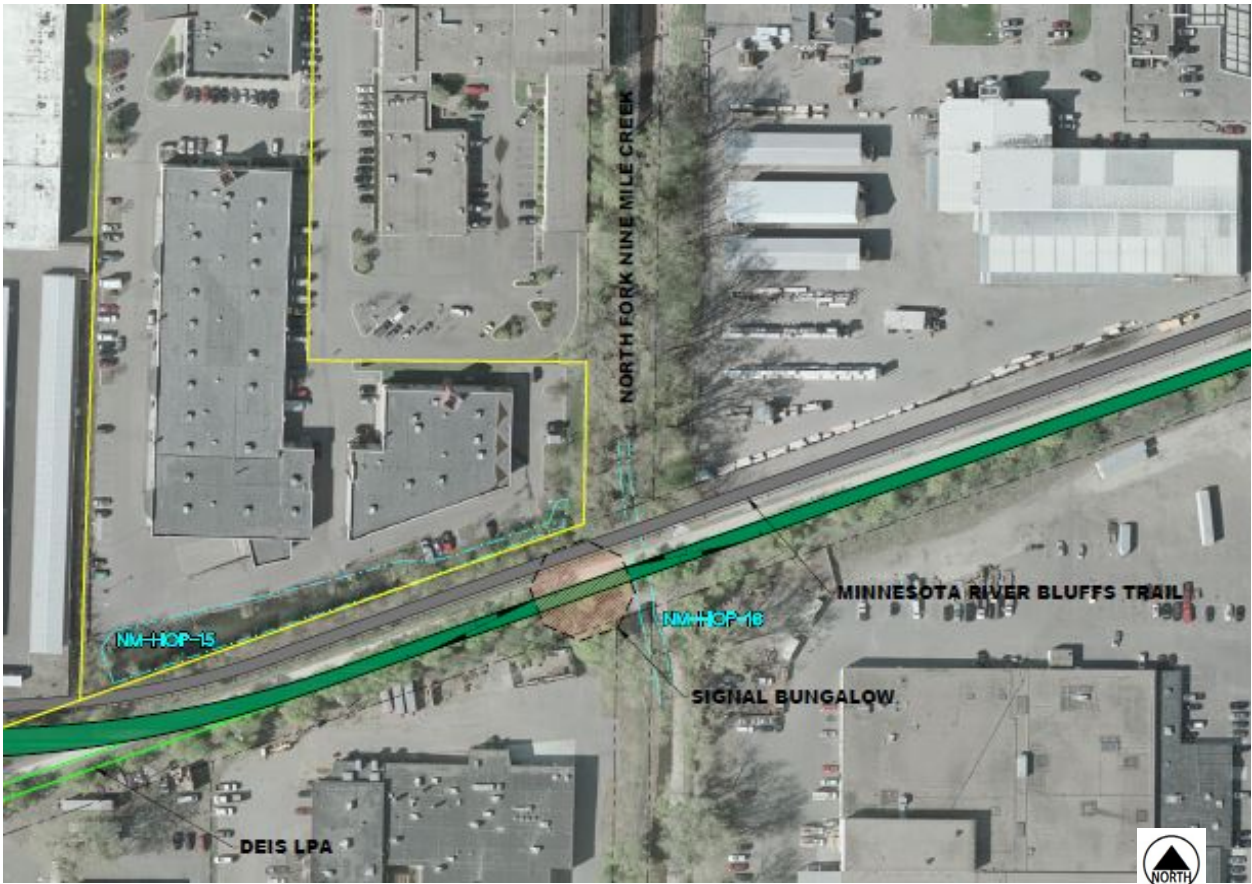
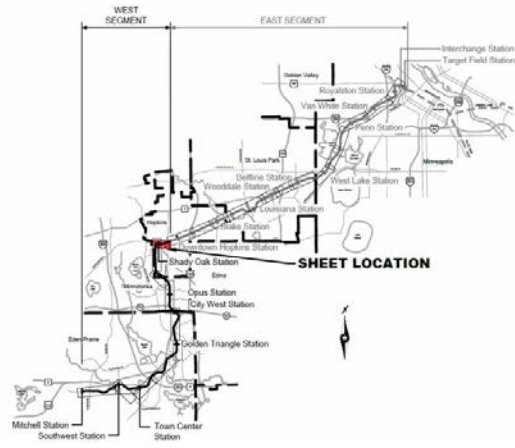
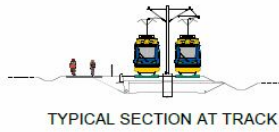


