

8 Amended Draft Section 4(f) and 6(f) Evaluation

8.1 Introduction

The METRO Blue Line (formerly Bottineau Transitway) Light Rail Transit (BLRT) Extension project Amended Draft Section 4(f) and 6(f) Evaluation provides additional information on the proposed BLRT Extension project's Section 4(f) and 6(f) properties since the publication of the Bottineau Transitway Draft Section 4(f) Evaluation. The Draft Section 4(f) Evaluation was published in March 2014 as a part of the Bottineau Transitway Draft Environmental Impact Statement (Draft EIS; see Draft EIS Chapter 8 – Draft Section 4(f) Evaluation). In particular, this Amended Draft Section 4(f) and 6(f) Evaluation provides additional information regarding impacts to nine Section 4(f) properties along the proposed BLRT Extension project corridor. This Amended Draft Section 4(f) and 6(f) Evaluation also presents information regarding Section 4(f) resources where the assessment of impacts has not changed from the March 2014 Draft Section 4(f) Evaluation. The Federal Transit Administration (FTA) is seeking comments on the potential impact to these Section 4(f) properties.

Table 8.1-1 describes the preliminary determination of the Section 4(f) properties affected by the proposed BLRT Extension project, including two new preliminary Section 4(f) *de minimis* impact determinations. The locations of these Section 4(f) properties are shown in **Figure 8.1-1 through Figure 8.1-4** along with the proposed BLRT Extension project alignment and stations, and the proposed BLRT Extension project's Section 106 Area of Potential Effect (APE).

With this Amended Draft Section 4(f) and 6(f) Evaluation, FTA invites public and agency review and comment on the revised, impact analysis. Comments received concerning the revised Section 4(f) evaluations will be considered by FTA and the entities with jurisdiction over the Section 4(f) properties prior to making Section 4(f) determinations for those properties.

This Amended Draft Section 4(f) and 6(f) Evaluation includes the following sections:

- Section 8.1 Introduction
- Section 8.2 Changes in the Proposed BLRT Extension Project from the Draft Section 4(f) Evaluation to the Amended Draft Section 4(f) Evaluation
- Section 8.3 Amended Draft Section 4(f) Evaluation Summary
- Section 8.4 Regulatory Background/Methodology
- Section 8.5 Purpose and Need
- Section 8.6 Description of the Project
- Section 8.7 Use of Section 4(f) Properties in the Proposed BLRT Extension Project Study Area
- **Section 8.8** Coordination
- **Section 8.9** Preliminary Determination of Section 4(f) Use
- Section 8.10 Federally and State Funded Parks



Table 8.1-1. Impacts to Section 4(f) Properties¹

Section 4(f) Property	Property Type	Official with Jurisdiction	Direct Use	<i>De minimis</i> Use	Temporary Occupancy	No Use
Harrison Park	Parkland	Minneapolis Park and Recreation Board (MPRB)				Х
Theodore Wirth Regional Park (TWRP)	Parkland	MPRB		Х		
Glenview Terrace Park	Parkland	MPRB		X		
Sochacki Park: Mary Hills Management Unit ²	Parkland	City of Golden Valley and Joint Powers Agreement (JPA) Board ²			X	
Sochacki Park: Sochacki Management Unit ³	Parkland	City of Robbinsdale and JPA Board ³			X	
South Halifax Park	Parkland	City of Robbinsdale			X	
Lee Park	Parkland	City of Robbinsdale				Х
Triangle Park	Parkland	City of Robbinsdale				Х
Becker Park	Parkland	City of Crystal			Х	
Unnamed park identified as Tessman Park in the Draft EIS)	Parkland	City of Brooklyn Park				Х
College Park	Parkland	City of Brooklyn Park				Χ
Park Property Adjacent to Rush Creek Regional Trail	Parkland	Three Rivers Park District (TRPD)			Х	
St. Paul Minneapolis & Manitoba Railway Historic District (Minneapolis)	Historic	Minnesota Historic Preservation Office (MnHPO)				X
Minneapolis Warehouse District	Historic	MnHPO				Х
Northwestern Knitting Company Factory	Historic	MnHPO				Х
Sumner Branch Library	Historic	MnHPO				X
Wayman African Methodist Episcopal Church	Historic	MnHPO				X
Labor Lyceum	Historic	MnHPO				X
Floyd B. Olson Memorial Statue	Historic	MnHPO				Х
Bridge No. L9327	Historic	MnHPO				X
Homewood Historic District	Historic	MnHPO				Х
Osseo Branch, St. Paul Minneapolis & Manitoba Railway Historic District	Historic	MnHPO	Х			

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Table 8.1-1. Impacts to Section 4(f) Properties¹

Section 4(f) Property	Property Type	Official with Jurisdiction	Direct Use	<i>De minimis</i> Use	Temporary Occupancy	No Use
Grand Rounds Historic District ⁴	Historic	MnHPO	Х			
Sacred Heart Catholic Church	Historic	MnHPO				X
Robbinsdale Waterworks	Historic	MnHPO				Χ
Hennepin County Library – Robbinsdale Branch	Historic	MnHPO				X
West Broadway Avenue Residential Historic District	Historic	MnHPO				Х
Jones-Osterhus Barn	Historic	MnHPO				X
Minneapolis & Pacific/Soo Line Railway Historic District	Historic	MnHPO				Х

¹ See **Section 8.4** for definitions of the potential types of Section 4(f) uses.

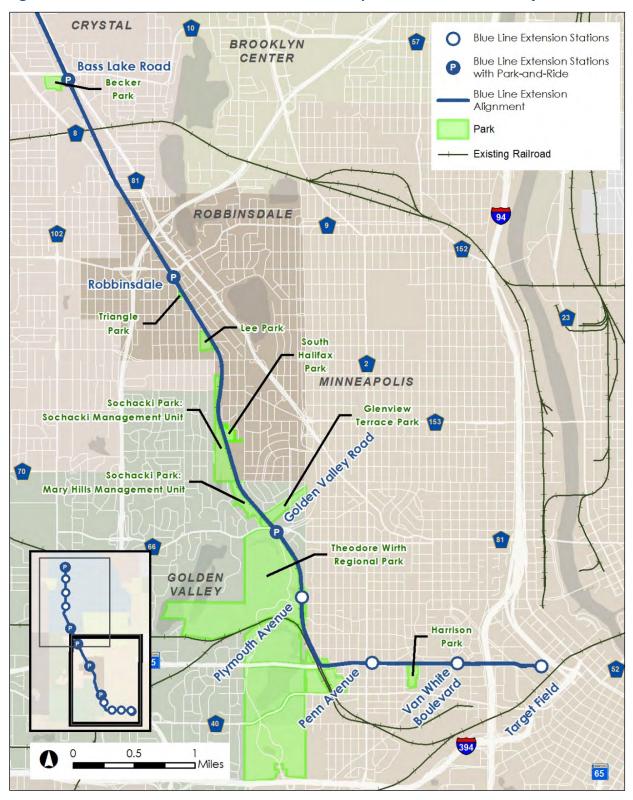
² The cities of Golden Valley and Robbinsdale entered into a Joint Powers Agreement with TRPD to manage Sochacki Park as discussed in **Section 8.2**. The joint management entity for these park resources is referred to as the JPA Board.

³ Sochacki Park: Sochacki Management Unit is also a Section 6(f) property as funds from the federal Land and Water Conservation program have been used on the property. See **Section 8.10** for additional information.

⁴ In the March 2014 Draft Section 4(f) Evaluation, the Grand Rounds Historic District was identified as a direct use in Table 8.3-2 on page 8-13, but was described as a *de minimis* use in the text on page 8-35. The correct preliminary determination in the March 2014 Draft Section 4(f) Evaluation was a *de minimis* use. Since the publication of the March 2014 Draft Section 4(f) Evaluation, additional engineering information along with additional coordination with MnHPO has resulted in FTA revising their preliminary Section 4(f) determination to a direct use.



Figure 8.1-1. Park Resources: Southern Portion of Proposed BLRT Extension Project Corridor



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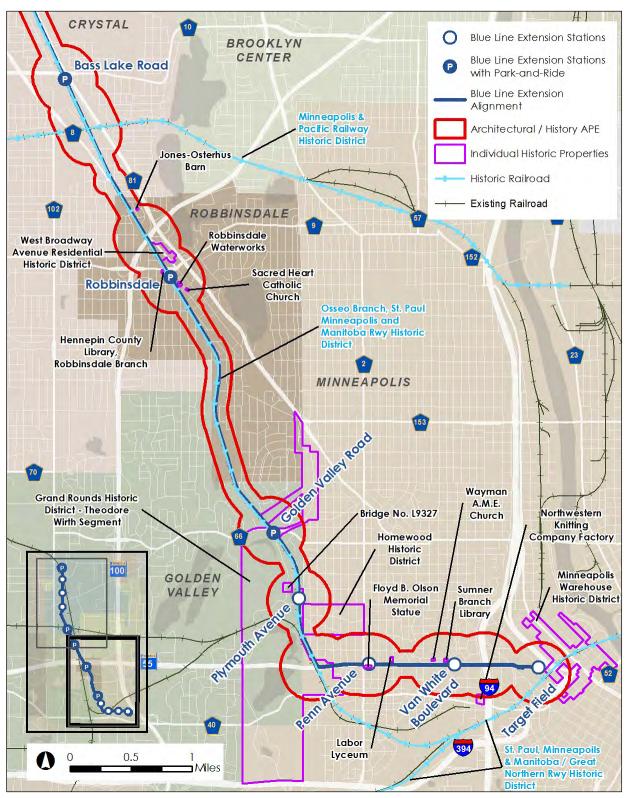


Figure 8.1-2. Park Resources: Northern Portion of Proposed BLRT Extension Project Corridor





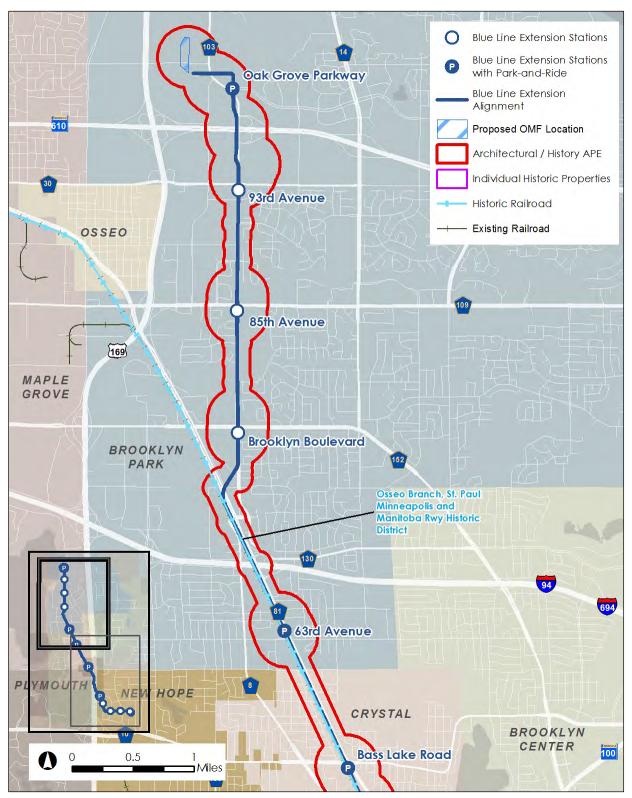
Figure 8.1-3. Historic Sites: Southern Portion of Proposed BLRT Extension Project Corridor



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Figure 8.1-4. Historic Sites: Northern Portion of Proposed BLRT Extension Project Corridor





Appendix E provides the proposed BLRT Extension project Engineering Drawings used for this Amended Draft Section 4(f) and 6(f) Evaluation. In summary, this report documents FTA's revised, preliminary Section 4(f) use determinations for Section 4(f) properties where the use determination has changed from the Draft Section 4(f) Evaluation (including *de minimis* uses) as a result of the proposed BLRT Extension project. This Amended Draft Section 4(f) Evaluation and 6(f) Evaluation will also support the Section 6(f) process.

8.2 Changes in the Proposed BLRT Extension Project from the Draft Section 4(f) Evaluation to the Amended Draft Section 4(f) Evaluation

Table 8.2-1 summarizes the changes in potential impacts to Section 4(f) properties made in this Amended Draft Section 4(f) Evaluation compared to the Draft Section 4(f) Evaluation published as part of the Draft EIS in March 2014. In addition to the changes in Section 4(f) preliminary determinations, a change in the management of Sochacki Park and Mary Hills Nature Area has taken place since the publication of the Draft Section 4(f) Evaluation. The Sochacki Park/Mary Hills Nature Area/Rice Lake Nature Area Initiative proposed the unification of Sochacki Park (located in the City of Robbinsdale) with the Mary Hills and Rice Lake nature areas in the City of Golden Valley to form one park under the Sochacki Park name. This combined park resource is managed through a Joint Powers Agreement (JPA), executed in March 2015 among the Three Rivers Park District (TRPD), the city of Robbinsdale, and the city of Golden Valley. Under the JPA, the three former park resources are referred to jointly as Sochacki Park, and separately as Sochacki Park: Sochacki Management Unit, Sochacki Park: Mary Hills Management Unit, and Sochacki Park: Rice Lake Management Unit. The underlying fee title ownership of the respective management units of Sochacki Park remains with the cities in which they are located.

8.3 Amended Draft Section 4(f) Evaluation Summary

FTA is issuing a revised, preliminarily Section 4(f) use, *de minimis* use, or temporary occupancy use determinations of nine Section 4(f) properties along the proposed BLRT Extension project corridor. The rationale for the revised, preliminary determinations is documented in **Section 8.7** and supporting documentation is provided in **Appendix J**. In general, this Amended Draft Section 4(f) Evaluation is based on proposed BLRT Extension project engineering drawings and design work (see **Appendix E**).

The documentation and exhibits within **Section 8.7** of this Amended Draft Section 4(f) Evaluation provide detail on the proposed BLRT Extension project improvements and construction activities and its impacts on Section 4(f) properties.

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Table 8.2-1. Comparison of Impacts to Section 4(f) Properties in the Draft and Amended Draft Section 4(f) Evaluations

Property	March 2014 Draft Section 4(f) Preliminary Determination	Amended Draft Section 4(f) Preliminary Determination					
Park Properties							
TWRP	Direct Use	De minimis Use					
Glenview Terrace Park	No Use	De minimis Use					
Sochacki Park: Mary Hills Management Unit ¹	Temporary Occupancy	Temporary Occupancy					
Sochacki Park: Sochacki Management Unit ¹	Temporary Occupancy	Temporary Occupancy ²					
South Halifax Park	No Use	Temporary Occupancy					
Minneapolis Public Schools Athletic Field	Direct Use	No Use ³					
Becker Park	No Use	Temporary Occupancy					
Park Property Adjacent to Rush Creek Regional Trail	De minimis Use	Temporary Occupancy					
Historic Properties							
Grand Rounds Historic District	De minimis Use	Direct Use					
Homewood Historic District	Direct Use	No Use ³					
Osseo Branch, St. Paul Minneapolis & Manitoba Railway Historic District	No Use	Direct Use					

¹ Park Resource name change: Sochacki Park and Mary Hills Nature Area are now operated as a combined park resource under the Sochacki Park name; the former individual parks are considered separate management units under the joint park resource.

8.4 Regulatory Background/Methodology

Section 4(f) of the United States Department of Transportation (USDOT) Act of 1966, 49 USC § 303 (Section 4(f)), is a federal law that protects publicly owned parks, recreation areas, wildlife and/or waterfowl refuges, and significant historic sites, whether publicly or privately owned. Section 4(f) requirements apply to all transportation projects that require funding or other approvals by USDOT, including FTA. FTA's Section 4(f) implementing regulations are at 23 CFR Part 774.

Additional protection is provided for outdoor recreational lands under Section 6(f) legislation (16 USC § 4602-8(f)(3)) where Land and Water Conservation Fund (LWCF) Act dollars were used for the planning, acquisition, or development of the property. These properties may be converted to a non-outdoor recreational use only if replacement land of at least the same fair market value and reasonably equivalent usefulness and location is assured. Minnesota has adopted the LWCF grant guidelines for the administration of state recreation grants; therefore, parks that have received state grant funds are subject to requirements similar to parks that have received LWCF funds.

² Sochacki Park: Sochacki Management Unit is included in this Amended Draft Section 4(f) and 6(f) Evaluation as it has been identified as a Section 6(f) resource in addition to a Section 4(f) resource. See **Section 8.10** for the Section 6(f) analysis for Sochacki Park: Sochacki Management Unit.

Resource use was associated with one of the Draft EIS alternative alignments that is not on the current proposed BLRT Extension project alignment.



This Section 4(f) documentation has been prepared in accordance with 49 USC § 303), the joint Federal Highway Administration (FHWA)/FTA regulations for Section 4(f) compliance codified as 23 CFR Part 774, the FHWA Technical Advisory T6640.8A (FHWA, 1987), and the revised FHWA Section 4(f) Policy Paper (FHWA, 2012). The FTA guidance on Section 4(f) is based on the revised FHWA policy paper.

Various methods were used to identify Section 4(f) properties near the proposed BLRT Extension project and to assess the potential use of those properties. Section 4(f) properties more than 300 feet from the proposed BLRT Extension project alignment were assumed to experience no direct impacts. This distance is used because 300 feet is the unobstructed screening distance for FTA noise impact assessments and would allow identification of potential noise impacts to Section 4(f) properties. Maps, aerial photography, and local comprehensive plans were consulted to determine the location of Section 4(f) properties. The proximity of Section 4(f) properties to the proposed BLRT Extension project, based on property ownership boundaries and construction limits of disturbance (see **Appendix E – Engineering Drawings**), was evaluated to determine the potential for direct use and temporary occupancy. Potential constructive use was assessed based on the proximity to the proposed BLRT Extension project and the potential effects to the activities, features, and attributes of the Section 4(f) property. Field visits and coordination with local jurisdictions provided additional information for evaluating the potential use of Section 4(f) properties.

FTA will make its final Section 4(f) determinations in the proposed BLRT Extension project's Record of Decision (ROD), and subsequent to its consideration of public and agency comments received on the FEIS. FTA will seek concurrence from the Official(s) With Jurisdiction (OWJs) on the preliminary determinations, prior to making a final determination in the ROD, as required by regulations.

8.4.1 Types of Section 4(f) Properties

Section 4(f) requires consideration of:

- Parks and recreational areas of national, state, or local significance that are both publicly owned and open to the public
- Publicly owned wildlife and waterfowl refuges of national, state, or local significance that are
 open to the public to the extent that public access does not interfere with the primary purpose
 of the refuge
- Historic sites of national, state, or local significance in public or private ownership regardless of whether they are open to the public that are listed on, or eligible for listing on, the National Register of Historic Places (NRHP)

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8.4.2 Section 4(f) Approvals

FTA cannot approve the use of a Section 4(f) resource, 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 774.1, to the use of land from the Section 4(f) property, and the action includes all possible planning, as defined in 23 CFR Part 774.17, to minimize harm to the Section 4(f) property resulting from such use; or
- The use of the Section 4(f) property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement features) committed to by the applicant would have a *de minimis* use, as defined in 23 CFR Part 774.17, on the Section 4(f) property

8.4.3 Section 4(f) Evaluation Process

After identifying the Section 4(f) properties in the proposed BLRT Extension project study area, FTA analyzed whether and how the proposed BLRT Extension project would impact each Section 4(f) property and whether the impact qualified as a use of the property.

The primary steps in an individual Section 4(f) Use evaluation are described below:

- Analyze Avoidance Alternatives: In this step, FTA considers alternatives that completely avoid the use of a Section 4(f) property. The avoidance analysis applies the Section 4(f) feasible and prudent criteria (23 CFR Part 774.17(2) and (3)). An alternative is not feasible if it cannot be built as a matter of sound engineering judgment. An avoidance alternative is not considered prudent if:
 - 1. It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need
 - 2. It results in unacceptable safety or operational problems
 - 3. After reasonable mitigation, it still causes:
 - a. Severe social, economic, or environmental impacts
 - b. Severe disruption to established communities
 - c. Severe disproportionate impacts to minority or low income populations
 - d. Severe impacts to environmental resources protected under other federal statutes
 - 4. It results in additional construction, maintenance, or operational costs of an extraordinary magnitude
 - 5. It causes other unique problems or unusual factors; or
 - 6. It involves multiple factors in items (1) through (5) of this definition, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.



- Consider All Possible Planning to Minimize Harm: After determining that there are no feasible and prudent alternatives to avoid the use of Section 4(f) property, the project approval process for an individual Section 4(f) evaluation requires the consideration and documentation of all possible planning to minimize harm to Section 4(f) property (see 23 CFR Part 774.3(a)(2)). All possible planning, defined in 23 CFR Part 774.17, means that all reasonable measures identified in the Section 4(f) evaluation to minimize harm or to mitigate for adverse impacts and effects must be included in the project. All possible planning to minimize harm does not require analysis of feasible and prudent avoidance alternatives because such analysis would have already occurred in the context of searching for feasible and prudent alternatives that would avoid Section 4(f) properties altogether under 23 CFR Part 774.3(a)(a). Minimization and mitigation measures should be determined through consultation with the OWIs over the Section 4(f) resource. Mitigation measures involving public parks, recreation areas, or wildlife or waterfowl refuges may involve replacement of land and/or facilities of comparable value and function, or monetary compensation to enhance remaining land. Mitigation of historic sites usually consists of those measures necessary to preserve the integrity of the site and agreed to in the project's Section 106 MOA in accordance with 36 CFR Part 800 by FTA, the Minnesota Historic Preservation Office (MnHPO), and other consulting parties.
- **Determine Alternative(s) with Least Overall Harm:** If no feasible and prudent alternatives are identified that would avoid using a Section 4(f) property, FTA also determines the alternative that would cause the least overall harm to Section 4(f) properties using the following factors (23 CFR Part 774.3I1) and the results of considering all possible planning to minimize harm:
 - 1. The ability to mitigate adverse impacts to each Section 4(f) property
 - 2. The relative severity of the remaining harm after mitigation
 - 3. The relative significance of each Section 4(f) property
 - 4. The views of the OWIs over each property
 - 5. The degree to which each alternative meets the project purpose and need
 - 6. The magnitude of adverse effects to resources not protected by Section 4(f)
 - 7. Substantial cost differences among the alternatives
- Coordinate with OWJs: Section 4(f) regulations require coordination with the officials with jurisdiction over the Section 4(f) property prior to Section 4(f) approval in several situations. The OWJs include:
 - MnHPO in the case of historic sites; and
 - Officials of the agency or agencies that own or administer the property in the case of public parks and recreation areas.

The concurrence of OWJs is required in the case of making *de minimis* findings or applying the temporary occupancy exception.

See 23 CFR Part 774 for additional information regarding coordination with OWJs.

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8.4.4 Section 4(f) Use Definitions and Requirements

This section provides definitions of types of potential Section 4(f) uses that are used throughout **Section 8.7** of this document and their related requirements, including: (1) individual Section 4(f) evaluation; (2) temporary occupancy exception; (3) *de minimis* impact determinations; and (4) constructive use.

8.4.4.1 Individual Section 4(f) Evaluation

The term "individual Section 4(f) evaluation" is used to refer to the process of assessing avoidance alternatives, determining the alternative with the least overall harm, and considering all possible planning to minimize harm for each property that would be used by the proposed BLRT Extension project and where that use would not be *de minimis* (*de minimis* use is described below in **Section 8.4.4.3**).

8.4.4.2 Temporary Occupancy Exception

Temporary occupancies that meet each of the following five criteria for temporary occupancy exception in 23 CFR Part 774.13(d) are not subject to Section 4(f) approval:

- 1. Duration of occupancy must be temporary (that is, less than the time needed for construction of the project), and there can be no change in ownership of the land.
- 2. The scope of work must be minor (that is, both the nature and magnitude of the changes to the Section 4(f) property are minimal).
- 3. There can be no anticipated permanent adverse physical impacts, nor can there be interference with the activities, features, or attributes of the property on either a temporary or permanent basis.
- 4. The land being used must be fully restored (that is, the property must be returned to a condition that is at least as good as that which existed prior to the project).
- 5. Written concurrence must be obtained from the OWJs, documenting agreement with the above conditions. If the OWJs do not agree with a temporary occupancy exception determination, an analysis of use must be conducted.

8.4.4.3 *De minimis* Impact Determinations

De minimis impacts to parks are defined as those that do not "adversely affect the activities, features, and attributes" of the Section 4(f) property. To distinguish the activities, features, or attributes of a Section 4(f) park property that are important to protect from those which can be used without resulting in an adverse effect, FTA carefully considered the activities, features and attributes of the properties noted in this analysis. *De minimis* impacts on historic sites are defined as the determination of either "no adverse effect" or "no historic properties affected" in compliance with Section 106 of the National Historic Preservation Act.

A *de minimis* impact determination is made for a permanent incorporation or temporary occupancy (i.e. construction) of Section 4(f) property. A *de minimis* impact determination requires agency coordination and public involvement as specified in 23 CFR Part 774.5(b). For



park properties and recreation areas, the OWJs over the property must be informed of the intent to make a *de minimis* impact determination, after which an opportunity for public review and comment must be provided. After considering any comments received from the public, if the OWJs concur in writing that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection, then FTA may finalize the *de minimis* impact determination.

- Parks, Recreational Areas, and Refuges: In order for a *de minimis* impact determination to be approved for a Section 4(f) park property, the following conditions must be met:
 - The transportation use of the Section 4(f) property, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f);
 - The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) property; and
 - The OWJs over the property, after being informed of the public comments and FTA's intent to make the *de minimis* impact finding, concur in writing that the project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).
- **Historic Properties:** In order for a *de minimis* impact determination to be approved for a Section 4(f) historic property, the following conditions must be met:
 - The consulting parties identified as part of the Section 106 process must be consulted;
 - The public has been afforded an opportunity to review and comment on the effects of the project on the Section 4(f) property; and
 - MnHPO or the Tribal Historic Preservation Office (THPO), after being informed of the public comments and FTA's intent to make the *de minimis* impact finding, concur in writing with the *de minimis* determination.

8.4.4.4 Constructive Use

A constructive use involves no actual physical use of the Section 4(f) property via permanent incorporation of land or a temporary occupancy of land into a transportation facility. A constructive use occurs when the proximity impacts of a proposed project adjacent to or nearby a Section 4(f) property result in substantial impairment to the property's activities, features, or attributes that qualify the property for protection under Section 4(f). As a general matter, substantial impairment means that the value of the resource, in terms of its Section 4(f) purpose and significance, would be meaningfully reduced or lost. The types of impacts that may qualify as constructive use are addressed in 23 CFR Part 774.15. The degree of impact and impairment must be determined in consultation with the OWJs in accordance with 23 CFR Part 774.15(d)(3). In situations where a potential constructive use can be reduced below a substantial impairment level by the inclusion of mitigation measures, there will be no constructive use and Section 4(f) use will not apply. If there is no substantial impairment, notwithstanding an adverse effect determination (under Section 106),

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there is no constructive use and Section 4(f) use does not apply. A project's proximity to a Section 4(f) property is not in itself an impact that results in constructive use. Also, the assessment for constructive use is based on the impact that is directly attributable to the project under review, not the overall combined impacts to a Section 4(f) property from multiple sources over time.

8.5 Purpose and Need

The proposed BLRT Extension project's purpose and need is presented in **Chapter 1**. It is summarized in this section as reference for the Amended Draft Section 4(f) Evaluation.

8.5.1 Project Purpose

The purpose of the proposed BLRT Extension project is to provide transit service that would satisfy the long-term regional mobility and accessibility needs for businesses and the traveling public.

8.5.2 Project Need

The proposed BLRT Extension project is needed to effectively address long-term regional transit mobility and local accessibility needs while providing efficient, travel-time competitive transit service that supports economic development goals and objectives of local, regional, and statewide plans.

Due to continued increase in travel demand coupled with few highway capacity improvements planned for regional roadways in this area, congestion is expected to worsen by 2040. While transit investment is recognized regionally as one of the key strategies for managing congestion, transit would offer many other benefits to address the needs of residents and businesses in the proposed BLRT Extension project study area. Residents and businesses in the proposed BLRT Extension project study area need improved access to the region's activity centers to fully participate in the region's economy. Access to jobs in downtown Minneapolis and northbound reverse commute transit options to serve jobs in the growing suburban centers are crucial to continued economic vitality. Current transit options in the proposed BLRT Extension project study area offer a limited number of travel-time competitive alternatives to the single-occupant vehicle. Without major transit investments, it would be difficult to effectively meet the transportation needs of people and businesses in the corridor, manage highway traffic congestion in the proposed BLRT Extension project study area, and achieve the region's 2040 goal, as identified in the Metropolitan Council's (Council's) 2040 Transportation Policy Plan (2040 TPP), of increasing transit ridership by providing multi-modal options and encouraging land use to take advantage of transportation options.

Five factors contribute to the need for the proposed BLRT Extension project:

- Growing travel demand resulting from continuing growth in population and employment
- Increasing traffic congestion and limited fiscal resources
- People who depend on transit
- Limited transit service to suburban destinations (reverse commute opportunities) and timeefficient transit options
- Regional objectives for growth stated in *Thrive MSP 2040*



8.6 Description of the Project

The proposed BLRT Extension project would be a light rail transit (LRT) line of about 13 miles operating from downtown Minneapolis through the cities of Golden Valley, Robbinsdale, Crystal, and Brooklyn Park. The BLRT line would be an extension of the METRO Blue Line and would also connect to the METRO Green Line in downtown Minneapolis (see **Figure 8.6-1**).

On August 22, 2014, the proposed BLRT Extension project entered FTA's New Starts program, receiving formal approval to enter Project Development. The Preferred Alternative for the proposed BLRT Extension project, which resulted from refinements to the locally preferred alternative (LPA) during Project Development based on stakeholder input, technical analysis, as well as consideration of comments received on the Draft EIS, provides the basis for FTA's amended Section 4(f) evaluation and preliminary determinations.

8.6.1 Description of the Proposed BLRT Extension Project

The Preferred Alternative for the proposed BLRT Extension project (hereinafter referred to as the proposed BLRT Extension project) begins at the Target Field Station in downtown Minneapolis and follows Olson Memorial Highway (Trunk Highway [TH] 55) west to the BNSF Railway (BNSF) rail corridor just west of Thomas Avenue where it enters the BNSF rail corridor. Adjacent to the freight rail tracks, it continues in the rail corridor through the cities of Golden Valley, Robbinsdale, Crystal, and southern Brooklyn Park. The proposed BLRT Extension project crosses Bottineau Boulevard (County Road 81) at 73rd Avenue to run in the median of West Broadway Avenue (County State-Aid Highway 103) and terminates just north of TH 610 near the Target North Campus, as illustrated in Figure 8.6-1.

The proposed BLRT Extension project includes seven new LRT bridges: a 350-foot-long crossing of the Hennepin Energy Recovery Center (HERC) driveway, a 700-foot-long crossing of the ponds immediately north of Golden Valley Road, a 1,250-foot-long crossing of Grimes Pond in Robbinsdale, a 375-foot-long bridge over TH 100, a 1,250-foot-long bridge over the Canadian Pacific Railway rail tracks, a 925-foot-long bridge over the 73rd Avenue/Bottineau Boulevard intersection, and a 300 foot-long bridge over TH 610.

In addition, five roadway bridges would be reconstructed: a 375-foot-long Olson Memorial Highway bridge over the BNSF rail corridor, a 375-foot-long Plymouth Avenue bridge, a 120-foot-long Theodore Wirth Parkway bridge, a 215-foot-long Golden Valley Road bridge, and a 110-foot-long 36th Street bridge. The Olson Memorial Highway Bridge over Interstate Highway 94 (I-94) in Minneapolis and the I-94 Bridge over a BNSF rail corridor in Brooklyn Park would require modifications to accommodate the proposed BLRT Extension project.

In addition to the new LRT bridges and reconstructed roadway bridges, pedestrian bridges are proposed at the Bass Lake Road Station and the 63rd Avenue Station. The Bass Lake Road Station bridge would cross Bottineau Boulevard on the south side of Bass Lake Road and the 63rd Avenue Station bridge would cross Bottineau Boulevard on the north side of 63rd Avenue.

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Other general elements of the proposed BLRT transitway system are stations, operations and maintenance facilities, traction power substations, fare collection system, rail tracks, vehicles, train control, and operating frequencies.

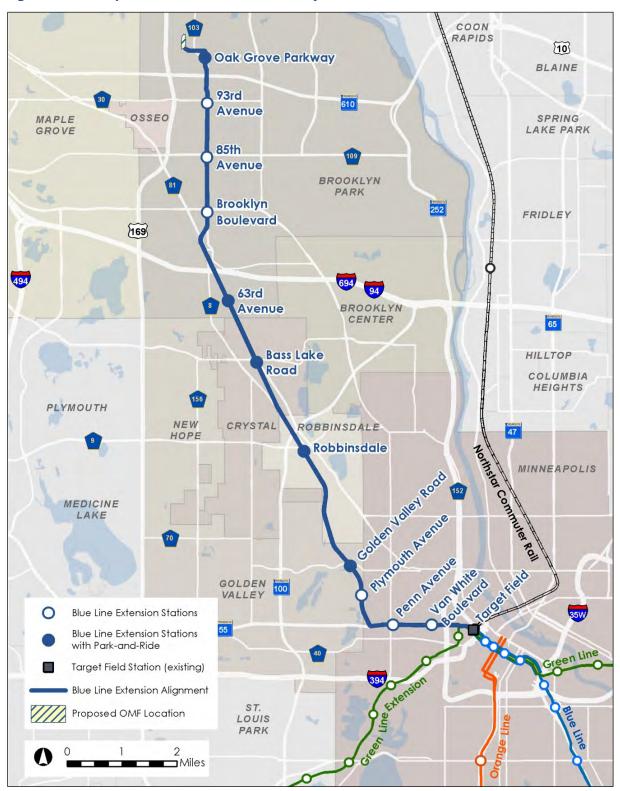
Eleven stations are planned for the proposed BLRT Extension project (see **Figure 8.6-1**). The station locations were selected based on connections with existing transit services and urban design principles including access and safety, public space availability, local plans, ridership catchment areas, and engineering feasibility. Potential station locations were presented to community members, local jurisdictions, and other stakeholders for input. In some cases, stations have been modified in response to comments. Five of the stations would include park-and-ride facilities, while the remaining stations would be walk-up facilities. Access plans for each station have been developed to enhance pedestrian and transit access for nearby communities. Ramps, stairs, elevators, and escalators in compliance with the Americans with Disabilities Act of 1990 (ADA), as amended, would be provided where needed.

The proposed BLRT Extension project's total cost will be approximately \$1.496 billion (in year-of-expenditure dollars).

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Figure 8.6-1. Proposed Blue Line Extension Project



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8.7 Use of Section 4(f) Properties in the Proposed BLRT Extension Project Study Area

This section addresses the Section 4(f) properties where the potential impacts to Section 4(f) properties differ from the Draft Section 4(f) Evaluation in March 2014, (Chapter 8 of the Bottineau Transitway Draft EIS). In Section 8.7.1, 12 publicly owned park and recreation areas are addressed; seven of these park and recreation areas have updated Section 4(f) impact assessments. Section 8.7.2 addresses 17 historic properties; two of these historic properties have updated Section 4(f) impacts assessments. All of the properties evaluated are listed and briefly described in Table 8.7-1.

Table 8.7-1. Section 4(f) Properties Evaluated in this Amended Draft Section 4(f) Evaluation

Property Name	Property Type	Location	Official with Jurisdiction	Section 4(f) Qualifying Description ^{1,2}				
Parks and Recreational Areas								
Harrison Park*	Park	503 Irving Avenue North (located south of the Highway 55 service road and west of Irving Avenue)	MPRB	6.9-acre public park				
TWRP	Park	3201 Glenwood Avenue North (located generally between a line extending along France Avenue on the west, Xerxes Avenue on the east, Interstate Highway 394 (I-394) on the south, and Golden Valley Road on the north)	MPRB	759-acre public park				
Glenview Terrace Park	Park	2351 Zenith Avenue North (located south of Manor Drive)	MPRB	17.5-acre public park				
Sochacki Park: Mary Hills Management Unit	Recreational Area	3500 June Avenue North (located between Golden Valley Road and 26th Avenue)	City of Golden Valley and JPA Board	15.7-acre public park				
Sochacki Park: Sochacki Management Unit	Park	4237 36th Avenue North (located between 26th Avenue and 34th Avenue)	City of Robbinsdale and JPA Board	37.4-acre public park				
South Halifax Park	Park	3101 Halifax Avenue North (located south of Lowry Avenue and west of Halifax Avenue)	City of Robbinsdale	4.0-acre public park				
Lee Park*	Park	3738 Lee Avenue North (located between 36th Avenue and 38th Avenue)	City of Robbinsdale	6.7-acre public park				
Triangle Park*	Park	4000 Orchard Avenue North (located at the intersection of Noble Avenue North & 40th Avenue North)	City of Robbinsdale	1.0-acre public park				



Table 8.7-1. Section 4(f) Properties Evaluated in this Amended Draft Section 4(f) Evaluation

Property Name	Property Type	Location	Official with Jurisdiction	Section 4(f) Qualifying Description ^{1,2}	
Becker Park	Park	6225 56th Avenue North (located in southwest quadrant of Bottineau Boulevard and Bass Lake Road and adjacent to the west side of the BNSF rail corridor)	City of Crystal	12.4-acre public park	
Unnamed park (identified as Tessman Park in the Draft EIS)*	Park	7890 Tessman Drive (located south of North Hennepin Community College)	City of Brooklyn Park	6.6-acre public park	
College Park*	Park	8233 West Broadway Avenue (located west of West Broadway Avenue, between 82nd Avenue and North College Park Drive)	City of Brooklyn Park	6.0-acre public park	
Park Property Adjacent to Rush Creek Regional Trail	Park	Located north of, and parallel to, 101st Avenue between Elm Creek Park Reserve in Hennepin County and Coon Rapids Dam Regional Park in Anoka County	TRPD	6.4 mile trail corridor	
Historic Resources					
St. Paul Minneapolis & Manitoba Railway Historic District*	Historic Property	Minneapolis	MnHPO	Eligible for NRHP	
Minneapolis Warehouse Historic District*	Historic Property	Bounded by 1st Avenue North, 1st Street North, 10th Avenue, and 6th Street – Downtown Minneapolis	MnHPO	Listed on NRHP	
Northwest Knitting Company Factory*	Historic Property	718 Glenwood Avenue, Minneapolis	MnHPO	Listed on NRHP	
Sumner Branch Library*	Historic Property	611 Emerson Avenue North, Minneapolis	MnHPO	Listed on NRHP	
Wayman African Methodist Episcopal Church*	Historic Property	1221 7th Avenue North, Minneapolis	MnHPO	Eligible for NRHP	
Labor Lyceum*	Historic Property	1800 Olson Memorial Highway, Minneapolis	MnHPO	Eligible for NRHP	
Floyd B. Olson Memorial Statue*	Historic Property	Olson Memorial Highway at Penn Avenue North, Minneapolis	MnHPO	Eligible for NRHP	

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Table 8.7-1. Section 4(f) Properties Evaluated in this Amended Draft Section 4(f) Evaluation

Property Name	Property Type	Location	Official with Jurisdiction	Section 4(f) Qualifying Description ^{1,2}	
Bridge No. L9327*	Historic Property	Theodore Wirth Parkway over Bassett Creek (in TWRP), Golden Valley	MnHPO	Eligible for NRHP	
Homewood Historic District*	Historic Property	Bounded by Penn Avenue, Oak Park Avenue, Xerxes Avenue, and Plymouth Avenue – Minneapolis	MnHPO	Eligible for NRHP	
Osseo Branch, St. Paul Minneapolis & Manitoba Railway Historic District	Historic Property	Minneapolis, Golden Valley, Crystal, Robbinsdale, Brooklyn Park, Osseo	MnHPO	Eligible for NRHP	
Grand Rounds Historic District	Historic Property	Minneapolis, Golden Valley, Robbinsdale	MnHPO	Eligible for NRHP	
Sacred Heart Catholic Church*	Historic Property	4087 West Broadway Avenue, Robbinsdale	MnHPO	Eligible for NRHP	
Robbinsdale Waterworks*	Historic Property	4127 Hubbard Avenue North, Robbinsdale	MnHPO	Eligible for NRHP	
Hennepin County Library – Robbinsdale Branch*	Historic Property	4915 42nd Avenue North, Robbinsdale	MnHPO	Listed on NRHP	
West Broadway Avenue Residential Historic District*	Historic Property	West Broadway Avenue, between 42nd Avenue North and TH 100, Lakeland Avenue North to BNSF right-of-way – Robbinsdale	MnHPO	Eligible for NRHP	
Jones-Osterhus Barn*	Historic Property	4510 Scott Avenue North, Robbinsdale	MnHPO	Eligible for NRHP	
Minneapolis & Pacific/Soo Line Railway Historic District*	Historic Property	Crystal	MnHPO	Eligible for NRHP	

^{*} Denotes Section 4(f) resource where FTA's preliminary determination has not changed since the publication of

the March 2014 Draft Section 4(f) Evaluation.

All listed parks are publicly owned, publicly accessible, and of local significance.

All acreages in this table are approximate. Theodore Wirth Cultural Landscape Study (see **Appendix H**) is the source of the number of acres and this acreage includes Theodore Wirth Parkway.



8.7.1 Publicly Owned Parks and Recreational Areas

Table 8.7-2 summarizes FTA's revised assessment of Section 4(f) properties and also includes how many acres of each property would be used under the proposed BLRT Extension project (compared to the property's acreage). Only parks where FTA's assessment has changed from the March 2014 Draft Section 4(f) Evaluation are listed in **Table 8.7-2**; however, all Section 4(f) parks are discussed in **Section 8.7.1**.

Table 8.7-2. Summary of Preliminary Section 4(f) Park and Recreational Property Impacts¹

Section 4(f) Property	Direct Use	De minimis Use	Temporary Occupancy	Existing Property Magnitude ²	Acres Temporary Easement	Acres Permanently Used	Percent of Property Used
TWRP		Х		759 acres	9.2	2.1	<1
Glenview Terrace Park		X		17.5 acres	0.25	0.01	<1
Sochacki Park: Mary Hills Management Unit			Х	15.7 acres	0.57	0	0
Sochacki Park: Sochacki Management Unit			X	37.4 acres	5.6	0	0
South Halifax Park			Χ	4.0 acres	0.7	0	0
Becker Park			Х	12.4 acres	0.1	0	0
Park Property Adjacent to Rush Creek Regional Trail			X	6.4 miles	No use of trail itself; 1.1 acres of temporary easement of property associated with trail	0	0

¹ See Section 8.4 of this report for definitions of the potential types of Section 4(f) uses.

8.7.1.1 Harrison Park

Section 4(f) Property Description

Harrison Park is located south of the Olson Memorial Highway service road and west of Irving Avenue (see **Figure 8.7-1**). Amenities provided by this 6.9-acre park include baseball, softball, football, and soccer fields, a basketball court, biking and walking paths, a picnic area, restroom facilities, a wading pool, and a playground. The park is under the jurisdiction of the Minneapolis Park and Recreation Board (MPRB). Because the park is a publicly owned, publicly accessible park of local significance, Harrison Park is considered by FTA to be a Section 4(f) protected property.

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² All acreages in this table are approximate. Theodore Wirth Cultural Landscape Study (see **Appendix H**) is the source of the number of acres and this acreage includes Theodore Wirth Parkway.



Figure 8.7-1. Harrison Park





Potential Impacts to Harrison Park

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in a permanent incorporation of land from Harrison Park. As such, there would not be an impact on the property.

Temporary Occupancy

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in the temporary use of property from Harrison Park during construction.

Potential Constructive Use

Existing bicycle, pedestrian, and vehicular access to the park would be maintained under the proposed BLRT Extension project. Changes in development density in areas surrounding the proposed Van White Boulevard and Penn Avenue transit stations could result in an increase in Harrison Park usage, which could have potential for both positive and negative consequences. The proposed BLRT Extension project would result in changes in the park's setting and a visitor's visual experience through the introduction of the light rail alignment north of the park. The visual changes and impacts would not alter or impair the overall use or function of Harrison Park. Although the sound of light rail trains could be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria.

Coordination

MPRB, as the OWJ, has been involved in design meetings for the proposed BLRT Extension project, and is aware that there are no permanent or temporary easements required from the park site. The Council has coordinated with the city of Minneapolis as well given their interest in the park.

8.7.1.2 Theodore Wirth Regional Park

Section 4(f) Property Description

Theodore Wirth Regional Park (TWRP; 3201 Glenwood Avenue North) is located generally between a line extending along France Avenue on the west (France Avenue is discontinuous and exists north and south of the park only), Xerxes Avenue on the east, I-394 to the south, and Golden Valley Road on the north. At 759 acres, TWRP is the largest park in the Minneapolis Park System. The northern two-thirds of the park lie within the municipal boundary of Golden Valley, while the southern third of the park lies within the City of Minneapolis. The park can be accessed from the north and south by Theodore Wirth Parkway and Cedar Lake Parkway. From the east and west, the park can be accessed via Glenwood Avenue North, Plymouth Avenue, Golden Valley Road, and the Luce Line Trail.

TWRP is recognized for its variety of year round recreational activities as well as its natural resource features. The park has trails for walking, running, dog walking, biking, off-road biking, and skiing. Summer activities include picnicking, swimming, basketball, tennis, volleyball, golf, and disc golf. Winter activities include snowboarding, sledding, tubing, cross-country skiing, and snowshoeing. The park's natural amenities include wetlands, prairie, and woodland resources. Within these natural areas, TWRP provides opportunities for quietude and nature observation,

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particularly in the peaceful setting along portions of the park's western boundary. These natural areas of TWRP are consistent with historic and current master plans for the park.

The Eloise Butler Wildflower Garden, the oldest public wildflower garden in the nation, is located within the southern portion of the park. TWRP is also the site of the Quaking Bog, a five-acre acid bog that is one of the southernmost bogs in Minnesota. The wildflower garden and bog are situated about a half-mile southwest of where the proposed BLRT Extension project transitions from the BNSF rail corridor to Olson Memorial Highway.

Existing Facilities: TWRP has the following existing natural amenities and facilities: Bassett Creek, Wirth Lake and Birch Pond, a fishing pier and boat launch, a swimming beach, a floating boardwalk, volleyball courts, a half basketball court, tennis court, a playground, picnic facilities, indoor picnic pavilion, restrooms, a snowboard park, a Swiss chalet–style clubhouse, 18-hole and par-three golf courses, an 18-hole disc golf course, and the J.D. Rivers' Children's Garden. The Eloise Butler Wildflower Garden and Bird Sanctuary, the Quaking Bog, and Birch Pond are situated at the south end of the park.

Planned Facilities: On February 18, 2015, MPRB adopted the Theodore Wirth Regional Park Master Plan (TWRP Master Plan). The plan focuses on two primary outcomes: (1) TWRP's unique natural and ecological resources would be protected and enhanced and (2) TWRP's natural resources would be a basis for recreational and visitor experiences (MPRB, 2015). The plan depicts proposed future amenities including walking paths, an off-road cycling trail, golf course improvements, an event cycling trail and stadium, along with various improvements to existing park facilities.

Figure 8.7-2 depicts locations of existing and planned TWRP facilities.

Potential Impacts to TWRP

The proposed BLRT Extension project would result in the permanent incorporation of approximately 2.1 acres of property from TWRP (see Figure 8.7-3 through Figure 8.7-5). In particular, an approximate 1.9-acre portion of designated parkland, located in the southwest corner of the Golden Valley Road and Theodore Wirth Parkway intersection, would be affected with the construction of a transit station and park-and-ride lot. This triangle-shaped portion of TWRP is unimproved with no existing or planned recreational amenities. The 1.9 acres are isolated from the larger segments of TWRP as it is surrounded by transportation infrastructure (Golden Valley Road, Theodore Wirth Parkway, and the existing rail corridor). An additional 0.2 acre would need to be permanently incorporated and would occur immediately adjacent to the eastern edge of rail corridor in an area just north of Plymouth Avenue. This narrow strip of parkland is needed to construct the transitway and associated facilities, including drainage improvements. This impact occurs on land associated with TWRP, but is on an unimproved area that is separated from the primary parkland by the rail corridor.

During construction, approximately 9.2 acres of temporary construction easements would be required within TWRP to grade land around the proposed BLRT Extension project corridor, to provide access during construction, and to provide floodplain and wetland mitigation. The land encompassed by temporary construction easements includes existing open space (e.g. wooded and



grassland areas adjacent to the rail corridor and Bassett Creek). A short segment of an existing north-south trail that parallels the west side of the rail corridor (a portion of the trail is located on the private rail corridor right-of-way) would be realigned along with a shift of an approximately 400-foot stretch of Bassett Creek as part of the replacement of the Plymouth Avenue Bridge. Access to the park would remain open throughout construction.

A portion of TWRP property just west of the proposed BLRT Extension project corridor and just north of Olson Memorial Highway, along with adjacent private property, would be excavated for floodplain and wetland mitigation. The design details of the excavation and grading of the site would be coordinated with MPRB staff to ensure a design that is in harmony with the park setting.

All wetland impacts and mitigation activities have been reviewed and approved by the Minnesota Wetlands Technical Evaluation Panel (TEP)¹ and the US Army Corps of Engineers (USACE). USACE issued approval of National Environmental Policy Act (NEPA)/404 Merger Concurrence Point 4² on June 16, 2016.

The Council considered modifications to the alignment to minimize effects on park property. However, given the limited area within the BNSF rail corridor and the proximity of the park property, alignment shifts were largely not effective.

The total permanent and temporary easements on TWRP property necessary for building the proposed BLRT Extension project constitute approximately one percent of the total park property; permanent easements needed for the proposed BLRT Extension project are significantly less than one percent of the 759-acre park.