Figure 4.1.8-1: Hopkins Nine Mile Creek Crossing

4.1.9 St. Louis Park: Minnehaha Creek Crossing

The DEIS LPA proposed bridging over a portion of Minnehaha Creek within St. Louis Park. This segment of Minnehaha Creek contains very steep banks, with no associated wetland. There is currently a bridge structure accommodating a pedestrian trail and freight railroad track alignment. The current alignment proposes to construct a single bridge for the freight rail, a second bridge for the pedestrian path, and a third bridge for two LRT track alignments.

Potential adverse impacts to federally regulated aquatic resources would be limited to below the ordinary high water mark of Minnehaha Creek. There may be some temporary impacts during the course of construction of the bridges, and negligible permanent impacts associated with placement of the bridge piers, if necessary. Final bridge design is still pending and seeks to avoid placement of structures within the channel.

The SWLRT project will reduce indirect temporary and permanent impacts to Minnehaha Creek by incorporating erosion/sediment control and BMPs related to the pumping of water from the construction site during construction.

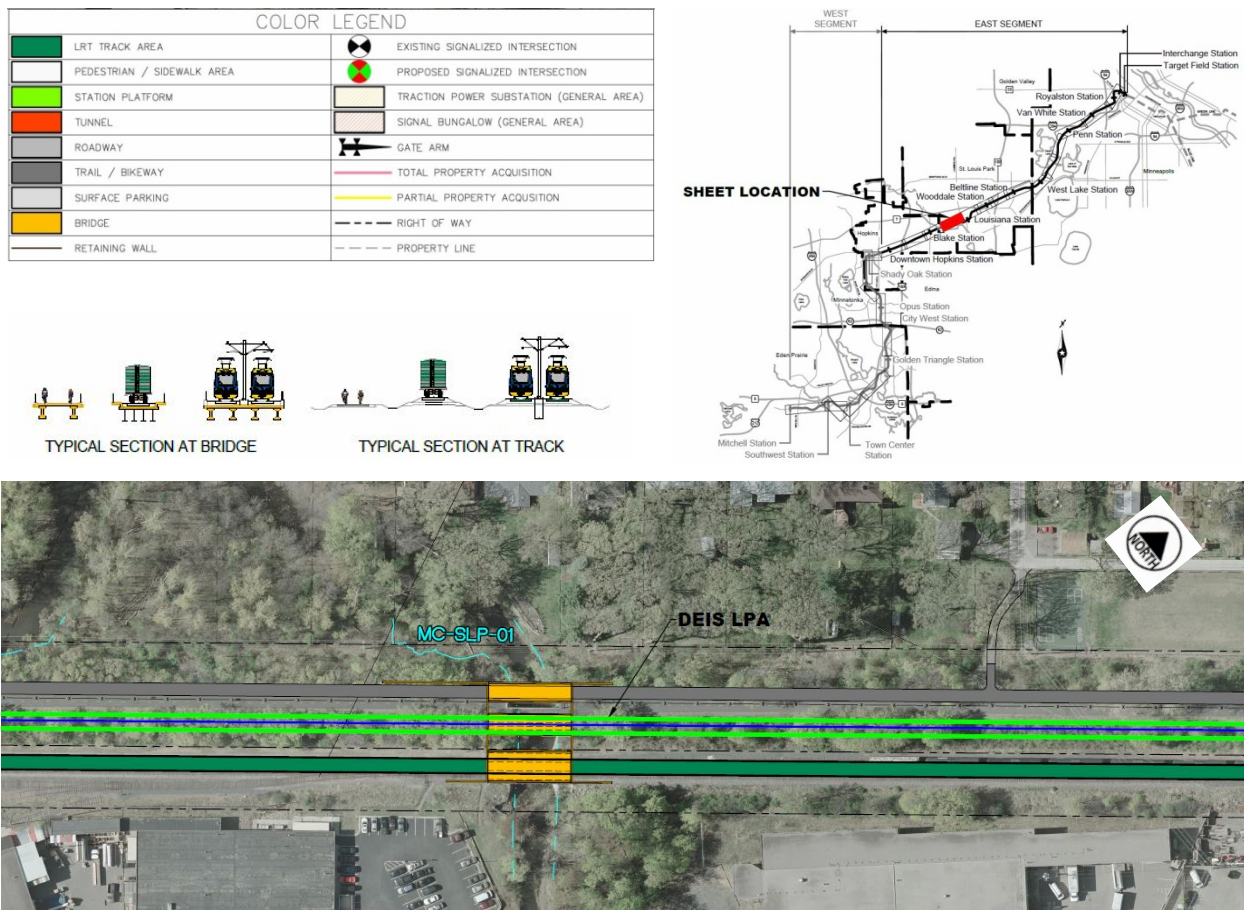


Figure 4.1.9-1: Minnehaha Creek Crossing

4.1.10 Minneapolis: Kenilworth Channel Crossing

This segment of the Kenilworth Channel (Waters of the US) contains steep banks, with no associated wetland. There are currently two wood-pile bridges housing a pedestrian trail and freight railroad track alignment over the Kenilworth Lagoon. LRT 3A (from the DEIS) would have replaced the current wood-pile bridges with a new LRT/trail bridge. LRT 3A-1 (from the DEIS) would have replaced the current wood pile bridges with two new freight rail LRT/trail bridges.

Based on adjustments to the LPA and incorporation of freight rail modifications, as identified by the Council in April 2014, the LPA would result in the removal of the existing wood-pile bridge, replaced by a new freight rail bridge and a second bridge to accommodate two LRT tracks and the pedestrian trail (similar to LRT 3A-1 in the DEIS).

Potential adverse impacts to federally-regulated aquatic resources would be limited to below the ordinary high water mark of the channel. There may be some temporary impacts during the course of construction of the bridges, and negligible permanent impacts associated with placement of bridge piers. Final bridge design is pending, which will determine the precise size, location, design, and materials of the new bridge piers, however the Council is not planning to add additional piers in the channel compared to the existing bridge. Further, the existing clearance height above water surface will be maintained.

The SWLRT project will reduce indirect temporary and permanent impacts to this channel by incorporating erosion/sediment control and BMPs related to the removal of water from the construction site during construction.

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		TOTAL PROPERTY ACQUISITION
	SURFACE PARKING		PARTIAL PROPERTY ACQUISITION
	BRIDGE		RIGHT OF WAY
	RETAINING WALL		PROPERTY LINE

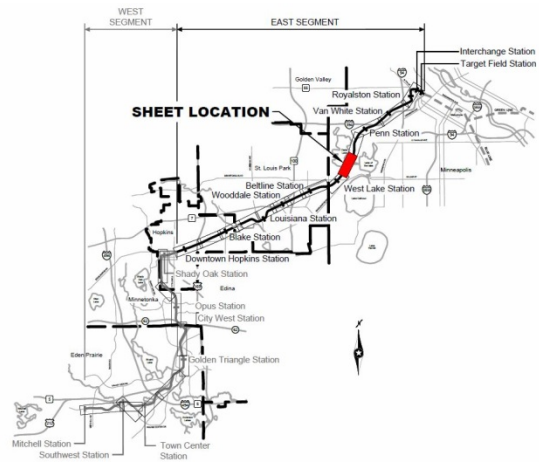
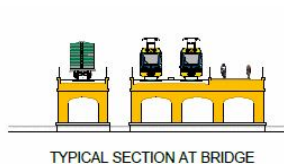
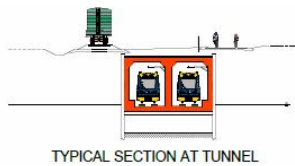




Figure 4.1.10-1: Kenilworth Channel Crossing

4.2 Project-Wide Best Management Practices

- Construction sequencing to consider seasonal variation (i.e. frozen ground)
- Restoring wetland soils and hydrology to existing conditions or grades
- Restoring disturbed stream channels to original width and substrate
- Minimizing construction right-of-way corridor width
- Preserving existing tree canopies and natural areas in and around aquatic resources as much as possible
- Implementing elevated structures or bridge spans across wetlands and waterways
- Implementing erosion and sediment control BMPs that will protect aquatic resources such as: silt fence, bio-rolls, inlet protection, de-watering practices for temporary construction in streams, sedimentation ponds, etc.
- Avoiding the use of fertilizers, pesticides, herbicides within wetlands
- Considering downstream waters and implementing water quality BMPs
- Coordinating project storm water management to maintain or improve water quality

4.3 Impacts to Aquatic Resources Regulated by the Clean Water Act

4.3.1 Temporary Impacts

All wetlands and Waters of the U.S. temporarily impacted by construction activities will be restored to existing grades and re-vegetated to an appropriate native vegetative community. Temporary impacts are generally those impacts lasting less than six months duration.