In consideration of the permanent and temporary uses of TWRP property, the proposed BLRT Extension project has evaluated park-related enhancements as measures to minimize harm to the park resource. These enhancements include (see also **Figure 8.7-4** and **Figure 8.7-5**):

- Relocation of the TWRP trail adjacent to Bassett Creek; the portion of the existing trail that is located within BNSF right-of-way would be shifted west to lie entirely within TWRP property.
- Construction of a stair access and bridge over Bassett Creek to connect the previously mentioned trail to Plymouth Avenue, thereby improving connectivity between the TWRP trail system and the proposed BLRT Extension project Plymouth Avenue Station.
- Construction of a trail connection between the existing trail on the west side of Theodore Wirth Parkway and the trail system in Sochacki Park just north of Golden Valley Road. The proposed trail connection would run along the west side of the rail corridor, pass under the Golden Valley

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¹ The BLRT Extension project TEP includes representatives from the cities along the corridor, the Bassett Creek Watershed Management Commission, the Shingle Creek/West Mississippi Watershed Management Commission, the Hennepin County Soil and Water Conservation District, and the Minnesota Board of Soil and Water Conservation. MPRB staff have also participated in TEP meetings.

² Concurrence Point 4, in the combined or "merged" NEPA review process and Section 404 of the Clean Water Act permitting process, is an agreement between USACE and FTA regarding the compensatory mitigation requirements for wetland impacts, which have been submitted to USACE as part of the Section 404 permit process for review and approval.



Road bridge, curve around the wetland to the north of Golden Valley Road, and connect to the existing trail system in Sochacki Park: Mary Hills Management Unit.

- Construction of a new trailhead incorporated into the Golden Valley Road Station park-and-ride at the intersection of Theodore Wirth Parkway and Golden Valley Road. The trailhead would provide a convenient access point to the MPRB trail adjacent to Theodore Wirth Parkway, and to the proposed Bassett Creek Trail, a TRPD trail that would run along Golden Valley Road at this location. The trailhead would also provide wayfinding signs to help direct pedestrians and bicyclists to park resources in the area.
- Reconstruction of the Theodore Wirth Parkway bridge over the BNSF rail corridor; this bridge is currently owned by MPRB.
- Reconstruction of the Theodore Wirth Parkway/Golden Valley Road intersection, including intersection features that would enhance pedestrian and bicycle safety.
- Minimization of visual effects through ongoing coordination regarding design of station elements and retaining walls.

Most of the park and recreation area of TWRP property will not be directly affected by the proposed BLRT Extension project. There will be no permanent effects on park property which accommodates the golf course, trails, and other recreational facilities from implementation of the proposed BLRT Extension project. Temporary impacts will be limited to the existing trail adjacent to Bassett Creek which will be reconstructed as part of the proposed BLRT Extension project, relocating the trail to the west outside of the BNSF right-of-way. In addition, the proposed BLRT Extension's project infrastructure will generally be screened from view from the TWRP recreational areas due to retained trees and existing natural view sheds located between the proposed alignment and the park areas.

The portion of the TWRP property that will have a permanent use by the proposed BLRT Extension project includes some natural vegetation; however, that area is generally isolated from the larger park and recreation areas located in the western and southern portions of the property. Further, the area that will be permanently used by the proposed BLRT Extension project is not a recreational feature of the TWRP, and is not planned to be incorporated into recreational use in the TWRP Master Plan. Therefore, the permanent acquisition of 2.1 acres of TWRP would not adversely affect the activities, features, or attributes which qualify TWRP for protection under Section 4(f).

Construction activities within TWRP property will be closely coordinated with MPRB to help avoid and minimize effects on recreational activities within the park property. The Council will also provide MPRB and the public with ongoing notification of construction activities within the open space, such as the timing and location of heavy construction activities and detours. All areas of the TWRP property that will be affected by proposed BLRT Extension project's construction activities will be restored to existing conditions or better and restoration plans will be developed and implemented in consultation with MPRB.



Figure 8.7-2. Existing and Planned TWRP Facilities

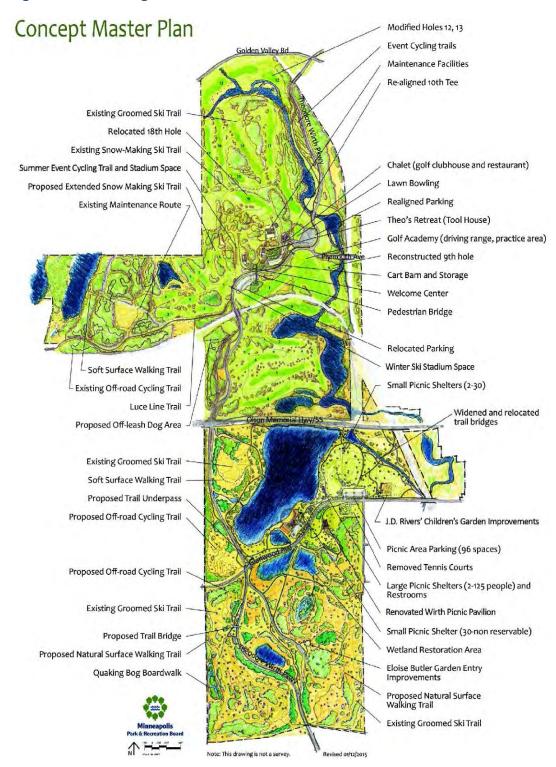


Figure from TWRP Master Plan, MPRB, February 2015

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Figure 8.7-3. TWRP: Overview

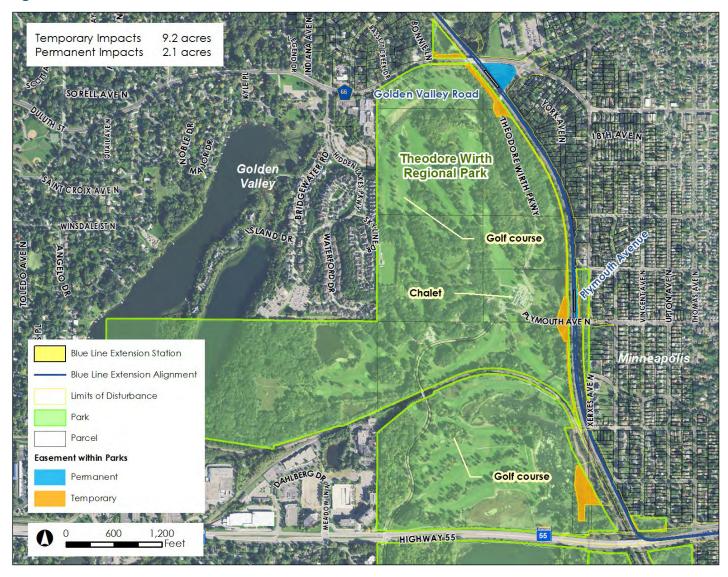




Figure 8.7-4. TWRP: Plymouth Avenue Station Area



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Figure 8.7-5. TWRP: Golden Valley Road Station Area





Coordination

Coordination between FTA, the Council, and MPRB is ongoing regarding anticipated impacts to TWRP that would result from constructing the proposed BLRT Extension project. Documentation showing these coordination efforts is provided in **Appendix J**. The documentation includes notes from meetings with MPRB staff discussing park impacts and mitigation options, and a November 2015 MPRB action in support of the proposed BLRT Extension project that includes mitigation and continuing coordination components.

8.7.1.3 Glenview Terrace Park

Section 4(f) Property Description

Glenview Terrace Park is located in the City of Golden Valley south of Manor Drive and west of Zenith Avenue, and is owned by MPRB. The 17.5-acre park includes playground equipment, two lighted tennis courts, open space, and walkways. The rail corridor forms the southwestern boundary of the park. Active uses of the park are buffered from the proposed BLRT Extension project by a wetland area and ravine that is heavily wooded.

Potential Impacts to Glenview Terrace Park

As documented in the Draft EIS and Draft Section 4(f) Evaluation, FTA had preliminarily determined that there would be "No Use" of Glenview Terrace Park. However, since publication of the Draft Section 4(f) Evaluation, the Council has refined the design of the proposed BLRT Extension project, which results in a permanent use of Glenview Terrace Park. In particular, a 0.01-acre unimproved portion of designated parkland (currently a wetland) would be impacted with the operation of the proposed BLRT Extension project (see Figure 8.7-6), specifically to accommodate an LRT bridge over the wetland area. No existing and/or planned park amenities would be affected and all features, connections, and activities at the park would be maintained throughout construction.

The improvements associated with the proposed BLRT Extension project in the area of Glenview Terrace Park include the Golden Valley Road Station and reconstruction of the Golden Valley Road Bridge. Several design adjustments have been made as a result of coordination with staff from the local jurisdictions affected by the proposed bridge structure and with input from representatives with BNSF Railway. Specifically, BNSF Railway has indicated the need to separate the freight rail tracks from the LRT tracks underneath the Golden Valley Road Bridge. This would be accomplished by placing a bridge pier between the tracks of the freight rail and transit line. The refined Golden Valley Road bridge design requires a slightly wider footprint for the proposed LRT bridge over the wetland. This slight shift results in the 0.01-acre permanent impact to Glenview Terrace Park.

The wetland impact in this area has been minimized through preliminary design efforts. At the time of the publication of the Draft Section 4(f) Evaluation in 2014, the freight rail and LRT corridor would have been constructed on fill through the middle of the wetland. The current design allows the existing freight rail to stay in place, and would construct the LRT on a bridge over the wetland. Therefore the wetland impact in this area has been reduced to the cross-section of the bridge piers. The wetland impact minimization strategy at this location has been discussed with the Minnesota

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Wetlands TEP and USACE. USACE has agreed to this approach through its approval of NEPA/404 Merger Concurrence Point 4 on June 16, 2016.

During construction, approximately 0.25 acre of temporary construction easements within the park would be required for access and construction work along the proposed BLRT Extension project (see **Figure 8.7-6**). Specifically, the work area is needed to enable construction of the new BLRT tracks. The area of proposed temporary easements is currently open water (wetland), wooded, and undeveloped. Glenview Terrace Park and all existing park features, connections, and activities would be maintained throughout construction.

Most of the park and recreation area of Glenview Terrace Park property will not be directly affected by the proposed BLRT Extension project. The park property which accommodates the playground areas, tennis courts, open space and walkways will not be altered by the proposed BLRT Extension project, either permanently or temporarily. In addition, the proposed BLRT Extension's project infrastructure will generally be screened from view from the Glenview Terrace Park recreational areas due to retained trees and existing natural view sheds located between the proposed alignment and the park areas.

The websites for MPRB and the city of Golden Valley indicate that the features and amenities of Glenview Terrace Park include biking paths, a picnic area, walking paths, playground equipment, lighted tennis courts, and game squares. These amenities are located in the central and eastern portion of the park property. The park amenities are at an elevation of approximately 900 feet above mean sea level (amsl). The 0.01 acre required for the proposed BLRT Extension project is isolated from the recreational features. Specifically, the area to be impacted is at an elevation of approximately 838 feet amsl, is at the western edge of the park property immediately adjacent to existing transportation right-of-way, is over 875 feet from the recreational amenities at the park, and is visually screened from the recreational features by the presence of a dense stand of mature trees.

Construction activities within Glenview Terrace Park property will be closely coordinated with MPRB and city of Golden Valley to help avoid and minimize effects on recreational activities within the park property and provide continued access to park users. The Council will also provide MPRB, the city of Golden Valley, and the public with ongoing notification of construction activities within the open space, such as the timing and location of heavy construction activities and detours. All areas of the Glenview Terrace Park property that will be affected by proposed BLRT Extension project's construction activities will be restored to existing conditions or better and restoration plans will be developed and implemented in consultation with MPRB and the city of Golden Valley.

The Council considered widening the rail corridor away from Glenview Terrace Park, but this would result in the need to shift the freight rail tracks southwest and result in further impacts to Sochacki Park: Mary Hills Management Unit (another Section 4(f) Resource). In coordination with the city of Golden Valley and MPRB, the Council has made efforts to help avoid, minimize, and mitigate impacts to Glenview Terrace Park. As part of the measures to minimize harm to the park,



Figure 8.7-6. Glenview Terrace Park



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the Council would provide public awareness of and access to the park property. Specifically, the Council would provide pedestrian and bicycle improvements at the nearby Theodore Wirth Parkway/Golden Valley Road intersection and incorporate wayfinding signs at the trailhead that would direct people to various park system amenities, including Glenview Terrace Park.

Coordination

FTA has coordinated with MPRB as the OWJ regarding the use of Glenview Terrace Park and associated minimization and mitigation measures, and has discussed the proposed *de minimis* use determination for the park. The Council has coordinated with the city of Golden Valley as well given their interest in the park.

The Council would continue to coordinate with FTA, MPRB, and the city as the proposed BLRT Extension project advances regarding potential refinements to minimization and mitigation strategies.

8.7.1.4 Sochacki Park: Mary Hills Management Unit

Section 4(f) Property Description

This Section 4(f) property is located between Golden Valley Road and 26th Avenue in Golden Valley (see **Figure 8.7-7**). The existing rail corridor borders the east side of the recreational property. Sochacki Park: Mary Hills Management Unit encompasses 15.7 acres of wooded open space. Other recreational features include trails, picnic areas, and benches. A meandering north-south trail provides a connection between the Mary Hills and Sochacki management units. The Mary Hills Management Unit is under the jurisdiction of the city of Golden Valley and the JPA partners.

Potential Impacts to Sochacki Park: Mary Hills Management Unit

The proposed BLRT Extension project would not result in a permanent incorporation of land from the Mary Hills Management Unit; however, there would be a temporary easement of approximately 0.57 acre along the eastern border of the Sochacki Park: Mary Hills Management Unit to facilitate the proposed BLRT Extension project construction activities and stormwater conveyance improvements (see **Figure 8.7-7**).

The overall duration of construction for the entire proposed BLRT Extension project is approximately 3 years. The duration of the construction activities for the portion affecting the Sochacki Park: Mary Hills Management Unit is estimated to occur for approximately 18 calendar months—additional time may be needed for restoration activities, depending on variables, such as seasonal timing of the activities and weather conditions. There would be no change in ownership of the parkland that would be temporarily occupied.

Construction activities within the Sochacki Park: Mary Hills Management Unit property will be adjacent to the BNSF right-of-way and away from the recreational areas of the park property. Construction activities include:

- Clearing and grading along the eastern edge of the park to match grade elevations for the proposed BLRT Extension project corridor and improve existing stormwater drainage; and
- Restoration of vegetation within Sochacki Park: Mary Hills Management Unit property.



Figure 8.7-7. Sochacki Park: Mary Hills Management Unit



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All areas of the Sochacki Park: Mary Hills Management Unit property that will be affected by proposed BLRT Extension project's construction activities will be restored to existing conditions or better and restoration plans will be developed and implemented in consultation with the city of Golden Valley and the JPA.

The Sochacki Park: Mary Hills Management Unit would be accessible to the public throughout construction via existing trails and paths. There would be no permanent change to the Sochacki Park: Mary Hills Management Unit as a result of proposed BLRT Extension project actions.

None of the activities, features, or attributes of the Sochacki Park: Mary Hills Management Unit would be permanently affected nor would temporary construction actions permanently interfere with visitors using the park as they do currently. Council staff would coordinate with staff from the city of Golden Valley and the JPA to avoid park activities identified by the city that should be considered when setting the schedule for construction activities. Impacts related to temporary changes to access would be mitigated by development of a Construction Communication Plan, which would include advance notice of construction activities and highlighting trail closures and detour routes.

The portion of the park to be temporarily occupied during construction would be restored to existing conditions or better. A new multi-use trail under the Golden Valley Road Bridge is proposed that would provide a connection between the Sochacki Park: Mary Hills Management Unit and TWRP to the south (see **Figure 8.7-7**). The existing trail within the Sochacki Park: Mary Hills Management Unit would be widened from eight feet to 10 feet, as requested by the city and the JPA.

As part of coordination during proposed BLRT Extension project development, the Council has discussed potential impacts to Sochacki Park: Mary Hills Management Unit with the city of Golden Valley and the JPA. The city of Golden Valley and the JPA have agreed in writing that the mitigation commitments listed above (the restoration activities, the widening of the existing trail, and the construction of a trail connection to TWRP) are reasonable mitigation for occupying park property during LRT construction activities. Following the comment period on this Amended Draft Section 4(f) Evaluation and pending the review of comments received, FTA and the Council will seek written concurrence from the city of Golden Valley and the JPA on the temporary occupancy determination.

Potential Constructive Use

Changes in development density in areas surrounding proposed transit stations could result in increased use of the Mary Hills Management Unit, which could have potential for both positive and negative consequences.

The proposed BLRT Extension project would also result in changes to the property's setting and a visitor's visual experience, resulting in a moderately-low and low impact to views into and from the nature area, respectively. In particular, some users' visual experiences could be perceived as adversely affected by the introduction of light rail trains, located immediately east of the property. However, the visual changes and impacts would not alter or impair the overall use or function of the property. The alignment of the proposed BLRT Extension project in the area adjacent to the Mary Hills Management Unit would parallel the existing freight rail line. Although the sound of light



rail trains would be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria.

In summary, the proximity impacts of the proposed BLRT Extension project on Mary Hills Management Unit would not substantially impair the qualifying activities, features, or attributes of the park.

Coordination

During the design process, proposed BLRT Extension project staff consulted with the city of Golden Valley, the owner of the Mary Hills Management Unit, as well as the city of Robbinsdale and TRPD (the other two members of the JPA), on design adjustments to the proposed light rail alignment and associated facilities within the vicinity of the Mary Hills Management Unit.

8.7.1.5 Sochacki Park: Sochacki Management Unit

Section 4(f) Property Description

The Sochacki Park: Sochacki Management Unit is situated between 26th Avenue and 34th Avenue in the City of Robbinsdale. The park is bordered by June Avenue and residential backyards on the west, and the rail corridor on the east. The 37.4-acre park primarily provides passive recreational activities. Existing features within the Sochacki Park: Sochacki Management Unit include a picnic area, picnic pavilion, and gravel surface trails. An existing north-south path provides a connection to the Sochacki Park: Mary Hills Management Unit, which is located immediately south of the Sochacki Park: Sochacki Management Unit. The park is under the jurisdiction of the city of Robbinsdale and the JPA.³

Potential Impacts on Sochacki Park: Sochacki Management Unit

The proposed BLRT Extension project would not result in a permanent incorporation of land from the Sochacki Park: Sochacki Management Unit; however it would require a temporary easement of approximately 5.6 acres along the western edge of the Sochacki Park: Sochacki Management Unit to provide access and construction staging for the construction of a new LRT bridge structure across Grimes Pond (see **Figure 8.7-8**). All non-park construction staging options have been considered and proven to not be feasible because of impacts to residential property adjacent to the BNSF right-of-way.

The overall duration of construction for the entire proposed BLRT Extension project is approximately 3 years. The duration of the construction activities for the portion affecting the Sochacki Park: Sochacki Management Unit is estimated to occur for approximately 18 calendar months—additional time may be needed for restoration activities, depending on variables, such as seasonal timing of the activities and weather conditions. There would be no change in ownership of the parkland that would be temporarily occupied.

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³ See Section 8.2 for information regarding the JPA and the operation of Sochacki Park and Sochacki Park: Mary Hills Management Unit.



Figure 8.7-8. Sochacki Park: Sochacki Management Unit, and South Halifax Park





The portions of the Sochacki Park: Sochacki Management Unit to be temporarily occupied during construction of the LRT bridge over Grimes Pond include areas of open space with existing prairie and wooded vegetation. The proposed scope of work for the Sochacki Park: Sochacki Management Unit involves construction activities over multiple areas of the park and includes the following components:

- Approximately 5.6 acres of park property would be subject to a temporary easement for staging/laydown areas on both the north and south sides of North Rice Pond, and for a temporary construction access road from the northern border of the park to the northern and southern staging areas. This road would generally follow the current road/path alignment to minimize additional impacts to park trees and other vegetation. These temporary construction facilities would be used for the construction of the new LRT bridge across Grimes Pond.
- A temporary fence would be erected along both sides of the existing access road and a new pedestrian path would be added to just west of the access road provide a safe north-south connection through the park while construction vehicles utilize the access road during construction of the new LRT Bridge. Vehicular access to the southern end of the park would be limited during construction. However, pedestrian access would be maintained throughout the temporary occupancy.
- Minor improvements to the existing narrow access road would be made in order to accommodate the structural capacity needs of construction vehicles/equipment and to provide several bypass areas to allow two-way traffic an opportunity to safely pass when entering/exiting the park property.

All areas of the Sochacki Park: Sochacki Management Unit property that will be affected by proposed BLRT Extension project's construction activities will be restored to existing conditions or better and restoration plans will be developed and implemented in consultation with the city of Robbinsdale and the JPA. The park would remain accessible to the public throughout construction. Pedestrians would still be allowed to access the park from all existing access points. A new paved trail is proposed along the western edge of the north-south park access road, and all natural trails would remain open. The portion of the park to be temporarily occupied does not preclude the use of park resources by the public. Therefore, the nature and magnitude of changes to the Sochacki Park: Sochacki Management Unit are considered minimal.

None of the aforementioned activities, features, or attributes of the Sochacki Park: Sochacki Management Unit would be permanently impacted nor would temporary construction actions at the park permanently interfere with visitors utilizing the park as they do currently. Council staff would coordinate with staff from the city of Robbinsdale and the JPA to avoid park activities identified by the city that should be considered when setting the schedule for construction activities. Impacts related to temporary changes to access would be mitigated by development of a Construction Communication Plan, which would include advance notice of construction activities and highlighting park road and trail closures and proposed detour routes.

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The portion of the park to be temporarily occupied during construction would be restored to existing conditions or better—this includes the following mitigation commitments (see **Appendix J** for a copy of the JPA Board action):

- Removal of existing vegetation as agreed to by Council staff and JPA staff within the restoration zone, defined as A) the southern construction staging area, and B) the northern staging area (see Map Attachment A), blending into the adjacent disturbed areas in the northeast quadrant of the park.
- Removal and disposal of all surface rubble within the restoration zone, in accordance with the Minnesota Pollution Control Agency (MPCA) permitting requirements.
- Addition of clean fill and top soil in the restoration zone in accordance with MPCA permitting requirements and consistent with the re-use of this area as guided by stakeholders.
- Development and implementation of a revegetation plan approved by the JPA staff. The plan would address all areas disturbed by construction activities, including secondary construction activities in BNSF right-of-way, such as moving the Xcel power lines. In addition, the plan would identify practicable additional thickening of the vegetative buffer such as plantings of evergreen trees between the park and the LRT Corridor for the purposes of reducing visual impacts of the LRT on park visitors.
- In the southern staging area, North Rice Lake water edge restoration work and vegetation plantings to provide learning opportunities for park users (design and species to be determined [TBD]).
- Restoration of the existing paved interior road to provide for safe two way traffic.
- Removal or replacement of the northern parking lot to be determined in consultation with IPA staff.
- Reconstruction and expansion of the interior paved parking lot (exact site TBD in consultation with JPA staff), to include room for a school bus turnaround.
- Clearing, revegetation and fencing of an area immediately east and north of the interior parking lot within the northern staging area for future use as a dog off leash area.
- Providing practicable utility services to a site adjacent to the interior parking lot for future development of a bathroom/storm shelter, and drinking water fountain.
- Ground preparation for a future education shelter sized for 50 students in a location TBD.
- Construction of a water education platform on North Rice Lake.
- Redevelopment of a safe 10-foot-wide paved trail through the length of the park, running from the northern entrance to the current trail terminus by Bonnie Lane; with restoration along the trail edge as needed.
- Construction of an off-road trail connection from the existing terminus of the Sochacki Park trail at Bonnie Lane, crossing underneath the reconstructed Golden Valley Road Bridge and connecting to the existing trail in TWRP.



Potential Constructive Use

Changes in development density in areas surrounding proposed transit stations could result in an increase in Sochacki Park: Sochacki Management Unit usage, which could have potential for both positive and negative consequences.

The proposed BLRT Extension project would also result in changes to the park's setting and a visitor's visual experience, resulting in a moderately-low and low impact to views into and from the park, respectively. In particular, some users' visual experiences could be perceived as adversely affected by the introduction of light rail trains located immediately east of the park. However, the visual changes and impacts would not alter or impair the overall use or function of the park. The alignment of the BLRT in the area adjacent to the Sochacki Park: Sochacki Management Unit would parallel the existing BNSF rail corridor. Although the sound of light rail trains would be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria.

In summary, the proximity impacts of the proposed BLRT Extension project on the Sochacki Park: Sochacki Management Unit would not substantially impair the qualifying activities, features, or attributes of the park.

Coordination

During the proposed BLRT Extension project's preliminary design process, staff consulted with the city of Robbinsdale, the park owner, on design adjustments to the proposed light rail alignment and associated facilities within the vicinity of the Sochacki Park: Sochacki Management Unit. As part of coordination during project development, the Council has discussed potential impacts to Sochacki Park: Sochacki Management Unit with the city of Robbinsdale and the JPA. The city and the JPA have agreed in writing that the mitigation commitments listed above are reasonable mitigation for occupying park property during LRT construction activities. Following the comment period on this Amended Draft Section 4(f) Evaluation and pending the review of comments received, FTA and the Council will seek written concurrence on the temporary occupancy determination from the JPA Board and the city of Robbinsdale.

8.7.1.6 South Halifax Park

Section 4(f) Property Description

The park is located southwest of 31½ Avenue North and Halifax Avenue in Robbinsdale. The existing rail corridor forms the western boundary of the park. The 6.6-acre park has playground equipment, half-court basketball, a picnic area, and trails. The park is under the jurisdiction of the city of Robbinsdale. As the park is a publicly owned, publicly accessible park of local significance, South Halifax Park is considered by FTA to be a Section 4(f) protected property.

Potential Impacts to South Halifax Park

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in a permanent incorporation of land from South Halifax Park; however the proposed BLRT Extension project would require a temporary easement of approximately 0.70 acre

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along the western border of South Halifax Park to facilitate project-related construction activities (see **Figure 8.7-8**).

The overall duration of construction for the entire proposed BLRT Extension project is approximately 3 years. The duration of the construction activities for the portion affecting South Halifax Park is estimated to occur for approximately 18 calendar months—additional time may be needed for restoration activities, depending on variables, such as seasonal timing of the activities and weather conditions. There would be no change in ownership of the parkland that would be temporarily occupied.

The area of South Halifax Park to be occupied during construction is primarily open space (open water wetland) with no improved park amenities (see **Figure 8.7-8**). The proposed LRT bridge across Grimes Pond is located just northwest of South Halifax Park and temporary occupancy of 0.70 acre of the park is necessary in order to access the construction area and construct the improvements. South Halifax Park would still be accessible to the public throughout construction via existing roadways and paths. There would be no permanent change to South Halifax Park as a result of proposed BLRT Extension project actions. All areas of the South Halifax Park property that will be affected by proposed BLRT Extension project's construction activities will be restored to existing conditions or better and restoration plans will be developed and implemented in consultation with the city of Robbinsdale.

None of the activities, features, or attributes of South Halifax Park would be permanently impacted nor would temporary construction actions permanently or temporarily interfere with visitors utilizing the park as they do currently. Council staff would coordinate with staff from the city of Robbinsdale to avoid park activities identified by the city that should be considered when setting the schedule for construction activities. Impacts related to temporary changes to access would be mitigated by development of a Construction Communication Plan, which would include advance notice of construction activities and highlighting sidewalk closures and detour routes.

The portion of the park to be temporarily occupied during construction would be restored to existing conditions or better.

Potential Constructive Use

Changes in development density in areas surrounding proposed transit stations could result in an increase in usage of South Halifax Park, which could have potential for both positive and negative consequences.

The proposed BLRT Extension project would also result in changes to the property's setting and a visitor's visual experience, resulting in a moderately-low and low impact to views into and from the nature area, respectively. In particular, some users' visual experiences could be perceived as adversely affected by the introduction of light rail trains, located immediately west of the property. However, the visual changes and impacts would not alter or impair the overall use or function of the property. The alignment of the proposed BLRT Extension project in the area adjacent to South Halifax Park would parallel the existing freight rail line. Although the sound of light rail trains would be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria.



In summary, the proximity impacts of the proposed BLRT Extension project on South Halifax Park would not substantially impair the qualifying activities, features, or attributes of the park.

Coordination

During the proposed BLRT Extension project design process, Council staff consulted with the city of Robbinsdale, the owner of South Halifax Park on design adjustments to the proposed light rail alignment and associated facilities within the vicinity of South Halifax Park. Existing access to the park would be maintained under the proposed BLRT Extension project.

As part of the coordination process during project development, the Council has discussed the potential impacts on South Halifax Park from the construction of the LRT project with the city of Robbinsdale. Following the comment period on this Amended Draft Section 4(f) Evaluation and pending the review of comments received, FTA and the Council will seek written concurrence on the temporary occupancy determination from the city of Robbinsdale.

8.7.1.7 Lee Park

Section 4(f) Property Description

The park is situated between 36th Avenue and 38th Avenue in Robbinsdale (see **Figure 8.7-9**). The park is bordered by the existing rail corridor on the east. The 6.7-acre park has a ball field, playground equipment, picnic area, picnic pavilion, skating rink, and a path/trail that connects with June Avenue to the south. The park is under the jurisdiction of the city of Robbinsdale. As the park is a publicly owned, publicly accessible park of local significance, Lee Park is considered by FTA to be a Section 4(f) protected property.

Potential Impacts to Lee Park

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in a permanent incorporation of land from Lee Park.

Temporary Occupancy

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in the temporary use of property from Lee Park during construction.

Potential Constructive Use

Existing bicycle, pedestrian, and vehicular access to the park would be maintained under the proposed BLRT Extension project. Although the sound of light rail trains could be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria. The proposed BLRT Extension project would result in changes in the park's setting and a visitor's visual experience through the introduction of the light rail alignment east of the park. The visual changes and impacts would not alter or impair the overall use or function of Lee Park.

Coordination

The city of Robbinsdale has been involved in design meetings for the proposed BLRT Extension project, and is aware that there are no permanent or temporary easements required from the park site.

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Figure 8.7-9. Lee Park





8.7.1.8 Triangle Park

Section 4(f) Property Description

Triangle Park is located west of Broadway Avenue in Robbinsdale. The 1-acre park is bordered by Orchard Avenue on the west and 40th Avenue on the south (see **Figure 8.7-10**). Park amenities include a ball field, playground equipment, picnic area, and a wading pool. The park is under the jurisdiction of the city of Robbinsdale. As the park is a publicly owned, publicly accessible park of local significance, Triangle Park is considered by FTA to be a Section 4(f) protected property.

Potential Impacts to Triangle Park

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in a permanent incorporation of land from Triangle Park.

Temporary Occupancy

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in the temporary use of property from Triangle Park during construction.

Potential Constructive Use

Existing bicycle, pedestrian, and vehicular access to the park would be maintained under the proposed BLRT Extension project. Although the sound of light rail trains could be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria. Changes in development density in areas surrounding the proposed Robbinsdale transit station could result in an increase in Triangle Park usage, which could have potential for both positive and negative consequences. The proposed BLRT Extension project would result in changes in the park's setting and a visitor's visual experience through the introduction of the light rail alignment east of the park. The visual changes and impacts would not alter or impair the overall use or function of Triangle Park.

Coordination

The city of Robbinsdale has been involved in design meetings for the proposed BLRT Extension project, and is aware that there are no permanent or temporary easements required from the park site.

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Figure 8.7-10. Triangle Park





8.7.1.9 Becker Park

Section 4(f) Property Description

Becker Park, owned and operated by the city of Crystal, is located in the southwest quadrant of Bottineau Boulevard and Bass Lake Road in Crystal (see **Figure 8.7-11**). This 12.4-acre park contains two baseball/softball fields, tennis and basketball courts, playground equipment, and a shelter structure. The eastern border of the park abuts the existing rail corridor and proposed BLRT alignment. Becker Park is accessible by automobile via two existing parking lots located off Sherburne Avenue and Douglas Drive. Pedestrian and bicycle access is also provided through connections to local sidewalks and off-street trails.

Potential Impacts to Becker Park

As illustrated in **Figure 8.7-11**, the proposed BLRT Extension project would not result in a permanent incorporation of land from Becker Park; however, it would require a temporary easement of approximately 0.1 acre near the northeast corner of Becker Park to facilitate construction activities including the reconstruction of a short (approximately 100 lineal feet) of existing sidewalk (see **Figure 8.7-11**).

The overall duration of construction for the entire proposed BLRT Extension project is approximately 3 years. The duration of the construction activities for the portion affecting Becker Park is estimated to occur for approximately 12 calendar months—additional time may be needed for restoration activities, depending on variables, such as seasonal timing of the activities and weather conditions. There would be no change in ownership of the parkland that would be temporarily occupied.

The portion of Becker Park to be temporarily occupied during construction includes a portion of an existing sidewalk from the intersection of Bottineau Boulevard and Bass Lake Road that passes through and provides access to the park. Pedestrians entering from the northeast corner of the park would be provided a temporary pedestrian path detour. Construction activities within Becker Park property include reconstruction of the existing trail in order to connect to the sidewalk system. The park would still be accessible to the public throughout construction for vehicles, bicycles, and pedestrians via the two parking lots and also for bicycles and pedestrians via the respective offstreet sidewalk paths surrounding the park. The portion of the park to be temporarily occupied does not contain any recreational features or amenities. There would be no permanent change to Becker Park as a result of proposed BLRT Extension project actions.

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Figure 8.7-11. Becker Park





None of the aforementioned activities, features, or attributes of Becker Park would be permanently impacted nor would temporary construction actions at the park permanently or temporarily interfere with visitors utilizing the park as they do currently. Council staff would coordinate with park staff from the city of Crystal to avoid park activities identified by the city that should be considered when setting the schedule for construction activities. Impacts related to temporary changes to access would be mitigated by development of a Construction Communication Plan, which would include advance notice of construction activities and highlighting sidewalk closures and detour routes.

The portion of the park to be temporarily occupied during construction would be restored to existing conditions or better—this includes the previously described sidewalk.

Potential Constructive Use

Changes in development density in areas surrounding proposed transit stations could result in an increase in Becker Park usage, which could have potential for both positive and negative consequences.

The proposed BLRT Extension project would also result in changes to the park's setting and a visitor's visual experience; with the addition of the pedestrian bridge over Bottineau Boulevard the overall visual impact is considered adverse. Some users' visual experiences could be perceived as adversely affected by the introduction of light rail trains and a new transit station, located immediately east of the park. However, the visual changes and impacts would not alter or impair the overall use or function of the park. The alignment of the BLRT in the area adjacent to Becker Park would parallel the existing rail line. Although the sound of light rail trains would be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria.

In summary, the proximity impacts of the proposed BLRT Extension project on Becker Park would not substantially impair the qualifying activities, features, or attributes of the park.

Coordination

During the proposed BLRT Extension project's design process, Council staff consulted with the city of Crystal, the park owner, on design adjustments to the proposed light rail alignment and associated facilities within the vicinity of Becker Park. Existing bicycle, pedestrian, and vehicular access to the park would be maintained under the proposed BLRT Extension project.

As part of the coordination process during proposed BLRT Extension project development, the Council has discussed the potential impacts and mitigation on Becker Park from the construction of the LRT project with the city of Crystal. Following the comment period on this Amended Draft Section 4(f) Evaluation and pending the review of comments received, FTA and the Council will seek written concurrence on the temporary occupancy determination from the city of Crystal.

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8.7.1.10 Unnamed Park (identified as Tessman Park in the Draft EIS)

Section 4(f) Property Description

The park is located directly south of North Hennepin Community College in Brooklyn Park (see **Figure 8.7-12**). The approximately 11-acre passive use park consists of open space grasslands, woodlands, and wetlands. There is an existing trail along the north side of Shingle Creek, which flows through the park. The park is under the jurisdiction of the city of Brooklyn Park. As the park is a publicly owned, publicly accessible park of local significance, the unnamed park is considered by FTA to be a Section 4(f) protected property.

Potential Impacts to Unnamed Park

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in a permanent incorporation of land from the unnamed park.

Temporary Occupancy

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in the temporary use of property from the unnamed park during construction.

Potential Constructive Use

Existing bicycle, pedestrian, and vehicular access to the park would be maintained under the proposed BLRT Extension project. Although the sound of light rail trains could be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria. Changes in development density in areas surrounding the proposed Brooklyn Boulevard and 85th Avenue stations could result in an increase in the unnamed park usage, which could have potential for both positive and negative consequences. The proposed BLRT Extension project would result in changes in the park's setting and a visitor's visual experience through the introduction of the light rail alignment west of the park. The visual changes and impacts would not alter or impair the overall use or function of the unnamed park.

Coordination

The city of Brooklyn Park has been involved in design meetings for the proposed BLRT Extension project, and is aware that there are no permanent or temporary easements required from the park site.



Figure 8.7-12. Unnamed Park



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8.7.1.11 College Park

Section 4(f) Property Description

The park is located west of West Broadway Avenue and between 82nd Avenue and North College Park Drive in Brooklyn Park (see **Figure 8.7-13**). The 6-acre park has a playground, skating rink, a picnic pavilion, and park activity building. The park is under the jurisdiction of the city of Brooklyn Park. As the park is a publicly owned, publicly accessible park of local significance, College Park is considered by FTA to be a Section 4(f) protected property.

Potential Impacts to College Park

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in a permanent incorporation of land from College Park.

Temporary Occupancy

As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in the temporary use of property from College Park during construction.

Potential Constructive Use

Existing bicycle, pedestrian, and vehicular access to the park would be maintained under the proposed BLRT Extension project. Although the sound of light rail trains could be audible from within the park, the park is not considered a sensitive noise receptor based on FTA's criteria. Changes in development density in areas surrounding the proposed Brooklyn Boulevard and 85th Avenue stations could result in an increase in College Park usage, which could have potential for both positive and negative consequences. The proposed BLRT Extension project would result in changes in the park's setting and a visitor's visual experience through the introduction of the light rail alignment east of the park. The visual changes and impacts would not alter or impair the overall use or function of College Park.

Coordination

The city of Brooklyn Park has been involved in design meetings for the proposed BLRT Extension project, and is aware that there are no permanent or temporary easements required from the park site.



Figure 8.7-13. College Park



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8.7.1.12 Park Property Adjacent to Rush Creek Regional Trail

Section 4(f) Property Description

The green space surrounding the Rush Creek Regional Trail is located north of, and generally parallel to, 101st Avenue between Elm Creek Park Reserve and Coon Rapids Dam Regional Park, both located in Hennepin County (see **Figure 8.7-14**). There are two multi-use trail properties which lie within the property boundary of the park—the primary trail is a 10-foot-wide multi-use paved trail and a secondary turf trail is situated south of and roughly parallel to the paved trail. The park property and both the trails lie within property owned by TRPD. As the park property is a publicly owned and publicly accessible, and the Rush Creek Regional Trail is a park property of local significance, and the property is a Section 4(f) protected property.

Potential Impacts to the Park Property Adjacent to Rush Creek Regional Trail

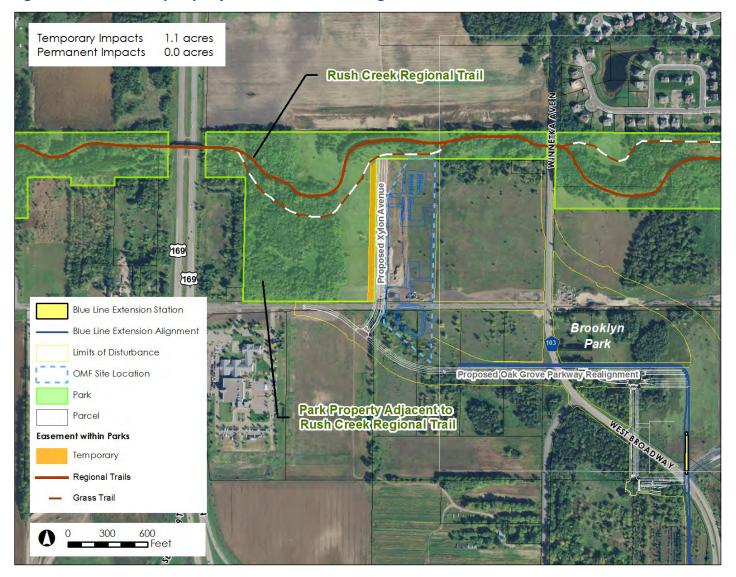
As illustrated in the BLRT preliminary engineering plans, the proposed BLRT Extension project would not result in a permanent incorporation of park land; however the proposed BLRT Extension project would require a temporary easement of approximately 1.1 acres of park property. This temporary occupancy is required for construction of the proposed Xylon Avenue; construction activities include grading along this approximate one-quarter mile segment of roadway (see Figure 8.7-14). The proposed BLRT Extension project Operations and Maintenance Facility would be constructed immediately to the east of Xylon Avenue.

The overall duration of construction for the entire proposed BLRT Extension project is approximately 3 years. The duration of the construction activities for the portion affecting the park property is estimated to occur for approximately 12 calendar months—additional time may be needed for restoration activities, depending on variables, such as seasonal timing of the activities and weather conditions. There would be no change in ownership of the parkland that would be temporarily occupied.

The portion of park property to be temporarily occupied during construction includes open, unimproved land with no recreational amenities. The trail itself would not be affected. The construction activities on the park property consist of grading work to match adjacent roadway elevations. All areas of the park property that will be affected by proposed BLRT Extension project's construction activities will be restored to existing conditions or better and restoration plans will be developed and implemented in consultation with TRPD. The park would still be accessible to the public throughout construction. There would be no permanent change to Rush Creek Regional Trail (primary or secondary trails) or adjacent park property as a result of proposed BLRT Extension project actions.



Figure 8.7-14. Park Property Adjacent to Rush Creek Regional Trail



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The proposed BLRT Extension project would require a temporary easement of approximately 1.1 acres of park property. This temporary occupancy is required for construction of the proposed Xylon Avenue; construction activities include grading along this approximate one-quarter mile segment of roadway (see **Figure 8.7-14**). The proposed BLRT Extension project Operations and Maintenance Facility would be constructed immediately to the east of Xylon Avenue.

The overall duration of construction for the entire proposed BLRT Extension project is approximately 3 years. The duration of the construction activities for the portion affecting the park property is estimated to occur for approximately 12 calendar months—additional time may be needed for restoration activities, depending on variables, such as seasonal timing of the activities and weather conditions. There would be no change in ownership of the parkland that would be temporarily occupied.

The portion of park property to be temporarily occupied during construction includes open, unimproved land with no recreational amenities. The trail itself would not be affected. The construction activities on the park property consist of grading work to match adjacent roadway elevations. All areas of the park property that will be affected by proposed BLRT Extension project's construction activities will be restored to existing conditions or better and restoration plans will be developed and implemented in consultation with TRPD. The park would still be accessible to the public throughout construction. There would be no permanent change to Rush Creek Regional Trail (primary or secondary trails) or adjacent park property as a result of proposed BLRT Extension project actions.

None of the aforementioned activities, features, or attributes of the park property would be permanently impacted nor would temporary construction actions at the park permanently or temporarily interfere with visitors utilizing the park or the trail as they do currently. Council staff would coordinate with park staff from the TRPD to avoid trail activities identified by the TRPD that should be considered when setting the schedule for construction activities. Impacts related to temporary changes to access would be mitigated by development of a Construction Communication Plan, which would include advance notice of construction activities.

The portion of the park to be temporarily occupied during construction would be restored to existing conditions or better.

Potential Constructive Use

Existing bicycle, pedestrian, and vehicular access to the park would be maintained under the proposed BLRT Extension project. Changes in development density in areas surrounding the proposed Oak Grove Parkway transit station could result in an increase in Rush Creek Regional Trail usage, which could have potential for both positive and negative consequences. The proposed BLRT Extension project would result in changes in the park's setting and a visitor's visual experience through the introduction of the Operations and Maintenance Facility east and south of the park. The visual changes and impacts would not alter or impair the overall use or function of Rush Creek Regional Trail and adjacent park property.



In summary, the proximity impacts of the proposed BLRT Extension project on park property adjacent to Rush Creek Regional Trail would not substantially impair the qualifying activities, features, or attributes of the park and, therefore, FTA has determined that there would be no Section 4(f) constructive use of park property adjacent to Rush Creek Regional Trail under the proposed BLRT Extension project, consistent with 23 CFR Part 774.15(a).

Coordination

During the proposed BLRT Extension project's design process, Council staff consulted with the TRPD, the park owner, on design adjustments to the proposed light rail alignment and associated facilities within the vicinity of the park property adjacent to Rush Creek Regional Trail. Existing bicycle, pedestrian, and vehicular access to the park would be maintained under the proposed BLRT Extension project.

As part of the coordination process during proposed BLRT Extension project development, the Council has discussed the potential impacts and mitigation on park property adjacent to Rush Creek Regional Trail from the construction of the LRT project with the TRPD. Following the comment period on this Amended Draft Section 4(f) Evaluation and pending the review of comments received, FTA and the Council will seek written concurrence on the temporary occupancy determination from the TRPD.

8.7.2 Historic Properties

Cultural resources studies of historic properties for the proposed BLRT Extension project have been completed under Section 106 of the National Historic Preservation Act (Section 106). The historic properties included in this Section 4(f) evaluation are those for which the use determination has changed since the publication of the Draft Section 4(f) Evaluation in the Draft EIS and there is a direct use of the property and/or where there is potential for an adverse effect determination under Section 106. (See **Section 4.4 – Cultural Resources** for further discussion of historic property identification and assessment of effects under Section 106.)

As noted in the Draft Section 4(f) Evaluation, Section 4(f) applies to historic sites of national, state, or local significance in public or private ownership, regardless of whether they are open to the public or not, that are listed in or eligible for the NRHP. NRHP eligibility criteria are defined as follows:

- Criterion A—association with events that have made a significant contribution to broad patterns
 of history
- **Criterion B**—association with the life of a historically significant person
- Criterion C—embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction
- Criterion D—has yielded, or is likely to yield, information important in history or prehistory (this generally is understood to refer to archeological significance)

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It is important to recognize the difference between Section 4(f) use of historic properties, discussed below, and Section 106 project effects to historic properties, which are discussed in Section 4.4. Section 4(f) and Section 106 are similar in that they both mandate consideration of historic sites in the planning of a federal undertaking. Section 4(f) applies to the actual use or occupancy of a historic site, while Section 106 involves an assessment of adverse effects of an action on historic properties. The Section 106 process is integral to the Section 4(f) process when historic sites are involved. Specifically, the Section 106 process identifies listed and eligible historic properties, and determines if the proposed action will have an adverse effect on a property. The eligibility of and adverse effects to a historic property are the basis for FTA's determination of a Section 4(f) use of that historic property.

The location of these historic properties relative to the proposed BLRT Extension project, based on parcel boundaries and preliminary construction limits, was used to determine the potential for direct use and temporary occupancy. Potential constructive use was based on determinations of potential adverse effect from proximity impacts as discussed in **Section 4.4** (e.g. noise, vibration) for those properties where there would be no temporary occupancy or direct use.

Following the provisions of the Section 106 review process, alternatives and design options to avoid, minimize, and mitigate adverse effects to historic properties have been explored through consultation with MnHPO, Section 106 consulting parties, other interested parties and the public and specified in the proposed BLRT Extension project's Memorandum of Agreement (MOA). The Advisory Council on Historic Preservation (ACHP) was invited to participate in this consultation; however, ACHP declined the opportunity to participate in a letter dated March 15, 2016 (see **Appendix H**). A copy of the Section 106 MOA is included for review in **Appendix H** and an executed copy will be part of FTA's Record of Decision for the proposed BLRT Extension project.

Of the 17 historic properties identified in **Table 8.1-1**, 15 were determined to have no Section 4(f) use based on information provided in **Section 4.4** and in the *METRO Blue Line Extension Light Rail Transit Project Section 106 Assessment of Effects and Final Determination of Effect for Historic Properties* (January 2016) (see **Appendix H**), hereinafter referred to as the Determination of Effects Report. **Table 8.7-3** summarizes FTA's revised, preliminary Section 4(f) use determinations for both of the remaining Section 4(f) properties. All historic Section 4(f) properties are discussed in the following sections; **Section 8.7.2.10 and Section 8.7.2.11** discuss in detail the evaluation of the two historic properties where FTA's preliminary determination has been revised since the March 2014 Draft Section 4(f) Evaluation.



Table 8.7-3. Summary of Preliminary Permanent Section 4(f) Historic Property Uses¹

Section 4(f) Property	Direct Use	De minimis Use	Temporary Occupancy	Existing Property Magnitude	Acres Permanently Used	Percent of Property Used
Grand Rounds Historic District (Theodore Wirth Segment)	X			4,662 acres	0.7 acre	0.015
Osseo Branch, St. Paul Minneapolis & Manitoba Railway Historic District	x			158 acres	43 acres	27.2

All acreages in this table are approximate.

8.7.2.1 St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District (Minneapolis)

Section 4(f) Property Description

The St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District is located in Minneapolis. This historic district is eligible for the NRHP under Criterion A. For more detailed information on this historic district, see **Section 4.4** and **Appendix H**.

Potential Impacts to the St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District (see the Section 106 consultation documentation in **Appendix H**).

Based on the Section 106 finding of No Adverse Effect, FTA has concluded that the St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

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¹ See Section 8.4 for definitions of the potential types of Section 4(f) uses.



8.7.2.2 Minneapolis Warehouse Historic District

Section 4(f) Property Description

The Minneapolis Warehouse Historic District, located in Minneapolis, is bounded by 1st Avenue North, 1st Street North, 10th Avenue, and 6th Street. This historic district is listed on the NRHP under Criterion A and Criterion C. For more detailed information on this historic district, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Minneapolis Warehouse Historic District

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Minneapolis Warehouse Historic District.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Minneapolis Warehouse Historic District during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Minneapolis Warehouse Historic District (see the Section 106 consultation documentation in **Appendix H**).

Based on the Section 106 finding of No Adverse Effect, FTA has concluded that the Minneapolis Warehouse Historic District will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.3 Northwestern Knitting Company Factory

Section 4(f) Property Description

The Northwestern Knitting Company Factory is located in Minneapolis at 718 Glenwood Avenue. Northwestern Knitting Company Factory is eligible for the NRHP under Criterion A. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Northwestern Knitting Company Factory

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Northwestern Knitting Company Factory.



Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Northwestern Knitting Company Factory during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Northwestern Knitting Company Factory (see the Section 106 consultation documentation in **Appendix H**).

Based on the Section 106 finding of No Adverse Effect, FTA has concluded that the Northwestern Knitting Company Factory will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.4 Sumner Branch Library

Section 4(f) Property Description

The Sumner Branch Library is located in Minneapolis at 611 Emerson Avenue North. The Sumner Branch Library is listed on the NRHP under Criterion A and Criterion B. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Sumner Branch Library

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Sumner Branch Library.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Sumner Branch Library during construction.