4.3.2 Permanent Impacts:

Unavoidable adverse impacts to federally-regulated waters that would remain after all appropriate and practicable minimization has been implemented will be potentially mitigated through the purchase of wetland credits from a USACE-approved wetland mitigation bank, project-specific wetland mitigation, or a combination of both. Mitigation is expected to occur at:

May 5, 2014

SWLRT NEPA/404 Merger Process

- 2.5:1 replacement for any out-of-kind wetland mitigation credits purchased outside the major watershed of the impacted wetland
- 2.25:1 replacement for any in-kind wetland mitigation credits purchased outside the major watershed of the impacted wetland
- 2.25:1 replacement for any out-of-kind wetland mitigation credits purchased within the same major watershed as the impacted wetland
- 2:1 replacement for any in-kind wetland mitigation credits purchased within the same major watershed as the impacted wetland

5.0 Conclusion

The USACE provided concurrence to Concurrence Point 1 - Project Purpose and Need in their December 20, 2012, DEIS comment letter.

The USACE provided general concurrence to Point 2 – Array of Alternatives and Alternatives Carried Forward in their December 20, 2012, DEIS comment letter with the option to re-evaluate concurrence as needed. The initial concurrence evaluated alternatives brought forth in the DEIS. Additional adjustments detailed in the SDEIS are described in this document for purposes of USACE concurrence, however there are no new alternatives for the project in addition to those identified in the DEIS.

Under Concurrence Point 3 – Identification of the Selected Alternative, the USACE identified LRT 3A-1, as described in the DEIS, as the LEDPA. The LEDPA determination for LRT 3A-1 is based on discharge of fill material over fewer acres of wetland than LRT 3A due to the location of freight rail. As described in the DEIS and Section 2.2 of this document, the LRT alignment under LRT 3A and LRT 3A-1 are fundamentally the same with the difference being the location of freight rail. The Project scope as identified by the Council on April 9, 2014, retains existing freight rail service in the Kenilworth Corridor, similar to LRT 3A-1 and is consistent with USACE’s comment letter from December 20, 2012 stating that LRT 3A-1 meets the USACE project purpose and has the least amount of impact to aquatic resources. This document provides details supporting the LPA, inclusive of retaining freight rail and the trail in the Kenilworth Corridor and placing LRT in two shallow tunnels, as the LEDPA. The other variation to the LPA included relocating freight rail to the MN&S Spur and had substantially more impacts to Waters of the U.S.

All avoidance and minimization measures to aquatic resources are described within this document under Concurrence Point 4 – Design Phase Impact Minimization. The project has, and continues to, implement avoidance and minimization measures during the design phase to avoid or minimize impacts to aquatic resources to the maximum practicable extent. All unavoidable wetland or aquatic resource impacts under the Clean Water Act will be compensated for in accordance with the United States Environmental Protection Agency and USACE Wetlands Compensatory Mitigation Rule.

This document serves to present each concurrence point element and provide supporting details that would allow the USACE to provide, in writing, concurrence that information provided in this document would satisfy Clean Water Act requirements.



Sources & References Cited

- Federal Transit Administration, Hennepin County Regional Railroad Authority, Metropolitan Council. 2012. *Southwest Transitway Draft Environmental Impact Statement*. Available at: <http://metro council.org/Transportation/Projects/Current-Projects/Southwest-LRT/Environmental/DEIS.aspx>
- Metropolitan Council. 2014. *Metropolitan Council Resolution to Adopt Southwest Light Rail Transit (Green Line Extension) Project Scope and Budget*. Available at: <http://metro council.org/getdoc/c8451cbe-f91c-409a-ba20-f621ac7b62f4/Agenda.aspx>