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Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (Appendix E) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Sumner Branch Library. This No Adverse Effect finding is subject to the implementation of mitigation measures identified in the Section 106 MOA (see the Section 106 consultation documentation in Appendix H). In summary, the proposed BLRT Extension project would potentially catalyze redevelopment in the area surrounding the Sumner Branch Library, and proposed BLRT Extension project elements would be highly visible from the Sumner Branch Library. However, it was noted in the proposed BLRT Extension project Section 106 Determination of Effects Report that the Sumner Branch Library would be protected from the effects of redevelopment because:

- It is in public ownership and use;
- It is a city of Minneapolis designated local landmark, protected by requirements for Minneapolis
 Heritage Preservation Commission review of all proposed changes to confirm compatibility
 with the historic character of the property; and
- The city of Minneapolis' Heritage Preservation ordinance sets a high threshold for approval of demolition of the property.

The mitigation for the proposed BLRT Extension project's proximity effects on the Sumner Branch Library include a requirement to design proposed BLRT Extension project infrastructure in the vicinity of the library in accordance with the Secretary of the Interior's Standards, and to prepare and implement a construction protection plan for the library.

Based on the Section 106 finding of No Adverse Effect (with mitigation), FTA has concluded that the Sumner Branch Library will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.5 Wayman African Methodist Episcopal Church

Section 4(f) Property Description

The Wayman African Methodist Episcopal Church is located in Minneapolis at 1221 7th Avenue North. The Wayman African Methodist Episcopal Church is eligible for the NRHP under Criterion C. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Wayman African Methodist Episcopal Church

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Wayman African Methodist Episcopal Church.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Wayman African Methodist Episcopal Church during construction.



Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (Appendix E) and continued consultation with MnHPO, a Section 106 finding of Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Wayman African Methodist Episcopal Church. In summary, the proposed BLRT Extension project would potentially alter the setting of the Wayman African Methodist Episcopal Church through development pressure created in part by the construction and operation of the proposed BLRT Extension project. Redevelopment could result in potential alteration or demolition of this property. While new development in the setting would not alter characteristics that qualify the church for the NRHP, alteration of the property would likely diminish its historic integrity and demolition would destroy the historic property. The MOA developed in consultation with MnHPO and other parties includes measures that will be incorporated into the proposed BLRT Extension project to mitigate the Adverse Effect on the church (see the Section 106 consultation documentation in Appendix H for additional detail). Based on the Section 106 finding of Adverse Effect and the measures to mitigate the Adverse Effect included in the Section 106 MOA, FTA has concluded that the Wayman African Methodist Episcopal Church historic property will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.6 Labor Lyceum

Section 4(f) Property Description

The Labor Lyceum is located in Minneapolis at 1800 Olson Memorial Highway. This historic property is eligible for the NRHP under Criterion A. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Labor Lyceum

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Labor Lyceum.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Labor Lyceum during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Labor Lyceum. This No Adverse Effect finding is subject to the implementation of mitigation measures identified in the Section 106 MOA (see the Section 106 consultation documentation in **Appendix H**).

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Based on the Section 106 finding of No Adverse Effect (with mitigation), FTA has concluded that the Labor Lyceum will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.7 Floyd B. Olson Memorial Statue

Section 4(f) Property Description

The Floyd B. Olson Memorial Statue is located in Minneapolis at Olson Memorial Highway at Penn Avenue North. The Floyd B. Olson Memorial Statue is eligible for the NRHP under Criterion C. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Floyd B. Olson Memorial Statue

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Floyd B. Olson Memorial Statue.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Floyd B. Olson Memorial Statue during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (Appendix E) and continued consultation with MnHPO, a Section 106 finding of Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Floyd B. Olson Memorial Statue. In summary, the proposed BLRT Extension project would potentially alter the setting of the Floyd B. Olson Memorial Statue through development pressure created in part by the construction and operation of the proposed BLRT Extension project. The construction of the Penn Avenue Station directly in front of the statue would disrupt the visual connection between the statue and Olson Memorial Highway, further diminishing the property's integrity of setting, feeling, and association. The redevelopment of adjacent properties would further diminish the visual connection to the statue and, as a result, its association with Olson Memorial Highway. The MOA developed in consultation with MnHPO and other parties includes measures that will be incorporated into the proposed BLRT Extension project to mitigate the Adverse Effect on the memorial statue (see the Section 106 consultation documentation in Appendix H for additional detail). Based on the Section 106 finding of Adverse Effect and the measures to mitigate the Adverse Effect included in the Section 106 MOA, FTA has concluded that the Floyd B. Olson Memorial Statue historic property will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.



8.7.2.8 Bridge No. L9327

Section 4(f) Property Description

Bridge No. L9327 is located in Golden Valley at Theodore Wirth Parkway over Bassett Creek. This historic property is individually eligible for the NRHP under Criterion C and as a contributing element to the Grand Rounds Historic District under Criterion A and Criterion C. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to Bridge No. L9327

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from Bridge No. L9327.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from Bridge No. L9327 during construction.

Determination of Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at Bridge No. L9327 (see the Section 106 consultation documentation in **Appendix H**).

Based on the Section 106 finding of No Adverse Effect, FTA has concluded that Bridge No. L9327 will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.9 Homewood Residential Historic District

Section 4(f) Property Description

The Homewood Residential Historic District, located in Minneapolis, is bounded by Penn, Oak Park, Xerxes, and Plymouth avenues. The Homewood Residential Historic District is eligible for the NRHP under Criterion A. For more detailed information on this historic district, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Homewood Residential Historic District

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Homewood Residential Historic District.

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Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Homewood Residential Historic District during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (Appendix E) and continued consultation with MnHPO, a Section 106 finding of Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Homewood Residential Historic District. In summary, the proposed BLRT Extension project would potentially alter the integrity of setting and feeling of the historic district through the introduction of a moderate noise impact on three residences at the southwestern corner of the historic district. However, that impact to the three properties in the historic district would not be to a degree that would affect the entire district's setting and feeling, and thus, eligibility for the NRHP. The MOA developed in consultation with MnHPO and other parties includes measures that will be incorporated into the proposed BLRT Extension project to mitigate the Adverse Effect on the historic district (see the Section 106 consultation documentation in Appendix H for additional detail). Based on the Section 106 finding of Adverse Effect and the measures to mitigate the Adverse Effect included in the Section 106 MOA, FTA has concluded that the Homewood Residential Historic District will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.10 Osseo Branch Line of the St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District

Section 4(f) Property Description

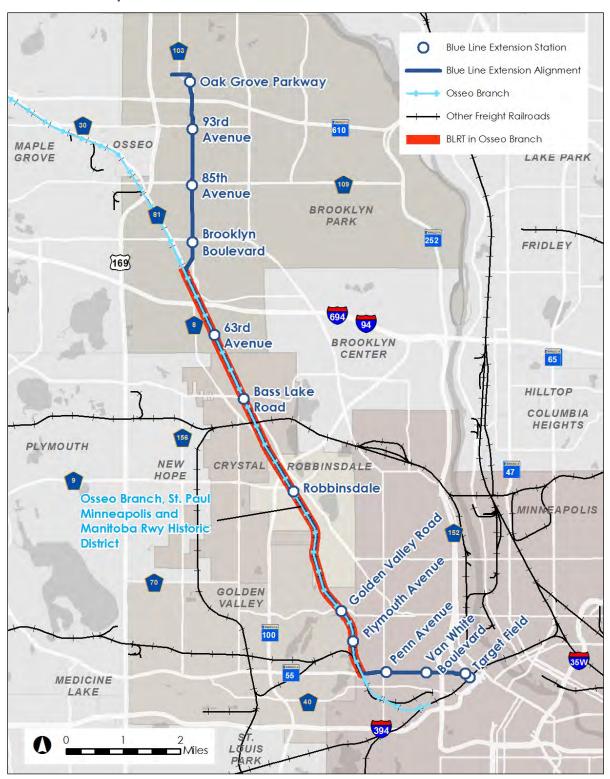
As stated in the Determination of Effects Report (FTA, 2016), the Osseo Branch (a portion of the St. Paul Minneapolis & Manitoba Railway Historic District) is a 13-mile segment of rail line that is generally 100-feet wide from Minneapolis to Osseo. The Osseo Branch supported the potato farming development of Osseo and surrounding areas. It established a farm-to-market connection that did not previously exist. This connection resulted in a significant expansion of the potatogrowing region in northern Hennepin County from the construction of line until the decline of the potato industry. The Osseo Branch is eligible for the NRHP under Criterion A.

Determination of Section 4(f) Use

Constructing the proposed BLRT Extension project in the Osseo Branch would result in the need for a permanent incorporation of approximately 43 acres of property along the 8-mile segment from Olson Memorial Highway northwest to 73rd Avenue North in the City of Brooklyn Park (see **Figure 8.7-15**). This permanent incorporation results from the need to locate the BLRT guideway and other infrastructure in the eastern 50 feet of the approximately 100-foot-wide corridor over this distance. An additional 49 acres of the Osseo Branch would be directly impacted with temporary easements for construction access and staging, activities that would occupy the remaining western 50-feet of the approximately 100-foot corridor during the construction period.



Figure 8.7-15. Osseo Branch Line of the St. Paul Minneapolis & Manitoba Railroad/Great Northern Railway Historic District



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These temporary construction easements would be required to shift the existing BNSF track and to grade land around the proposed BLRT Extension project corridor, as well as provide access during construction.

Based on the Section 106 analysis performed, FTA and MnHPO have determined that the proposed BLRT Extension project will result in an adverse effect on the Osseo Branch. The rationale for this effect determination is based on proposed changes to the historic property and its setting, including the following:

- The majority of the existing BNSF track would be removed and reconstructed on a new alignment approximately 15 to 25 feet west of its current location;
- The proposed BLRT Extension project would include the construction of two light rail tracks, an overhead catenary system, five stations, three vertical circulation towers, eight TPSSs and 15 signal bungalows, safety treatments, and bridges in the Osseo Branch right-of-way;
- The bluffs adjacent to the Osseo Branch would be altered for the construction of new retaining walls and to add sufficient space for the proposed BLRT Extension project, and some vegetation would also be removed; and
- A corridor protection barrier would be constructed between the freight rail track and new light rail track; the protection barrier can include a concrete wall that is up to six feet tall and two feet thick, a variable width ditch, or a retained embankment to grade separate freight and light rail traffic.

In addition to these rail infrastructure changes, the existing high-voltage transmission line on steel-truss towers located the eastern edge of the Osseo Branch corridor between Olson Memorial Highway and the Xcel Indiana Substation would be reconstructed with monopoles on the western edge of the corridor.

Based on the information summarized in this section, FTA has made a preliminary determination that the proposed BLRT Extension project will result in a non-*de minimis* use of the historic Osseo Branch Section 4(f) resource.

Avoidance Alternatives Analysis

The Section 4(f) statute requires the selection of an alternative that completely avoids the use of Section 4(f) property if that alternative is deemed feasible and prudent. Based on proposed BLRT Extension project analysis performed to date, the No-Build and the Enhanced Bus Alternatives as described and evaluated in the Draft EIS would completely avoid the use of any Section 4(f) property. During the proposed BLRT Extension project development process and associated analysis for this Amended Draft Section 4(f) Evaluation, three additional avoidance alternatives were identified. These include the Deep Tunnel Alternative, the Alignment Shift 1 Alternative, and the Alignment Shift 2 Alternative. The following sections summarize the FTA and Council assessment of the feasibility and prudence of these five avoidance alternatives.



No-Build Alternative

The No-Build Alternative is required by the NEPA and Minnesota Environmental Policy Act (MEPA) processes and includes all existing and committed transportation infrastructure, facilities, and services contained in the region's fiscally constrained and federally approved transportation plan, the Council's *TPP*.

As defined in **Chapter 2 – Alternatives**, the No-Build Alternative will completely avoid a use of all Section 4(f) resources.

Evaluation of Feasibility

As per 23 CFR Part 774.17 of the Section 4(f) regulations, an alternative is not feasible if it cannot be built as a matter of sound engineering judgment. FTA and the Council have determined that the No-Build Alternative will be feasible from an engineering perspective, because no construction will be required to implement the alternative.

Evaluation of Prudence

Section 8.4.3 lists the Section 4(f) criteria used by FTA to determine the prudence of a feasible and prudent avoidance alternative as defined in 23 CFR Part 774.17.

i. Effectiveness in Meeting Purpose and Need

The proposed BLRT Extension project's Purpose and Need is summarized in **Chapter 1**. FTA and the Council have concluded that, while the No-Build Alternative will avoid potential disruption to neighborhoods, commercial districts, and historic areas in the corridor, the No-Build Alternative will not adequately support the Purpose and Need of the proposed BLRT Extension project as expressed through the proposed BLRT Extension project's evaluation criteria (see **Section 12.1**). In summary, the No-Build Alternative will be inconsistent with local and regional comprehensive plans, which include or are consistent with implementation of the proposed BLRT Extension project. Furthermore, the No-Build Alternative will not improve mobility, provide a cost-effective efficient travel option, or support economic development, which are key elements of the proposed BLRT Extension project's Purpose and Need (see **Chapter 1**).

FTA and the Council have determined that the No-Build Alternative will compromise the proposed BLRT Extension project to a degree that, under the No-Build Alternative, the stated Purpose and Need for the proposed BLRT Extension project will not be met; therefore, the No-Build Alternative does not constitute a prudent alternative that will fully avoid the use of Section 4(f) properties.

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- ii. Safety and Operational Considerations
- None.
- iii. Social, Economic, Environmental, and Community Impacts
- None.
- iv. Cost
- None.
- v. Unique Problems or Unusual Factors
- None.
- vi. Cumulative Consideration of Factors
- None.

Avoidance Alternative Determination

The No-Build Alternative will avoid uses of all Section 4(f) resources, but it is deemed not prudent under the definition in 23 CFR Part 774.17. The No-Build Alternative is not prudent per 23 CFR Part 774.17 because it neither addresses nor corrects the transportation purpose and need that prompted the proposed BLRT Extension project.

Enhanced Bus Alternative

The Enhanced Bus Alternative was carried forward into the Draft EIS from the Bottineau Transitway Alternatives Analysis and Scoping. By definition, the Enhanced Bus Alternative is a low-capital cost alternative that will provide the best transit service to the corridor without a major capital investment. The Enhanced Bus Alternative included the same highway and roadway network improvements contained in the No-Build Alternative. The Enhanced Bus Alternative did not include any modifications to the existing highway or roadway infrastructure in the proposed BLRT Extension project study area.

In addition to the improvements included in the No-Build Alternative, the Enhanced Bus Alternative included the following:

- New transit center and park-and-ride facility in the City of Brooklyn Park on West Broadway Avenue near TH 610
- Additional limited stop bus routes providing bi-directional service between downtown Minneapolis and Brooklyn Park, with stops in Golden Valley, Robbinsdale, and Crystal,
- Service frequency improvements to existing transit routes
- Restructuring of existing bus routes in the corridor to connect to the new limited stop routes and enhance connections within the corridor

As defined in Chapter 2 of the Draft EIS, the Enhanced Bus Alternative will completely avoid the use of all Section 4(f) resources.



Evaluation of Feasibility

As per 23 CFR Part 774.17 of the Section 4(f) statute, an alternative is not feasible if it cannot be built as a matter of sound engineering judgment. FTA and the Council have determined that the Enhanced Bus Alternative could be built as a matter of sound engineering judgment and therefore it will be feasible from an engineering perspective.

Evaluation of Prudence

Section 8.4.3 lists the Section 4(f) criteria used by FTA to determine the prudence of a feasible and prudent avoidance alternative as defined in 23 CFR Part 774.17.

i. Effectiveness in Meeting Purpose and Need

The proposed BLRT Extension project's Purpose and Need is summarized in **Chapter 1** of this Final EIS, as well as Chapter 1 of the Draft EIS. In the Draft EIS, FTA and the Council concluded that, while the Enhanced Bus Alternative will avoid potential disruption to neighborhoods, commercial districts, and historic areas in the corridor, the Enhanced Bus Alternative will not adequately support the proposed BLRT Extension project's Purpose and Need as expressed through the proposed BLRT Extension project's evaluation goals, objectives, criteria, and measures (see Section 11.2 of the Draft EIS). In summary, the Enhanced Bus Alternative will be inconsistent with local and regional comprehensive plans, which include, or are consistent with, implementation of the proposed BLRT Extension project. The Enhanced Bus Alternative will only marginally improve mobility, and it will not provide a cost-effective, efficient travel option, or support economic development.

FTA and the Council have determined that the Enhanced Bus Alternative will compromise the proposed BLRT Extension project to a degree that, under the Enhanced Bus Alternative, the stated Purpose and Need for the proposed BLRT Extension project will not be met; therefore, the Enhanced Bus Alternative does not constitute a feasible and prudent alternative that will fully avoid the use of Section 4(f) properties.

- ii. Safety and Operational Considerations
- None.
- iii. Social, Economic, Environmental, and Community Impacts
- None.
- iv. Cost
- None.
- v. Unique Problems or Unusual Factors
- None.
- vi. Cumulative Consideration of Factors
- None.

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Avoidance Alternative Determination

The Enhanced Bus Alternative will avoid uses of all Section 4(f) resources, but it is deemed not prudent under the definition of in 23 CFR Part 774.17. The Enhanced Bus Alternative is not prudent per 23 CFR Part 774.17 because it neither addresses nor corrects the transportation purpose and need that prompted the proposed BLRT Extension project.

Deep Tunnel Alternative

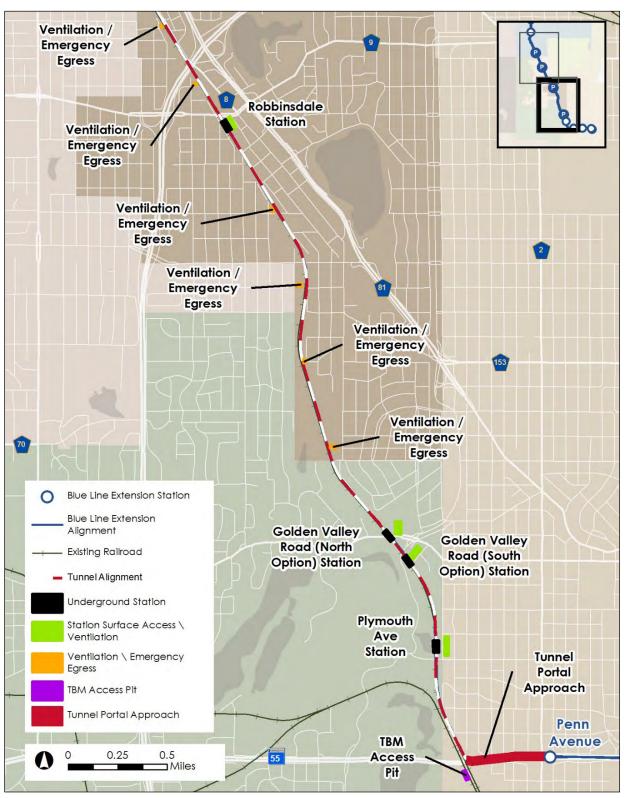
The construction of an approximately 8-mile-long deep (nominally 60 feet below ground) tunnel⁴ from approximately Olson Memorial Highway to 73rd Avenue was considered as an avoidance alternative for impacts on the Osseo Branch. The Deep Tunnel Alternative would have five underground stations, including Plymouth Avenue, Golden Valley Road, Robbinsdale, Bass Lake Road, and 63rd Avenue. The stations, ventilation shafts, and emergency egress portals would all daylight just outside the limits of the rail corridor to avoid the use of the Osseo Branch property. **Figure 8.7-16 through Figure 8.7-18** illustrate the general location of the Deep Tunnel Alternative and typical cross sections of a deep tunnel concept.

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⁴ A shallow, cut and cover tunnel option was also considered, but eliminated as an avoidance alternative since it would not completely avoid a Section 4(f) use of the Osseo Branch. The cut and cover option would still require relocation of the existing freight rail, and several segments of the corridor would need to be constructed at-grade because of shallow groundwater and surface water features. In a cut and cover alternative, the Golden Valley Road Station would need to be constructed at-grade because of these engineering limitations.



Figure 8.7-16. Deep Tunnel Conceptual Plan View – South



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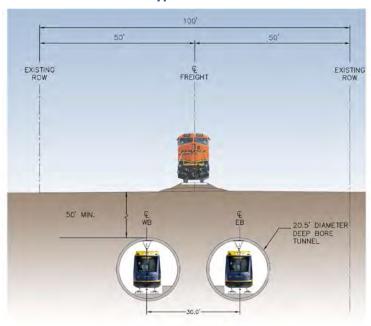
Figure 8.7-17. Deep Tunnel Conceptual Plan View - North





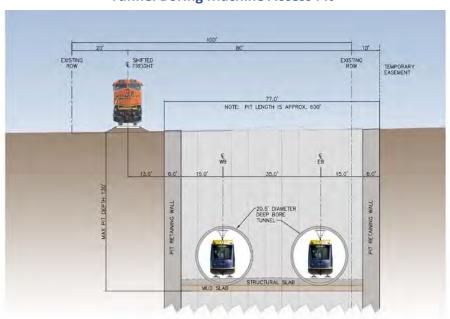
Figure 8.7-18. Deep Tunnel Sections

Typical Section



DRAFT-WORK IN PROCESS

Tunnel Boring Machine Access Pit



DRAFT-WORK IN PROCESS

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Evaluation of Feasibility

While a number of operational and social, economic, and community concerns have been identified with the Deep Tunnel Alternative, FTA and the Council have determined that the alternative could be built as a matter of sound engineering judgment and therefore it would be feasible from an engineering perspective.

Evaluation of Prudence

Section 8.4.3 lists the Section 4(f) criteria used by FTA to determine the prudence of a full avoidance alternative as per 23 CFR Part 774.17.

i. Effectiveness in Meeting Purpose and Need

Determining whether an alternative is prudent requires an assessment of whether or not the alternative would compromise the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need (see Section 8.5 above and Chapter 1).

Based on an assessment of Purpose and Need, the Deep Tunnel Alternative will address long-term regional transit mobility and local accessibility needs while providing efficient, travel-time competitive transit service that supports economic development goals and objectives of local, regional, and statewide plans.

- ii. Safety and Operational Considerations
- None.

iii. Social, Economic, Environmental, and Community Impacts

Another consideration for prudence is if an alternative, after reasonable mitigation, would cause severe social, economic, or environmental impacts; cause severe disruption to established communities; cause disproportionate impacts to minority or low-income populations; or result in impacts to environmental resources protected under other federal statutes.

Tunnel Portals: For the Deep Tunnel Alternative, large tunnel portals would be required at the southern end of the tunnel in the area of Olson Memorial Highway and Thomas Avenue, and at the northern end of the tunnel near the West Broadway Avenue/Brooklyn Boulevard intersection. The deepest portion of these portals would be between 30 and 60 feet below the ground surface, depending on tunnel depth and soil conditions. The portal excavation would extend as much as one quarter mile along the alignment in order to achieve the necessary grade for the LRT vehicles. Since no portion of the portals could be located in the Osseo Branch corridor, the impacts from the tunnel portals would be borne by properties and/or infrastructure adjacent to the corridor. At the southern portal, Olson Memorial Highway and the intersections with Penn and Thomas avenues would need to be reconfigured or closed to accommodate the descending LRT alignment. The required widening of Olson Memorial Highway in this area would require the acquisition of several residences adjacent to the current roadway. The portal excavation would present a massive, deep barrier to pedestrians and would exacerbate the existing safety concerns regarding the non-motorized traffic environment.



- At the northern end of the tunnel, the portal excavation would require the acquisition and relocation of three businesses. The tunnel portal would disrupt existing and planned pedestrian and bicycle trail connections in this area as well.
- Temporary construction impacts would be extensive as well. Large tunnel boring machine (TBM) access pits (approximately 75 feet wide, 200 feet long, and 30 to 60 feet deep) would need to be excavated at each end of the corridor. Because of the curves required at each end to align the tunnel portals with the Olson Memorial Highway and West Broadway Avenue surface running segments of the LRT alignment, the tunnel portals would not be able to be used as TBM access pits. Construction of the access pits would require dewatering in the Bassett Creek watershed, and could reduce the available hydrology for wetlands, especially those in and adjacent to TWRP.
- Drainage: Drainage in the tunnel approaches must be collected and sent to the storm drainage system. Given the high groundwater elevations in the area the collected drainage from the tunnel approaches would need to be pumped to a nearby stormwater treatment facility.
 - Any water in the tunnel (carried in by wet LRT vehicles, condensation, or seepage) must be treated as waste water and sent to the sanitary sewer system. As a result, a sanitary lift station would be required at the tunnel low point(s) in order to pump the collected water to nearby sanitary sewer line.
- Impacts to Adjacent Property: The deep tunnel option would require ventilation shafts, emergency egress shafts, and surface access points for five underground stations. The emergency egress shafts would be required every 2,500 feet, and it is assumed that where possible, ventilation shafts and powerhouses would be co-located with emergency egress shafts/portals. This would result in at least 15 surface portals. To avoid a Section 4(f) use of the Osseo Branch, these surface features would need to be located on property adjacent to the Osseo Branch, rather than within the rail corridor. To the extent practicable, these would be located on vacant property or non-park public rights of way. However, in the area between Olson Memorial Highway and 41st Avenue (approximately 3.5 miles of the 8-mile co-located corridor), adjacent lands are primarily park property, residential property, and other historic properties (the Homewood Historic District and the Grand Rounds Historic District). To avoid the park properties, which are Section 4(f) resources, the ventilation powerhouses and emergency egress portals would need to be located on residential property, and would likely result in the displacement of between 20 and 34 (depending on the location of the Golden Valley Road Station surface access) single-family residential properties.

Of the five Osseo Branch corridor stations, three (Robbinsdale, Bass Lake Road, and 63rd Avenue) could be designed in a manner where the surface station access infrastructure would not impact residential property, however, 15 business displacements and acquisitions would likely be needed at these stations (especially Robbinsdale and Bass Lake Road) to accommodate the excavation for the underground station. The Plymouth Avenue Station is surrounded by TWRP property on the west and residential property to the east. The surface station access infrastructure for an underground Plymouth Avenue station would require the acquisition of 11 homes from the eastern boundary of the Plymouth Avenue Station in order to avoid impacts

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to the park property. Similarly, the Golden Valley Road Station is surrounded by park property, the Grand Rounds Historic District to the west, and residential property to the east. To avoid the park property and the historic district, which are Section 4(f) resources, the surface station access infrastructure for an underground Golden Valley Road Station would require the acquisition of 14 homes or a church to the east.

As demonstrated in the discussion above, the construction and operational requirements of the Deep Tunnel Alternative would have extensive social, economic, and environmental impacts, especially with respect to the acquisition and displacement of residences and businesses.

iv. Cost

The Deep Tunnel Alternative would increase proposed BLRT Extension project capital costs by \$5 billion to \$7 billion compared to the same facility at grade. The increases occur as a result of construction activities involving tunneling, underground station construction and surface access, emergency egress, and ventilation infrastructure (see **Appendix J** for avoidance alternative cost information). Tunnel construction would also increase the proposed BLRT Extension project schedule by approximately 2 years, a factor that has been considered in the overall evaluation of proposed BLRT Extension project costs. The increased construction schedule would delay transportation benefits to system users.

Long-term operating and maintenance costs (e.g., tunnel lighting/communication, drainage, ventilation, fire protection) would be significantly greater than an at-grade facility.

v. Unique Problems or Unusual Factors

No unique problems or unusual factors were identified.

vi. Cumulative Consideration of Factors

A final consideration of prudence takes into account multiple factors that on their own may be considered minor, but would cumulatively result in unique problems or project impacts of extraordinary magnitude. Several factors of concern have been raised with the Deep Tunnel Alternative including social, economic, environmental, and community impacts, risks of schedule and benefit delays, and substantial increases in operational, maintenance, and construction costs. Cumulatively, these adverse effects and extraordinary increase in costs make the Deep Tunnel Alternative not prudent.

Avoidance Alternative Determination

The Deep Tunnel Alternative would avoid uses of all Section 4(f) resources and is feasible to construct, but is deemed not prudent under the criteria defined in paragraph (3) of 23 CFR Part 774.17 for feasible and prudent avoidance alternatives.

Alignment Shift 1 Alternative

The Alignment Shift Avoidance Alternatives considered would be primarily at-grade alignments that follow existing roadways adjacent to the proposed BLRT Extension project. A western shift (the Alignment Shift 1 Alternative) and an eastern shift (the Alignment Shift 2 Alternative) were developed (see **Figure 8.7-19**). However, because of the number of park resources, the presence of



Bassett Creek and relative lack of parallel roadways on the western side of the proposed BLRT Extension project south of TH 100; Alignment Shift 1 and Alignment Shift 2 alternatives share a common alignment segment. This common alignment segment lies east of the proposed BLRT Extension project through the portion of the City of Minneapolis north of Olson Memorial Highway, all of the cities of Golden Valley and Robbinsdale, and the southern portion of the City of Crystal.

The Alignment Shift 1 Alternative shifts the alignment and transit stations west along several public roadways to avoid use of the Osseo Branch (see **Figure 8.7-19**).

Beginning in the City of Minneapolis at the connection to Olson Memorial Highway, the Alignment Shift 1 Alternative would be shifted to public rights-of-way, to the extent possible, north along Xerxes Avenue. Between Oak Park Avenue and Plymouth Avenue, the Alignment Shift 1 Alternative would be constructed in a tunnel to avoid the Homewood Historic District. As the corridor approaches Theodore Wirth Parkway and Golden Valley Road the avoidance alternative would affect St. Margaret Mary Church property and Glenview Terrace Park (another Section 4(f) property, which includes a portion of the Grand Rounds Historic District). To avoid Glenview Terrace Park and the Grand Rounds Historic District, the alignment shift in this area would be constructed in a cut-and-cover tunnel (see **Figure 8.7-19**). In the cities of Golden Valley and Robbinsdale, the avoidance alternative would follow Crestview Avenue, Byrd Avenue, France Avenue. The avoidance alternative would continue north through the City of Crystal along West Broadway Avenue, bridging over the Osseo Branch at the West Broadway/BNSF at-grade crossing. Continuing north, the avoidance alternative shifts east, crossing over the Osseo Branch on a bridge in the City of Brooklyn Park.

Evaluation of Feasibility

While a number of operational, and social, economic, and community concerns have been identified with the Alignment Shift 1 Alternative, FTA and the Council have determined that the alternative could be built as a matter of sound engineering judgment and therefore it would be feasible from an engineering perspective.

Evaluation of Prudence

Section 8.4.3 lists the Section 4(f) criteria used by FTA to determine the prudence of a full avoidance alternative as per 23 CFR Part 774.17.

i. Effectiveness at Meeting Purpose and Need

Determining whether an alternative is prudent requires an assessment of whether or not the alternative would compromise the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need (see Section 8.5 above and Chapter 1).

Based on an assessment of Purpose and Need, the Alignment Shift 1 Alternative will address long-term regional transit mobility and local accessibility needs while providing efficient, travel-time competitive transit service that supports economic development goals and objectives of local, regional, and statewide plans. However, as described in subsequent sections, the amount of right-of-way and relocations associated with the Alignment Shift 1 Alternative would be in conflict with local and regional economic development goals and objectives. Additionally, the Alignment Shift 1

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Alternative would be less travel-time competitive than the proposed BLRT Extension project as the LRT speeds would need to be lower on residential streets.

ii. Safety and Operational Considerations

Consideration of safety and operational conditions of an avoidance alternative is required in determining whether the alternative is prudent. This avoidance alternative would introduce a new rail corridor in an area where rail operations do not currently exist. The Alignment Shift 1 Alternative would also require the closure of several public road intersections. This could potentially hinder emergency response to these directly affected streets and surrounding neighborhoods. BLRT operations would also be affected as trains would need to operate at reduced speeds through residential areas as compared to the proposed BLRT Extension project that uses the Osseo Branch (an existing rail corridor). Slower travel times would reduce projected ridership and overall effectiveness of the proposed BLRT Extension project.

iii. Social, Economic, Environmental, and Community Impacts

Another consideration for prudence is if an alternative, after reasonable mitigation, would cause severe social, economic, or environmental impacts; cause severe disruption to established communities; cause disproportionate impacts to minority or low-income populations; or result in impacts to environmental resources protected under other federal statutes.

Right-of-Way Impacts: As described above, shifting the BLRT alignment to the west to avoid the Osseo Branch would adversely impact densely developed residential areas along several public roadways (e.g. Xerxes, Crestview, Byrd, France, and West Broadway avenues; see **Appendix J** for a mapbook of the Alignment Shift 1 Alternative including anticipated impacted parcels). Within the area surrounding TWRP (between Olson Memorial Highway and 26th Avenue North) the potential number of relocations is estimated to exceed 90 residential properties and one commercial property. Farther north along West Broadway Avenue between Corvallis Avenue North and 73rd Avenue in the cities of Crystal and Brooklyn Park, approximately 60 residential relocations and over 20 business relocations would be required. Several partial land acquisitions of both public and private properties would also occur.

Economic Impact: The loss of residential and commercial property described above would impact economic conditions. While some residents and the commercial business displaced under this avoidance alternative may relocate within the area, the potential loss of property tax base would adversely affect economic conditions in the cities of Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park.

Community Disruption: Introducing a new rail corridor in a residentially developed area has the potential to cause community disruption by way of altering travel patterns, dividing or isolating neighborhoods, and increasing travel time to community resources, recreation areas, residents, or area businesses. Other local factors to consider include reduced accessibility, noise, and visual impacts. The Alignment Shift 1 Alternative has the potential to alter the desirability of the area and adversely impact the community character and cohesion for these portions of the cities of Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park, thereby reducing the quality of life of those who live in the surrounding neighborhoods.



The potential for constructing additional tunnel sections to avoid the social, economic and environmental effects noted above was considered. However, given the preponderance of narrow residential streets along the Alignment Shift 1 Alternative, a shallow cut and cover tunnel would require a similar number of acquisitions because of the required construction footprint. Deep tunnel sections would need to be approximately 850 feet long and would require the appropriate entrance and exit grades; these deep tunnel sections would encounter the same factors outlined in the discussion of the Deep Tunnel Alternative and would therefore be deemed not prudent.

iv. Construction, Maintenance, or Operational Costs of Extraordinary Magnitude

Long term maintenance and operational costs would be comparable to the proposed BLRT Extension project; the cost of construction of this avoidance alternative would approximately \$35 million to \$45 million higher than that of the proposed BLRT Extension project, primarily because of the costs for the cut and cover tunnels.

v. Unique Problems or Unusual Factors

No other unique or unusual factors have been identified. However, the Alignment Shift 1 Alternative introduces additional risks resulting from construction schedule uncertainty associated with a large increase in the number of acquisitions and relocations. Construction delay would not only increase overall capital costs, but delay benefits of system users. In addition, the Alignment Shift 1 Alternative would not be supported by local jurisdictions or the public due to the aforementioned concerns related to social, community and economic impacts.

vi. Cumulative Consideration of Factors

A final consideration of prudence takes into account multiple factors that on their own may be considered minor, but would cumulatively result in unique problems or project impacts of extraordinary magnitude. While the Alignment Shift 1 Alternative would have avoided use of the Osseo Branch and is considered feasible, this avoidance alternative is not considered prudent as it exhibits weak performance in meeting purpose and need by not supporting local and regional economic development goals and objectives and potentially reducing ridership because of slower travel times; it would result in social and economic impacts of extraordinary magnitude including creating substantially greater right-of-way impacts on residential properties; and it would create additional operational concerns. For these reasons, the Alignment Shift 1 Alternative has been determined not prudent.

Avoidance Alternative Determination

The Alignment Shift 1 Alternative would avoid uses of all Section 4(f) resources and is feasible to construct, but is deemed not prudent under the criteria defined in paragraph (3) of 23 CFR Part 774.17 for feasible and prudent avoidance alternatives.

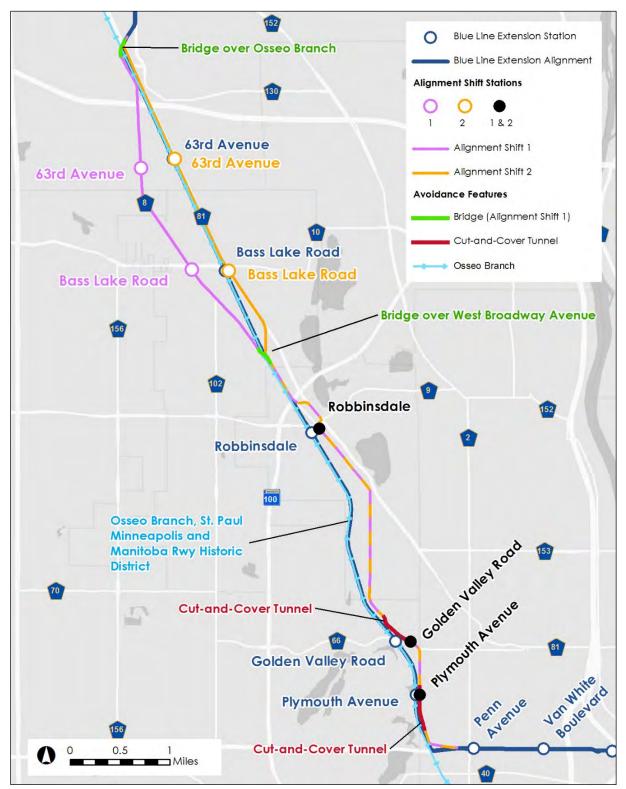
Alignment Shift 2 Alternative

This avoidance alternative shifts the alignment and transit stations east along several public roadways in order to stay outside the Osseo Branch (see **Figure 8.7-19**).

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Figure 8.7-19. Alignment Shift Avoidance Alternatives





Beginning in the City of Minneapolis at the connection to Olson Memorial Highway, the Alignment Shift 2 Alternative would follow a common corridor with the Alignment Shift 1 Alternative 1 (i.e., Xerxes Avenue, then Crestview Avenue, Byrd Avenue, and France Avenue to West Broadway Avenue). Following West Broadway north, the Alignment Shift 2 Alternative would shift east to Vera Cruz Avenue North and then to Bottineau Boulevard just north of where the proposed BLRT Extension project enters the BNSF rail corridor in Brooklyn Park.

Evaluation of Feasibility

While a number of operational, and social, economic, and community concerns have been identified with the Alignment Shift 2 Alternative, FTA and the Council have determined that the alternative could be built as a matter of sound engineering judgment and therefore it would be feasible from an engineering perspective.

Evaluation of Prudence

Section 8.4.3 lists the Section 4(f) criteria used by FTA to determine the prudence of a full avoidance alternative as per 23 CFR Part 774.17.

i. Effectiveness at Meeting Purpose and Need

Determining whether an alternative is prudent requires an assessment of whether or not the alternative would compromise the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need (see **Section 8.5** above and **Chapter 1**).

Based on an assessment of Purpose and Need, the Alignment Shift 2 Alternative will address long-term regional transit mobility and local accessibility needs while providing efficient, travel-time competitive transit service that supports economic development goals and objectives of local, regional, and statewide plans. However, as described in subsequent sections, the amount of right-of-way and relocations associated with the Alignment Shift 2 Alternative would be in conflict with local and regional economic development goals and objectives. Additionally, the Alignment Shift 2 Alternative would be less travel-time competitive than the proposed BLRT Extension project as the LRT speeds would need to be lower on residential streets.

ii. Safety and Operational Considerations

Consideration of safety and operational conditions of an avoidance alternative is required in determining whether the alternative is prudent. The Alignment Shift 2 Alternative would introduce a new rail corridor in an area where rail operations do not currently exist. The Alignment Shift 2 Alternative would also require the closure of several public road intersections. This could potentially hinder emergency response to these directly affected streets and surrounding neighborhoods. BLRT operations would also be affected as trains would not be able to travel at the same speeds through residential areas as compared to the proposed BLRT Extension project that utilizes an existing rail corridor. Slower travel times would reduce projected ridership and overall effectiveness of the proposed BLRT Extension project.

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iii. Social, Economic, Environmental, and Community Impacts

Another consideration for prudence is if an alternative, after reasonable mitigation, would cause severe social, economic, or environmental impacts; cause severe disruption to established communities; cause disproportionate impacts to minority or low-income populations; or result in impacts to environmental resources protected under other federal statutes.

Right-of-Way Impacts: As described above, shifting the BLRT alignment to the east to avoid the Osseo Branch would impact densely developed residential areas along several public roadways (e.g., Xerxes, Crestview, Byrd, France, and West Broadway avenues; see **Appendix J** for a mapbook of the Alignment Shift 2 Alternative including anticipated impacted parcels). Within the area surrounding TWRP (between Olson Memorial Highway and 26th Avenue North) the potential number of relocations is estimated to exceed 90 residential properties and one commercial property. Several partial land acquisitions of both public and private properties would also occur.

The northern portion of the Alignment Shift 2 Alternative would run down the median of Bottineau Boulevard. Bottineau Boulevard is a principal arterial that carries between 22,000 and 29,200 vehicles per day (vpd) and is projected to carry between 29,000 and 35,000 vpd in 2040. To effectively carry this volume of traffic, three through lanes in each direction are required. Intersections at Bass Lake Road and 63rd Avenue have sufficiently high volumes and turning movements that dual left turn lanes have been implemented. In its current configuration, there is insufficient median width to accommodate a light rail corridor and associated station infrastructure. In order to maintain the necessary traffic operations and incorporate light rail transit, Bottineau Boulevard would need to be widened a minimum of 30 feet. This widening would need to occur entirely on the east side of the roadway as widening to the west would encroach upon the Osseo Branch. Widening Bottineau Boulevard to the east would require the elimination of the frontage road, removal of business and residential accesses, and the likely acquisition of over 30 residences and partial or total acquisitions of over 20 businesses, and would encroach further into the Crystal Airport runway protection zone.

Economic Impact: The loss of residential and commercial property described above would impact economic conditions. While some residents and the commercial business displaced under this avoidance alternative may relocate within the area, the potential loss of property tax base would adversely affect economic conditions in the cities of Minneapolis, Golden Valley, Robbinsdale, and Crystal.

Community Disruption: Introducing a new rail corridor in a residentially developed area has the potential to cause community disruption by way of altering travel patterns, dividing or isolating neighborhoods, and increasing travel time to community resources, recreation areas, residents, or area businesses. Other local factors to consider include reduced accessibility, noise, and visual impacts. The Alignment Shift 2 Alternative has the potential to alter the desirability of the area and adversely impact the community character and cohesion for these portions of the cities of Minneapolis, Golden Valley, Robbinsdale, and Crystal, thereby reducing the quality of life of those who live in the surrounding neighborhoods.



The potential for constructing additional tunnel sections to avoid the social, economic and environmental effects noted above was considered. However, given the preponderance of narrow residential streets along the Alignment Shift 2 Alternative, a shallow cut and cover tunnel would require a similar number of acquisitions because of the required construction footprint. Deep tunnel sections would need to be approximately 850 feet long and would require the appropriate entrance and exit grades; these deep tunnel sections would encounter the same factors outlined in the discussion of the Deep Tunnel Alternative and would therefore be deemed not prudent.

iv. Construction, Maintenance, or Operational Costs of Extraordinary Magnitude

Long term maintenance and operational costs would be comparable to the proposed BLRT Extension project; the cost of construction of this avoidance alternative would approximately \$35 million to \$45 million greater than the proposed BLRT Extension project primarily because of the cost of the shallow tunnel sections.

v. Unique Problems or Unusual Factors

No other unique or unusual factors have been identified. However, the Alignment Shift 2 Alternative introduces additional risks resulting from construction schedule uncertainty associated with a large increase in the number of acquisitions and relocations. Construction delay would not only increase overall capital costs, but delay benefits of system users. In addition, Alignment Shift 2 Alternative would not be supported by local jurisdictions and/or the public due to the aforementioned concerns related to social, economic, and community impacts.

vi. Cumulative Consideration of Factors

A final consideration of prudence takes into account multiple factors that on their own may be considered minor, but would cumulatively result in unique problems or project impacts of extraordinary magnitude. While the Alignment Shift 2 Alternative would have avoided use of the Osseo Branch and is considered feasible, this avoidance alternative is not considered prudent as it exhibits weak performance in meeting purpose and need by not supporting local and regional economic development goals and objectives and potentially reducing ridership because of slower travel times; it would result in social and economic impacts of extraordinary magnitude including creating substantially greater right-of-way impacts on residential properties; and it would create additional operational concerns. For these reason, Alignment Shift 2 Alternative has been determined not prudent.

Avoidance Alternative Determination

The Alignment Shift 2 Alternative would avoid uses of all Section 4(f) resources and is feasible to construct, but is deemed not prudent under criteria defined in paragraph (3) of 23 CFR Part 774.17 for feasible and prudent avoidance alternatives.

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All Possible Planning to Minimize Harm Analysis

In addition to a determination that there is no feasible and prudent alternative that avoids the use of a Section 4(f) resource, the Section 4(f) regulations also states that FTA may not approve the use of a Section 4(f) resource unless it determines that the proposed action includes all possible planning, as defined in 23 CFR Part 774.17, to minimize harm to the property resulting from such use.

In evaluating the reasonableness of measures to minimize harm under \$774.3(a)(2), FTA will consider the preservation purpose of the Section 4(f) statute and:

- The views of the official(s) with jurisdiction over the Section 4(f) property;
- Whether the cost of the measures is a reasonable public expenditure in light of the adverse impacts of the project on the Section 4(f) property and the benefits of the measure to the property, in accordance with §771.105(d) of this chapter; and
- Any impacts or benefits of the measures to communities or environmental resources outside of the Section 4(f) property.

FTA and Council has consulted with MnHPO and identified consulting parties during the design of the proposed BLRT Extension project in the Osseo Branch corridor to avoid, minimize, and/or mitigate adverse effects from construction and operation of the proposed BLRT Extension project through sensitive design and the incorporation of protective measures. The design of the LRT alignment and facilities continue to be developed as part of the advancement of the design for the proposed BLRT Extension project.

FTA, MnDOT CRU, and the Council are responsible for the proposed BLRT Extension project's implementation of the Section 106 consultation process, including coordination with USACE, which has Section 106 responsibilities as a NEPA Cooperating Agency. USACE recognizes FTA as the Lead Federal Agency for the Section 106 process. **Table 8.7-4** lists the Section 106 coordination meetings that the Council has held under the Section 106 process. **Appendix H** includes documentation of Section 106 consultation meetings.

The complete reconstruction that is required within the Osseo Branch to accommodate the construction of the proposed BLRT Extension project and the reconstruction of the existing BNSF freight tracks would result in the demolition of the historic resource within the 8-mile segment that proposed BLRT Extension project would occupy (see Determination of Effects Report in **Appendix H**). Therefore, mitigation efforts would be the primary measures to minimize harm. During the March 10, 2016 Section 106 Consultation meeting, mitigation measures for impacts to the Osseo Branch were discussed and agreed upon.

Based on the Section 106 consultation meetings, the following proposed mitigation measures for impacts to the Osseo Branch have been agreed upon by MnHPO and the proposed BLRT Extension project's consulting parties and documented in the proposed BLRT Extension project's Section 106 MOA (see also **Appendix H**):



Osseo Branch Line of the St. Paul, Minneapolis & Manitoba Railroad / Great Northern Railway. The COUNCIL shall incorporate interpretation of the Osseo Branch Line of the St. Paul, Minneapolis & Manitoba Railroad / Great Northern Railway into the design of the PROJECT segment that will utilize the Osseo Branch Line of the St. Paul, Minneapolis & Manitoba Railroad / Great Northern Railway Historic District. The interpretation shall be based on the results of the Phase II evaluation completed for the historic property during the identification stage of the PROJECT and additional research that shall be completed to inform the content of the interpretation. Interpretation shall be incorporated into the design at station locations within the historic district corridor; and into the PROJECT related trail improvements along the historic district corridor.

Table 8.7-4. Council Meetings Related to Section 106

Date	Meeting Type	
January 23–25, 31, 2012	EIS Scoping open houses (4)	
May 7, 8, 13, 14, 2014	Draft EIS public hearings (4)	
February 26, 2015	Open house	
May 28, 2015	Open house	
June 4, 2015	Open house	
June 5, 2015	Section 106 consulting parties meeting	
June 11, 2015	Open house	
June 17, 2015	Open house	
July 10, 2015	Section 106 consulting parties meeting	
July 16, 2015	Section 106 consulting parties meeting	
October 18, 2015	Open house	
October 20, 2015	Open house	
October 21, 2015	Open house	
October 28, 2015	Open house	
October 29, 2015	Open house	
February 4, 2016	Section 106 consulting parties meeting	
March 10, 2016	Section 106 consulting parties meeting	
March 24, 2016	Section 106 consulting parties meeting	

All Possible Planning to Minimize Harm Determination

Based on the summary within this section, FTA has determined in accordance with 23 CFR Part 774.17 that all possible planning to minimize harm to the Osseo Branch Line of the St. Paul, Minneapolis & Manitoba Railroad/Great Northern Railway Historic District will be conducted and implemented through the proposed BLRT Extension project's Section 106 process and with execution of the proposed BLRT Extension project's Section 106 MOA.

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8.7.2.11 Grand Rounds Historic District – Theodore Wirth Segment

In the March 2014 Draft Section 4(f) Evaluation, the Grand Rounds Historic District was identified as a direct use in Table 8.3-2 on page 8-13, but was described as a *de minimis* use in the text on page 8-35. The correct preliminary determination in the March 2014 Draft Section 4(f) Evaluation was a *de minimis* use. Since the publication of the March 2014 Draft Section 4(f) Evaluation, additional engineering information along with additional coordination with MnHPO has resulted in FTA amending their preliminary Section 4(f) determination for the Grand Rounds Historic District. The following sections discuss FTA's amended Section 4(f) determination.

Section 4(f) Property Description

As stated in the Determination of Effects Report, the Grand Rounds Historic District is a nationally significant example of urban park development in the nineteenth and twentieth centuries and is one of the most unique and iconic features of Minneapolis. The district represents a conscious effort to link all areas of the City into a comprehensive and unified system. The district is the most comprehensive design by nationally prominent landscape architect Horace William Shaler Cleveland and most important work by nationally prominent landscape architect and park professional Theodore Wirth. TWRP is a contributing element to Theodore Wirth Segment of the district. The Grand Rounds Historic District is approximately 4,662 acres. The Grand Rounds Historic District is eligible for the NRHP under Criteria A and C.

Approximately one mile of the Osseo Branch Section 4(f) resource, which is discussed in detail in **Section 8.7.2.10**, lies within the boundaries of the Grand Rounds Historic District.

Determination of Permanent Section 4(f) Use

There are several permanent and temporary easements proposed for the proposed BLRT Extension project that lie within the boundaries of the Grand Rounds Historic District. These include (see also **Figure 8.7-20**):

- Approximately 0.7 acre of property along Theodore Wirth Parkway, a contributing element to the Grand Rounds Historic District, would be acquired as permanent easement.
- Approximately 1.4 acres of TWRP property that is not a contributing element to the Grand Rounds Historic District would be acquired as a permanent easement; this includes approximately 1.2 acres for the Golden Valley Road Station and approximately 0.2 acre for the Plymouth Avenue Station.
- Approximately 10.6 acres of property would be needed as temporary easement for construction purposes.
- Approximately 11.7 acres of existing BNSF right-of-way, currently in a transportation use, would be needed for LRT construction and freight rail reconstruction activities.

Impacts would occur from removal of vegetation, grading, construction of the LRT guideway, realigned freight track, bridge reconstruction, and corridor protection barriers between the freight rail and light rail lines. In addition, the Plymouth Avenue and Golden Valley Road stations are within the historic district and would include vertical circulation towers and pedestrian access



facilities that are ADA compliant. The Golden Valley Road Station also includes construction of a 100-space park-and-ride adjacent to the station; however, only 0.7 acre would impact Theodore Wirth Parkway—a contributing element to the Grand Rounds Historic District.

FTA has preliminarily determined that this 0.7-acre impact to Theodore Wirth Parkway is the only direct use of the Grand Rounds Historic District, since the other 1.4 acres of permanent easement do not affect contributing elements to the historic district. Similarly, the 11.7 acres of existing BNSF right-of-way that lie within the Grand Rounds Historic District are not a contributing element to the district, and furthermore are already a transportation use.

Avoidance Alternatives Analysis

The Section 4(f) statute requires the selection of an alternative that completely avoids the use of Section 4(f) property if that alternative is deemed feasible and prudent. Based on proposed BLRT Extension project analysis performed to date, the No-Build and the Enhanced Bus Alternatives as described and evaluated in the Draft EIS (and for the No-Build, as also evaluated in the Final EIS) would completely avoid the use of any Section 4(f) property. Alignment D2 from the Draft EIS would avoid impacts on the Grand Rounds Historic District, but would result in impacts to other Section 4(f) properties, including Lincoln Community School Playground, the Minneapolis Public Schools athletic field, and the Homewood Residential Historic District, that are being avoided by the proposed BLRT Extension project.

Portions of the same avoidance alternatives presented in **Section 8.7.2.10** for the Osseo Branch were evaluated for the Grand Rounds Historic District. These include the Deep Tunnel Avoidance Alternative and the Alignment Shift Avoidance Alternatives with the cut-and-cover tunnels. In addition, the elimination of the Golden Valley Road Station or the relocation of the station, north and south, was evaluated.

The following sections summarize the FTA and Council assessment of the feasibility and prudence of these avoidance alternatives.

No-Build Alternative and Enhanced Bus Alternative

The No-Build Alternative and Enhanced Bus Alternative would, as described in **Section 8.7.2.10**, avoid all Section **4**(f) uses. However, as described in **Section 8.7.2.10**, neither the No-Build Alternative nor the Enhanced Bus Alternative would be considered prudent as they would not address the Purpose and Need for the proposed BLRT Extension project.

Avoidance Alternative Determination

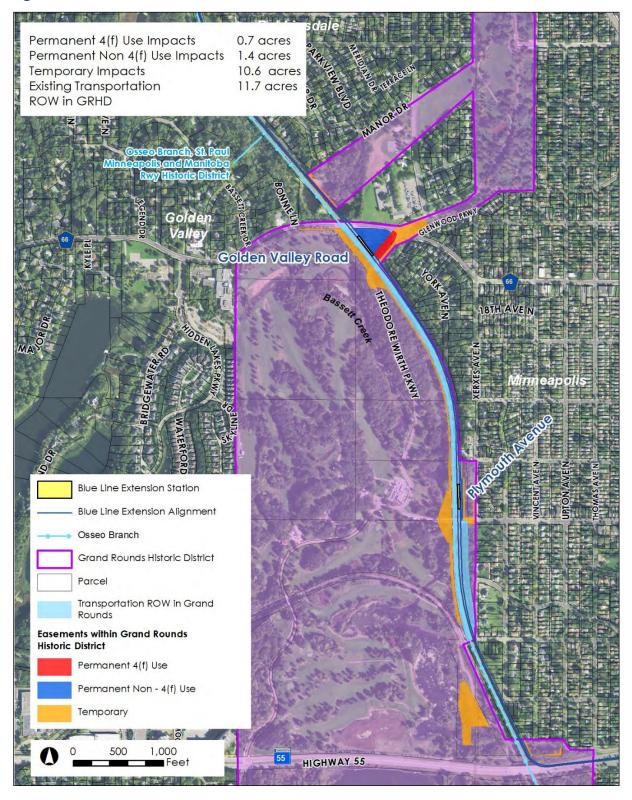
The No-Build Alternative and the Enhanced Bus Alternative would avoid uses of all Section 4(f) resources and would be considered feasible from an engineering perspective because of relatively low construction requirements to implement the alternatives, but both the alternatives are deemed not prudent under the criteria defined in paragraph (3) of 23 CFR Part 774.17 for feasible and prudent avoidance alternatives. The No-Build Alternative and the Enhanced Bus Alternative are not prudent per 23 CFR Part 774.17 because they neither address nor correct the transportation purpose and need that prompted the proposed BLRT Extension project.

See Section 8.7.2.10 for additional discussion of the No-Build and Enhanced Bus alternatives.

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Figure 8.7-20. Grand Rounds Historic District





Deep Tunnel Alternative

As described in **Section 8.7.2.10** the construction of an approximately 8-mile long deep tunnel⁵ along the proposed BLRT Extension project alignment was considered as an alternative to avoid the use of the Osseo Branch. This Deep Tunnel Alternative would also avoid the Grand Rounds Historic District. A shorter tunnel section was also considered but eliminated since a shorter tunnel would still impact the majority of the Osseo Branch, a Section 4(f) protected property.

Figure 8.7-16 through Figure 8.7-18 illustrate the Deep Tunnel Alternative.

Evaluation of Feasibility

Section 8.4.3 describes the process and criteria to be used in determining whether or not an alternative is feasible.

As described in **Section 8.7.2.10**, FTA and the Council have determined that a Deep Tunnel Alternative is feasible from a technical engineering perspective.

Evaluation of Prudence

Section 8.4.3 describes the process and criteria to be used in determining whether or not an alternative is prudent. The analysis of prudence for the Deep Tunnel Alternative as an avoidance alternative for the Grand Rounds Historic District is the same as the prudence analysis for the Osseo Branch. See **Section 8.7.2.10** for a detailed discussion of the prudence evaluation criteria for the Deep Tunnel Alternative.

Avoidance Alternative Determination

The Deep Tunnel Alternative would avoid uses of all Section 4(f) resources and is feasible to construct, but is deemed not prudent under the criteria in paragraph (3) of 23 CFR Part 774.17.

Alignment Shift 1 and Alignment Shift 2 Alternatives

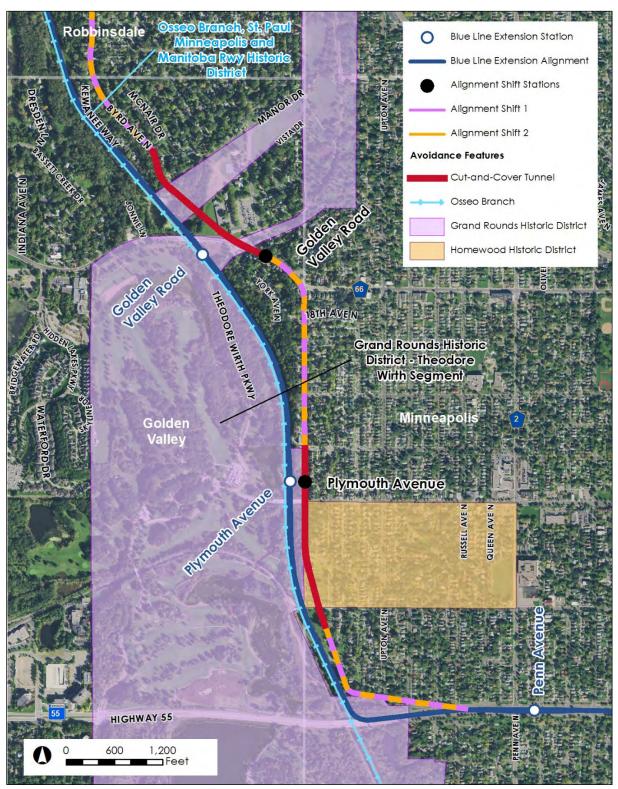
Shifting the BLRT alignment and moving the Plymouth Avenue and Golden Valley Road stations in an effort to avoid impacts on the Grand Rounds Historic District was considered. The alignment shift in the area of the Grand Rounds Historic District is part of the common segment of the Alignment Shift 1 and Alignment Shift 2 alternatives (see Figure 8.7-21) associated with impacts to the Osseo Branch, St. Paul Minneapolis and Manitoba Railway Historic District, which is discussed in detail under Section 8.7.2.10. The alignment shift in the area of the Grand Rounds Historic District moves the alignment and the Plymouth Avenue and Golden Valley Road stations east along several public roadways in order to stay outside the historic district (see Figure 8.7-21).

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Section 4(f) use of the Grand Rounds Historic District or the Osseo Branch. The cut and cover option would still require relocation of the existing freight rail, and several segments of the corridor would need to be constructed at-grade because of shallow groundwater and surface water features. In a cut and cover alternative, the Golden Valley Road Station would need to be constructed at-grade because of these engineering limitations; therefore the impact to Theodore Wirth Parkway (which is the only impacted contributing element of the Grand Rounds Historic District) would still occur.



Figure 8.7-21. Alignment Shift Alternatives





Evaluation of Feasibility

Section 8.4.3 describes the process and criteria to be used in determining whether or not an alternative is feasible.

As described in **Section 8.7.2.10**, FTA and the Council have determined that the Alignment Shift 1 and Alignment Shift 2 alternatives are feasible from a technical engineering perspective.

Evaluation of Prudence

Section 8.4.3 describes the process and criteria to be used in determining whether or not an alternative is prudent. The analysis of prudence for the Alignment Shift 1 and Alignment Shift 2 alternatives as avoidance alternatives for the Grand Rounds Historic District is the same as the prudence analysis for the Osseo Branch. See **Section 8.7.2.10** for a detailed discussion of the prudence evaluation criteria for the Alignment Shift 1 and Alignment Shift 2 alternatives.

Avoidance Alternative Determination

The Alignment Shift 1 and Alignment Shift 2 alternatives would avoid uses of all Section 4(f) resources and are feasible to construct, but are deemed not prudent under the criteria defined in paragraph (3) of 23 CFR Part 774.17 for feasible and prudent alternatives.

All Possible Planning to Minimize Harm Analysis

In evaluating the reasonableness of measures to minimize harm under §774.3(a)(2), FTA will consider the preservation purpose of the Section 4(f) statute and:

- The views of the official(s) with jurisdiction over the Section 4(f) property;
- Whether the cost of the measures is a reasonable public expenditure in light of the adverse impacts of the project on the Section 4(f) property and the benefits of the measure to the property, in accordance with §771.105(d) of this chapter; and
- Any impacts or benefits of the measures to communities or environmental resources outside of the Section 4(f) property.

FTA and the Council have consulted with MnHPO and identified consulting parties during the design of the proposed BLRT Extension project in the Grand Rounds Historic District to avoid, minimize, and/or mitigate adverse effects from construction and operation of the proposed BLRT Extension project through sensitive design and the incorporation of protective measures. The design of the LRT alignment and facilities continue to be developed as part of the advancement of the design for the proposed BLRT Extension project.

Section 8.7.2.10 summarizes the roles and responsibilities of FTA, the Council, and cooperating agencies with respect to the Section 106 process. **Table 8.7-4** lists the Section 106 coordination meetings that the Council has held under the Section 106 process. **Appendix H** includes documentation of Section 106 consultation meetings.

The analysis of measures to minimize harm for the Grand Rounds Historic District focuses on the contributing elements to the district.

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Several options that were developed during the analysis of avoidance alternatives were considered as potential measures to minimize harm to the contributing elements of the district. These options include:

- Reducing the Golden Valley Road Station park-and-ride footprint
- Eliminating the park-and-ride at the Golden Valley Road Station
- Shifting the Golden Valley Road Station to the north
- Shifting the Golden Valley Road Station to the south
- Eliminating the Golden Valley Road Station

None of these options were considered viable avoidance alternatives as they still would result in a Section 4(f) use of another resource; the Osseo Branch. However, these options would potentially reduce impacts to the contributing elements of the Grand Rounds Historic District.

Reducing or Eliminating the Golden Valley Road Station Park-and-Ride

As shown in **Figure 8.7-22**, reducing the footprint of the Golden Valley Road Station park-and-ride would result in an approximate 0.2-acre impact to Theodore Wirth Parkway, which is a contributing element to the Grand Rounds Historic District. Similarly, eliminating the park-and-ride would also result in an approximate 0.2-acre impact to the parkway, as shown in **Figure 8.7-23**. The 0.2-acre impact is caused by the need for ADA-compliant pedestrian access facilities to the station platform.

Reducing or eliminating the Golden Valley Road Station park-and-ride would not eliminate the impact to Theodore Wirth Parkway, which is a contributing element to the Grand Rounds Historic District. Therefore, reducing or eliminating the park-and-ride is not considered a viable measure to minimize harm.

Shifting the Golden Valley Road Station Location

The construction of the Golden Valley Road Station either north or south of the proposed location, would eliminate impact to the Theodore Wirth Parkway portion of the Grand Rounds Historic District. Specifically, moving the station location to outside the right-of-way of Theodore Wirth Parkway would avoid the Section 4(f) use of the resource (see Figure 8.7-24 and Figure 8.7-25).

However, the amount of right-of-way and relocations and the substantial increase in automobile and bus traffic in residential areas would be in conflict with local and regional economic development goals and objectives, and would be objectionable to the public. A shift of the station to the north would impact at least 14 residential properties along Kewanee Way and Byrd Avenue North. A shift of the station location to the south would impact at least 15 residential properties along Zephyr Place, Golden Valley Road, and York Avenue North.

Finally, shifting the Golden Valley Road Station away from the intersection of Golden Valley Road and Theodore Wirth Parkway and into residential neighborhoods would not be supported by Golden Valley residents, staff or elected officials because it would lead to additional impacts on



residential properties and would adversely impact the community character and cohesion for the neighborhood within the City of Golden Valley.

These factors indicate that shifting the Golden Valley Road Station to the north or south would not be viable measures to minimize harm.

Elimination of the Golden Valley Road Station

By eliminating the Golden Valley Road Station, impacts to Theodore Wirth Parkway could be eliminated. Elimination of the station would diminish the City of Golden Valley's access to the LRT service that would be provided by the proposed BLRT Extension project, and therefore would not meet one of the goals of the purpose and need for the proposed BLRT Extension project, namely addressing long-term regional transit mobility and local accessibility needs.

Both the city of Golden Valley and MPRB have provided strong written support for the construction of the Golden Valley Road Station to facilitate access to both the City and to TWRP.

These factors indicate that eliminating the Golden Valley Road Station is not a viable measure to minimize harm.

Mitigation Measures

Altering the layout or location of the Golden Valley Road Station, or eliminating the station altogether, are not viable options as discussed above. Therefore, mitigation efforts are anticipated to be the primary measures to minimize harm. During the March 24, 2016 Section 106 Consultation meeting, mitigation measures for impacts to the Grand Rounds Historic District were discussed. Designing proposed BLRT Extension project elements in accordance with Secretary of the Interior Standards, developing preservation and treatment plans for the Theodore Wirth Segment of the Grand Rounds Historic District, design review processes, and historic district interpretation elements were considered.

Based on the Section 106 consultation meetings, the following proposed mitigation measures for impacts to the Grand Rounds Historic District have been agreed upon by MnHPO and the proposed BLRT Extension project's consulting parties, and documented in the proposed BLRT Extension project Section 106 MOA (see also **Appendix H**):

- All proposed BLRT Extension project elements within, and in the vicinity of, the Grand Rounds Historic District will be designed in accordance with the Secretary of the Interior's Standards and the National Park Service's (NPS) Guidelines for the Treatment of Cultural Landscapes.
- During the proposed BLRT Extension project design development (before completion of the 30 percent, 60 percent, and 90 percent plans) FTA shall continue to consult with MnHPO, concurring parties, and the public, as appropriate, on the design of PROJECT elements within, and in the vicinity of, the Grand Rounds Historic District to consider ways to minimize effects on the district and address design concerns.
- All BLRT design plans (30 percent, 60 percent, 90 percent, and 100 percent plans and subsequent modifications) shall be subject to FTA review. The purpose of the review is to determine if substantive proposed BLRT Extension project changes that have the potential to

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change the effects or mitigation for historic property have been made, and would need to be addressed. FTA will submit the 60 percent plans to MnHPO for concurrence.

- A Construction Protection Plan would be developed that would detail the measures to be implemented during construction to avoid and minimize adverse effects on the Grand Rounds Historic District from construction activities.
- Interpretation of the Theodore Wirth Segment of the Grand Rounds Historic District would be incorporated into the design of the Plymouth Avenue and Golden Valley Road stations. The park-and-ride lot at the Golden Valley Road Station shall include a trailhead at the intersection of Theodore Wirth Parkway and Golden Valley Road, and this trailhead shall also include interpretation of the Grand Rounds Historic District.
- Vegetation and landscaping would be incorporated into the proposed BLRT Extension project design to screen and minimize views of the proposed BLRT Extension project from Theodore Wirth Parkway. Proposed BLRT Extension project infrastructure, as well as alterations to the landscape, shall be developed in a manner that minimizes the net loss of existing vegetation.
- Preservation and treatment plans would be developed to guide the overall preservation of the Theodore Wirth Segment of the Grand Rounds Historic District and to guide preservation activities for up to twelve different historic features or feature types within this area.

All Possible Planning to Minimize Harm Determination

Based on the summary within this section, FTA has determined in accordance with 23 CFR Part 774.17 that all possible planning to minimize harm to the Theodore Wirth Segment of the Grand Rounds Historic District will be conducted and implemented through the completion of the proposed BLRT Extension project's Section 106 process and with execution of the proposed BLRT Extension project's Section 106 MOA.



Figure 8.7-22. Golden Valley Road Station with Reduced Park-and-Ride Footprint



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Figure 8.7-23. Golden Valley Road Station without Park-and-Ride Footprint

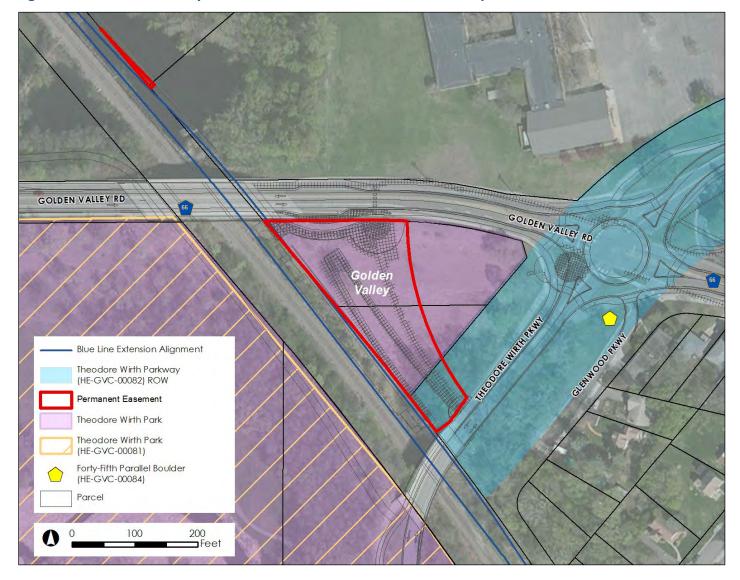




Figure 8.7-24. Shift of Golden Valley Road Station to the North



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Figure 8.7-25. Shift of Golden Valley Road Station to the South





8.7.2.12 Sacred Heart Catholic Church

Section 4(f) Property Description

Sacred Heart Catholic Church is located in Robbinsdale at 4087 West Broadway Avenue. This historic property is eligible for the NRHP under Criterion C. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Sacred Heart Catholic Church

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from Sacred Heart Catholic Church.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from Sacred Heart Catholic Church during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at Sacred Heart Catholic Church. This No Adverse Effect finding is subject to the implementation of mitigation measures identified in the Section 106 MOA (see the Section 106 consultation documentation in **Appendix H**).

Based on the Section 106 finding of No Adverse Effect (with mitigation), FTA has concluded that Sacred Heart Catholic Church will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.13 Robbinsdale Waterworks

Section 4(f) Property Description

The Robbinsdale Waterworks is located in Robbinsdale at 4127 Hubbard Avenue North. This historic property is eligible for the NRHP under Criterion A. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Robbinsdale Waterworks

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Robbinsdale Waterworks.

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Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Robbinsdale Waterworks during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Robbinsdale Waterworks. This No Adverse Effect finding is subject to the implementation of mitigation measures identified in the Section 106 MOA (see the Section 106 consultation documentation in **Appendix H**).

Based on the Section 106 finding of No Adverse Effect (with mitigation), FTA has concluded that the Robbinsdale Waterworks will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.14 Hennepin County Library, Robbinsdale Branch

Section 4(f) Property Description

The Hennepin County Library, Robbinsdale Branch is located in Robbinsdale at 4915 42nd Avenue North. This historic property is listed on the NRHP under Criterion A. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Hennepin County Library, Robbinsdale Branch

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Hennepin County Library, Robbinsdale Branch.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Hennepin County Library, Robbinsdale Branch during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Hennepin County Library, Robbinsdale Branch. This No Adverse Effect finding is subject to the implementation of mitigation measures identified in the Section 106 MOA (see the Section 106 consultation documentation in **Appendix H**).



Based on the Section 106 finding of No Adverse Effect (with mitigation), FTA has concluded that the Hennepin County Library, Robbinsdale Branch will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.15 West Broadway Avenue Residential Historic District

Section 4(f) Property Description

The West Broadway Avenue Residential Historic District is located in Robbinsdale along West Broadway Avenue, between 42nd Avenue North and TH 100, Lakeland Avenue North to the BNSF right-of-way. The West Broadway Avenue Residential Historic District is eligible for the NRHP under Criterion C. For more detailed information on this historic district, see **Section 4.4** and **Appendix H**.

Potential Impacts to the West Broadway Avenue Residential Historic District

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the West Broadway Avenue Residential Historic District.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the West Broadway Avenue Residential Historic District during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (Appendix E) and continued consultation with MnHPO, a Section 106 finding of Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the West Broadway Avenue Residential Historic District. In summary, the proposed BLRT Extension project would diminish the historic district's integrity of setting and feeling through the introduction of both severe and moderate noise impacts to residential property in the historic district, and would sever the district's visual connection across the existing BNSF rail corridor. However, these impacts to the historic district's setting and feeling would not be to a degree that would affect the West Broadway Avenue Residential Historic District's eligibility for the NRHP. A MOA developed in consultation with MnHPO and other parties includes measures that will be incorporated into the proposed BLRT Extension project to mitigate the Adverse Effect on the historic district. Specifically, the implementation of a Federal Railroad Administration Quiet Zone at the 42nd Avenue crossing will address severe noise impacts. Residual moderate noise impacts will be addressed through interior noise testing, and as appropriate, sound insulation. Additionally, a public meeting will be held with the residents of the West Broadway Avenue Residential Historic District in order to solicit input on proposed BLRT Extension project designs (see the Section 106 consultation documentation in **Appendix H** for additional detail).

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Based on the Section 106 finding of Adverse Effect and the measures to mitigate the Adverse Effect included in the Section 106 MOA, FTA has concluded that the features and attributes that qualify the West Broadway Avenue Residential Historic District for protection under Section 4(f) will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project. This is supported by the Section 106 finding that the Adverse Effect on the West Broadway Avenue Historic District would not be to a degree that would affect its eligibility for the NRHP.

8.7.2.16 Jones-Osterhus Barn

Section 4(f) Property Description

The Jones-Osterhus Barn is located in Robbinsdale at 4510 Scott Avenue North. This historic property is eligible for the NRHP under Criterion C. For more detailed information on this historic property, see **Section 4.4** and **Appendix H**.

Potential Impacts to the Jones-Osterhus Barn

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Jones-Osterhus Barn.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Jones-Osterhus Barn during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Jones-Osterhus Barn (see the Section 106 consultation documentation in **Appendix H**).

Based on the Section 106 finding of No Adverse Effect, FTA has concluded that the Jones-Osterhus Barn will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.2.17 Minneapolis & Pacific/Soo Line Railway Historic District

Section 4(f) Property Description

The Minneapolis & Pacific/Soo Line Railway Historic District is located in Crystal. This historic district is eligible for the NRHP under Criterion A. For more detailed information on this historic district, see **Section 4.4** and **Appendix H**.



Potential Impacts to the Minneapolis & Pacific/Soo Line Railway Historic District

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in a permanent incorporation of land from the Minneapolis & Pacific/Soo Line Railway Historic District.

Temporary Occupancy

As illustrated in the proposed BLRT Extension project's engineering drawings (**Appendix E**), the proposed BLRT Extension project will not result in the temporary use of property from the Minneapolis & Pacific/Soo Line Railway Historic District during construction.

Potential Constructive Use

Based on the proposed BLRT Extension project's engineering drawings (**Appendix E**) and continued consultation with MnHPO, a Section 106 finding of No Adverse Effect has been made with respect to the proposed BLRT Extension project impacts at the Minneapolis & Pacific/Soo Line Railway Historic District (see the Section 106 consultation documentation in **Appendix H**).

Based on the Section 106 finding of No Adverse Effect, FTA has concluded that the Minneapolis & Pacific/Soo Line Railway Historic District will not be substantially impaired by proximity impacts associated with the proposed BLRT Extension project.

8.7.3 Corridor-Wide Least Overall Harm Analysis

Per 23 CFR Part 774.3(c), if the Section 4(f) analysis for a property that will be used by a project concludes that there is no feasible and prudent avoidance alternative, FTA may approve, from among the remaining alternatives that use Section 4(f) property, only the alternative that causes the least overall harm in light of the statute's preservation purpose. If the assessment of least overall harm finds that two or more alternatives are substantially equal, FTA can approve any of those alternatives. To determine which of the alternatives will cause the least overall harm, FTA must compare seven factors set forth in 23 CFR Part 774.3(c)(1) concerning the alternatives under consideration (Section 8.4.3 above). The results of the assessment are discussed below by factor.

The Section 106 consultation process, including meetings, is ongoing and will continue to proceed through execution of the proposed BLRT Extension project's Section 106 MOA. The Council and FTA have also committed to continue Section 4(f) coordination activities with the OWJs related to the park and historic properties. In general, these Section 4(f) coordination activities will focus on the visual and noise effects of the proposed BLRT Extension project's impacts on the Section 4(f) protected properties identified in this Amended Evaluation.

A final determination of least overall harm requires the completion of the process to determine if all possible planning to minimize harm has been satisfied. Because the Osseo Branch and the Grand Rounds Historic District are Section 106 resources, all possible planning to minimize harm for these two resources will be completed when the proposed BLRT Extension project's Section 106 process concludes with an approved Section 106 MOA. The section below includes a least overall harm analysis based on an anticipated proposed BLRT Extension project's Section 106 MOA that will

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address the adverse effect to the Osseo Branch and Grand Rounds Historic District. The final determination of least overall harm will be documented in the proposed BLRT Extension project ROD, after consideration of comments received from the Department of the Interior.

8.7.3.1 Ability to Mitigate Adverse Impacts to Each Section 4(f) Property

Prior to the identification of the proposed BLRT Extension project, FTA and the Council considered potential use of all Section 4(f) resources (parks/recreational properties and historic properties) in connection with the Draft EIS alternatives. In assessing the alternatives, numerous design refinements were considered, such as alignment shifts, to reduce impacts to Section 4(f) properties. Differences among the four Draft EIS build alternatives primarily exist between Alignment D1 (BNSF Railway–Olson Highway—part of the proposed BLRT Extension project) and Alignment D2 (West Broadway–Penn Avenue), therefore the analysis focuses on these two alignments. Based on the design refinements, both options would require direct use of park/recreational properties and historic properties. Alignment D1 would impact approximately 2 acres of TWRP (total size: 759 acres), but not disrupt any existing or planned park amenities. Alignment D2 would impact the approximately 0.5 acre of the Minneapolis Public Athletic Fields (total size: 3 acres). While the Minneapolis Athletic Field could continue to function as a football field, it would no longer be large enough to accommodate a full-size soccer field under Alignment D2.

Alignment D1 would involve a use of the Grand Rounds Historic District, while Alignment D2 would not. Alignment D1 would have a greater use of the Osseo Branch Historic District as it includes an additional 2.5 miles of the freight rail corridor compared to Alignment D2. Alignment D2 involved the use of the Homewood Historic District as designed in the Draft EIS, while Alignment D1 avoids the Homewood Historic District. A cut-and-cover tunnel for Alignment D2 in the vicinity of the Homewood Historic District would avoid the use of the historic resource entirely. A cut-and-cover option for Alignment D2 was dismissed because property impacts would be essentially the same as the impacts from construction of the alignment at grade because of the close proximity of residences and businesses, and costs would be greater for a cut-and-cover option.

FTA has the same ability to mitigate impacts associated with the different alternatives discussed in this section, as compared to the proposed BLRT Extension project.

8.7.3.2 Relative Severity of the Remaining Harm after Mitigation

Considering the relative severity of remaining harm to Section 4(f) properties, a severity rating was assigned to each property, with "high" being removal of the entire property or significantly compromising the ability to continue to use the property for its intended purpose, "moderate" being partial use of the property that does not qualify for a *de minimis* use determination, "low" being a partial use of the property that does qualify for a *de minimis* use determination, and "no use" being avoidance of the property.

⁶ The Draft EIS evaluated four alternatives consisting of combinations of Segments A, B, C, D1, and D2 (Alternative A-C-D1, Alternative A-C-D2, Alternative B-C-D1 [the BLRT Extension project], and Alternative B-C-D20. All alternatives had Alignment C in common; Alignment C lies entirely within the Osseo Branch and the construction of Alignment C would result in a Section 4(f) use of the Osseo Branch resource. As documented here, the primary Section 4(f) differences between the Draft EIS alternatives lie with Alignments D1 and D2.



Remaining Severity of Harm Ratings

Table 8.7-5 presents the Section 4(f) resource uses along Draft EIS alternative Alignments D1 and D2, and the severity of harm that would be incurred upon each resource by each alignment.

Table 8.7-5. Severity of Harm by Alignment

Section 4(f) Resource	Alignment D1	Alignment D2
Minneapolis Schools Athletic Field	No Use	High
Grand Rounds Historic District	Moderate	No Use
Homewood Historic District	No Use	Moderate
TWRP	Low	No Use
Glenview Terrace Park	Low	No Use

Implementation of Alignment D1 (part of the proposed BLRT Extension project) would result in moderate harm to one resource (a use of the Grand Rounds Historic District), and low harm to two resources (*de minimis* uses of TWRP and Glenview Terrace Park). Implementation of Alignment D2 would result in high harm to one resource (a use of Minneapolis Schools Athletic Field) and moderate harm to one resource (a use of the Homewood Historic District).

The assessment results indicate that there would be one more property affected by Alignment D1 as compared to Alignment D2. However, the severity of remaining harm would be greater at the properties affected by Alignment D2.

8.7.3.3 Relative Significance of Each Section 4(f) Property

FTA and the Council consider each Section 4(f) property to be equally significant in this evaluation.

8.7.3.4 Views of the OWJs over Each Property

The OWJs over the Section 4(f) properties have provided views and input on the design refinements regarding the proposed BLRT Extension project. These officials include:

- MPRB for TWRP and Glenview Terrace Park
- MPRB for Glenview Terrace Park
- City of Golden Valley and the JPA Board for Sochacki Park: Mary Hills Management Unit
- City of Robbinsdale for South Halifax Park
- City of Robbinsdale and the JPA Board for Sochacki Park: Sochacki Management Unit
- City of Crystal for Becker Park
- TRPD for Park Property Adjacent to Rush Creek Regional Trail

FTA and the Council have developed mitigation plans and agreements specific to each affected Section 4(f) property. These plans and agreements capture the negotiated mitigation for impacts to parkland. See **Table 8.7-6** for a summary of OWJ coordination and mitigation commitments.

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Table 8.7-6. Coordination with Officials with Jurisdiction

Section 4(f) Resource	Section 4(f) Use	OWJ	Section 4(f) Coordination	Mitigation Measure(s)
TWRP	De Minimis	MPRB	x	Replacement parkland; trail reconstruction, new trail construction and trail connections; trailhead construction; reconstruct Theodore Wirth Parkway/Golden Valley Road intersection; revegetation of disturbed areas
Glenview Terrace Park	De Minimis	MPRB	х	Enhanced trail connections and wayfinding signage
Sochacki Park: Mary Hills Management Unit	No Use (Temporary Occupancy)	City of Golden Valley; JPA Board	X	Trail reconstruction; revegetation of disturbed areas; new trail construction and trail connections
Sochacki Park: Sochacki Management Unit	No Use (Temporary Occupancy)	City of Robbinsdale; JPA Board	X	Trail reconstruction; revegetation of disturbed areas; park enhancements
South Halifax Park	No Use (Temporary Occupancy)	City of Robbinsdale	х	Revegetation of disturbed area
Becker Park	No Use (Temporary Occupancy)	City of Crystal	х	Restoration of disturbed area
Park Property Adjacent to Rush Creek Regional Trail	No Use (Temporary Occupancy)	TRPD	X	Restoration of disturbed area
Osseo Branch	Use	MnHPO	x	Implement measures in Section 106 MOA
Grand Rounds Historic District	Use	MnHPO	x	Implement measures in Section 106 MOA

8.7.3.5 Degree to Which Each Alternative Meets the Project Purpose and Need

Each alternative would achieve the proposed BLRT Extension project purpose to effectively address the long-term regional transit mobility and local accessibility needs, while providing efficient, travel-time competitive transit service that supports economic development goals and objectives of local, regional, and statewide plans. Therefore the degree to which each alternative meets the project purpose and need is not a distinguishing factor in this evaluation.



8.7.3.6 The Magnitude of Adverse Effects to Resources Not Protected by Section 4(f)

The adverse impacts of the alignment alternatives to non-Section 4(f) properties would be considerable when comparing Alignment D1 and Alignment D2. The D2 alignment follows Penn Avenue between Olson Memorial Highway to West Broadway Avenue. This section of Penn Avenue is densely developed with residential, institutional, and commercial developments present along both sides of the existing roadway corridor. This area has a high concentration of minority and low income populations, as identified in Chapter 7 – Environmental Justice of the Draft EIS. **Table 8.7-7** summarizes key factors from the Environmental Justice analysis for Alignments D1 and D2.

Table 8.7-7. Comparison of Environmental Justice Impacts – Alignments D1 and D2

	Potentially High or Disproportionate Impacts		
Section 4(f) Resource	Alignment D1	Alignment D2	
Pedestrian and Bicycle Facilities	No – limited impacts to pedestrian and bicycle facilities since Alignment D1 is in an existing trench and therefore grade- separated from pedestrian and bicycle traffic	Yes – closure of residential street crossings and interruption of street grid system decrease walkability and accessibility to and within the neighborhoods	
Parking	No – no parking spaces lost along the D1 alignment	Yes – loss of 270 on-street parking spaces	
Community Facilities/ Community Character and Cohesion	No — use of the existing rail corridor trench isolates LRT facilities from community facilities and maintains connections within and between neighborhoods	Yes – changes in community character due to removal of residential properties and community facilities, access changes, and loss of parking	
Acquisitions and Displacements	No – no residential or commercial relocations along Alignment D1	Yes – 103 residential displacements and three commercial displacements	

The environmental justice impacts associated with Alignment D2 are a key distinguishing factor between the Alternatives; Alignment D2 has notable environmental justice impacts, while Alignment D1 does not.

8.7.3.7 Cost Difference

The cost difference of each of the alternatives is not a distinguishing factor in this evaluation. The relative cost of the Draft EIS alternatives that include Alignment D2 is approximately 10 percent greater than the costs of the Draft EIS Alternatives that include Alignment D1; these costs are mainly associated with the acquisition/displacement of residential and commercial properties located along the Penn Avenue segment.

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8.8 Coordination

This section summarizes the proposed BLRT Extension project's Section 4(f) coordination activities that have occurred since publication of the Draft Section 4(f) Evaluation and the Draft EIS, which address Section 4(f) coordination and concurrence requirements set forth in 23 CFR Part 774.

8.8.1 US Department of the Interior

The Draft Section 4(f) Evaluation was provided to the US Department of the Interior (USDOI) for review and comment during the Draft EIS comment period, which concluded on May 29, 2014. A copy of USDOI's letter to FTA regarding the Draft Section 4(f) Evaluation is included in **Appendix J**.

USDOI has been provided a copy of the Final EIS. FTA will address USDOI's comments on both the Draft Section 4(f) Evaluation and the Final EIS in the ROD.

8.8.2 **OWJs**

See **Appendix H** for documentation of the Section 106 consultation process and for documentation of Section 4(f) coordination meetings with OWJs. OWJs include:

- Minnesota State Historic Preservation Officer
- MPRB
- City of Golden Valley
- City of Robbinsdale
- Sochacki Park IPA Board
- City of Crystal
- City of Brooklyn Park
- TRPD

8.9 Preliminary Determination of Section 4(f) Use

Based on BLRT preliminary engineering plans and analysis conducted to-date, FTA has made the following preliminary Section 4(f) determinations:

- The proposed BLRT Extension project would result in a direct use of the Grand Rounds Historic District and the Osseo Branch of the St. Paul Minneapolis & Manitoba Railway Historic District and there is no feasible and prudent alternative that would avoid a use of these Section 4(f) resources. In addition, based on the summary within this section, FTA has determined in accordance with 23 CFR Part 774.17 that all possible planning to minimize harm has been conducted and implemented. Further, FTA and the Council have determined that the proposed BLRT Extension project is the alternative that would result in the least overall harm to these two historic resources.
- The proposed BLRT Extension project would have a Section 4(f) *de minimis* impact on two Section 4(f) park/recreational properties Glenview Terrace Park and TWRP. Measures to



minimize harm, such as avoidance, minimization, mitigation and enhancement measures, include the following:

- O Glenview Terrace Park: The recreational amenities of Glenview Terrace Park will be unaffected by the proposed BLRT Extension project. The proposed LRT alignment will be visually screened by an existing stand of mature trees. New trail connections, enhancements to existing trails, and a new trailhead with wayfinding signage will improve park accessibility. The small area of temporary impact (0.25 acre) adjacent to the 0.01-acre permanent impact will be restored to existing or better condition following construction.
- o TWRP: The recreational amenities of TWRP will not be permanently affected by the proposed BLRT Extension project. The proposed LRT alignment will be visually screened from the majority of the park by existing and restored vegetation. Areas of temporary disturbance will be restored to existing or better conditions. An existing trail along Bassett Creek will be reconstructed in a location approved by MPRB outside of railroad right-of-way. New trail connections to the Plymouth Avenue Station and the Golden Valley Road Station will be provided. A new trail connection to the Sochacki Park system to the north will be constructed. A trailhead will be provided at the Golden Valley Road Station park-and-ride lot; this trailhead will provide connections to two regional trails and other local trail connections. Wayfinding signage will be included at this trailhead.
- The proposed BLRT Extension project would result in Section 4(f) temporary occupancies during construction of five Section 4(f) park/recreation properties Sochacki Park: Mary Hills Management Unit, Sochacki Park, South Halifax Park, Becker Park, and the park property adjacent to Rush Creek Regional Trail. It has been preliminarily determined that Section 4(f) temporary occupancy exception criteria in 23 CFR Part 774.13(d) would be met in all instances and therefore no use would result at any of these five properties (see Section 8.7.1.4 through Section 8.7.1.6, Section 8.7.1.9, and Section 8.7.1.12).
- FTA has preliminarily determined that none of the Section 4(f) resources along the proposed BLRT Extension project corridor would be subject to a constructive use (see Section 8.7.1.1, Section 8.7.1.4 through Section 8.7.1.12, Section 8.7.2.1 through Section 8.7.2.9, and Section 8.7.2.12 through Section 8.7.2.17).

8.10 Federally and State Funded Parks

8.10.1 Introduction

Many parks and recreational facilities are developed through funding that restricts the use of the property. Some federally and state-funded programs require the land to be retained and operated solely for outdoor recreation, and any conversion of any portion of the land to a different use would require approval of the funding entity and the replacement of the converted land. This section describes the two programs under which impacted parks and recreation areas were funded that restrict their use—the federal Land and Water Conservation Act Program of Assistance to States and Urban Parks and Minnesota's Outdoor Recreation Grant Program.

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8.10.1.1 Section 6(f)(3) of the Land and Water Conservation Fund Act

Established by the Land and Water Conservation Fund (LWCF) Act of 1965 (Public Law 88-578) which is codified as 16 USC § 460, the LWCF Program of Assistance to States and Urban Parks has provided funding for parks and recreational facilities across the United States for over 50 years. Section 6(f)(3) of the LWCF Act, commonly referred to as Section 6(f), contains provisions to protect federal investments in park and recreation resources and ensure the public outdoor recreation benefits achieved through the use of these funds are maintained. Section 6(f)(3) of the LWCF Act states:

No property acquired or developed with assistance under this section shall, without prior approval of the Secretary [of the Interior], be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive Statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location.

Regulations at 36 CFR Part 59, "Land and Water Conservation Fund Program of Assistance to States; Post-Completion Compliance Responsibilities" implement the requirements of Section 6(f). These regulations delegate approval authority under Section 6(f) to the Regional Directors of NPS. In the state of Minnesota, the LWCF Act is administered by the Minnesota Department of Natural Resources (DNR). The Director of Parks and Trails at DNR is the State Liaison Officer to NPS for LCWF Act coordination.

A review of the LWCF grants database and consultation with DNR indicate that one property developed with LWCF grant assistance within the proposed BLRT Extension project study area would potentially be impacted with the proposed BLRT Extension project—Walter Sochacki Park, hereinafter referred to as Sochacki Park: Sochacki Management Unit (see Figure 8.7-8).

8.10.1.2 Minnesota Department of Natural Resources Outdoor Recreation Grant Program

The Outdoor Recreation Grant Program administered by DNR assists local governments in acquiring parkland and developing or redeveloping outdoor recreation facilities. Established in Minnesota Statute 85.019, the Program provides matching grants to local units of government for up to 50 percent of the cost of acquisition, development, and/or redevelopment of local parks and recreation areas. Parks and outdoor recreation areas, natural and scenic areas, regional trails, and trail connections are all eligible for funding under this Program.

The State Comprehensive Outdoor Recreation Plan (SCORP), Minnesota's outdoor recreation policy plan, was developed with the input of Minnesota outdoor and natural resource leaders. It establishes outdoor recreation priorities for Minnesota to assist outdoor recreation and natural resource managers, the state legislature, and the executive branch in decision-making about the state's outdoor recreation system and sets out criteria for awarding grants consistent with these identified priorities. All applications for funding under the Outdoor Recreation Grant Program are



assessed to ensure that the proposed BLRT Extension project is consistent with priorities established in the most recent SCORP document.

A review of the DNR database of Grant-Funded Parks and Natural Areas Subject to Permanent Grant Program Requirements indicated that three properties developed through Program funding are located within the study area potentially impacted by the proposed BLRT Extension project—Glenview Terrace Park, Sochacki Park: Mary Hills Management Unit, and Sochacki Park: Sochacki Management Unit (see Figure 8.7-6, Figure 8.7-7, and Figure 8.7-8).

8.10.2 Section 6(f)(3) of the Land and Water Conservation Fund Act

8.10.2.1 Regulatory Requirements and Section 6(f)(3) Process

Section 6(f)(3) of the LWCF Act requires the evaluation of any project that would convert properties that were acquired or developed with LWCF grant assistance. The Section 6(f)(3) process, as described in the LWCF State Assistance Program Federal Financial Assistance Manual, begins with early consultation between DNR and NPS to agree on the Section 6(f)(3) acreage, boundaries, extent of impact, and approach to conformity with the regulations. A conversion occurs when the use of all or part of a Section 6(f)(3) site is changed for longer than 6 consecutive months to a non-outdoor recreation use, or when a project occurs on the Section 6(f)(3) property and would affect access to or other reasonable use of the Section 6(f)(3) resource on the site for more than 6 months (NPS, 2008).

Under the LWCF Act, conversion of parkland may be approved only if NPS finds that the following criteria have been met:

- 1. All practical alternatives to the proposed conversion have been evaluated;
- The fair market value of the park property to be converted has been established and that the
 property proposed for substitution is of at least equal fair market value, as established by an
 approved appraisal in accordance with the Uniform Appraisal Standards for Federal Land
 Acquisition, excluding the value of structures or facilities that will not serve recreational
 purposes;
- 3. The proposed replacement property is of reasonably equivalent usefulness and location as the converted property;
- 4. The property proposed for substitution meets the eligibility requirements for LWCF-assisted acquisition;
- 5. For properties that are proposed to be partially rather than wholly converted, the impact of the converted portion on the remainder must be considered and the unconverted area must remain recreationally viable, or be replaced as well;
- 6. All necessary coordination with other federal agencies has been satisfactorily accomplished;
- 7. The guidelines for environmental evaluation have been satisfactorily completed and considered by the NPS during its review of the conversion proposal;
- 8. The proposed conversion is in accordance with the applicable SCORP and/or equivalent recreation plans.

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Formal conversion proposal submittals to NPS include the following items:

- Proposal Description and Environmental Screening Form (PD/ESF)
- Environmental document (Environmental Assessment or EIS) analyzing the entire conversion proposal (the converted parkland and the replacement parkland in one document)
- LWCF project amendment form identifying changes to the original Section 6(f)(3) boundary caused by the conversion and to establish a new 6(f) boundary around the replacement site(s)
- Signed and dated Section 6(f)(3) boundary map for any remaining parkland resulting from a partial conversion, and for the replacement site(s)

8.10.2.2 Relationship between Section 4(f) and Section 6(f)(3)

Section 4(f) of the US Department of Transportation Act is broader in scope than Section 6(f)(3) of the LWCF Act and each is governed by a different federal law. Section 4(f) protects publicly owned parks, recreational areas, and waterfowl and wildlife refuges, as well as historic sites considered to have national, state, or local significance; for the proposed BLRT Extension project, FTA is the lead federal agency for compliance with Section 4(f). Section 6(f)(3) resources are protected by regulations that apply specifically to recreational areas acquired or developed with the LWCF Act funds, with NPS as the lead federal agency, as described above.

Often, one or more Section 4(f) recreational resource has received LWCF Act funding, thereby also triggering the need for compliance with Section 6(f)(3) and an integrated mitigation plan for any impacts resulting from the project. Section 6(f)(3) requires any converted lands to be replaced, as described above, whereas Section 4(f) mitigation is more flexible and may or may not include replacement lands.

Because of the differences between Section 4(f) and Section 6(f)(3) regulations, the resource impact findings may also be different. In the case of the Sochacki Park: Sochacki Management Unit, application of the Section 4(f) regulations yields a preliminary determination of temporary occupancy, and, with the agreement of the OWJ, the requirement is to restore the park to preconstruction conditions or better (see Section 8.4.4.2). Under Section 6(f)(3) regulations, a non-recreational use of part of the park property for longer than 6 months (as is proposed by the proposed BLRT Extension project) results in a conversion of that portion of the park, regardless of the fact that the park property would remain in its current ownership and the property would be restored and enhanced after construction is complete.

8.10.2.3 Description of the Section 6(f)(3) Resource

Portions of Sochacki Park: Sochacki Management Unit, located at 3500 June Avenue North in the City of Robbinsdale, were acquired with LWCF funds, as shown in **Figure 8.10-1**. A total of \$133,333 in funding was approved for the city on May 18, 1981, and the park was completed before the funds expired in 1986. The Sochacki Management Unit is contained within a 37.4-acre roughly narrow triangular site along BNSF right-of-way. The park contains picnic tables, a picnic pavilion, and several paths and trails. According to the city of Robbinsdale's 2030 Comprehensive Plan, the Sochacki Management Unit is classified by the city of Robbinsdale as a "Community Conservancy."



Community parks are intended to serve the entire community, with diverse environmental character and active and passive recreational features; however, conservancy areas have limited facilities and their primary objective is the protection and management of the natural environment through compatible passive recreational uses.

The Sochacki Management Unit also has certain property conditions of concern, including:

- The presence of demolition debris:
 - Concrete and rebar have been observed in several areas of the park
 - The park site is listed in the Minnesota Pollution Control Agency database as an unpermitted dump site
- A notable amount of nuisance vegetation, including buckthorn (a listed invasive plant species in Minnesota)
- Erosion features such as steep banks along North Rice Pond (a pond/wetland area present along much of the eastern portion of the park which extends eastward beyond the park boundary into the proposed BLRT Extension project corridor)
- Poor water quality in North Rice Pond

As noted in **Section 8.2** of this document, the Sochacki Park/Mary Hills/Rice Lake Nature Area Initiative proposed the unification of Sochacki Park with the Mary Hills and Rice Lake Nature Areas in Golden Valley to form one park, Sochacki Park, managed through a JPA between TRPD, the city of Robbinsdale, and the city of Golden Valley. **Figure 8.10-2** illustrates the planned Sochacki Park elements developed by the Sochacki Park/Mary Hills/Rice Lake Nature Area Initiative, proposed by TRPD in collaboration with the cities of Robbinsdale and Golden Valley. Improvements planned for the park include: paved trails, trail extensions north and south, an off-leash dog area, landscape buffers adjacent to rail right-of-way, prairie areas, and improved access.

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⁷ The Joint Powers Agreement for the provision of park system services for Sochacki Park was executed in March 2015.



Figure 8.10-1. LWCF Map

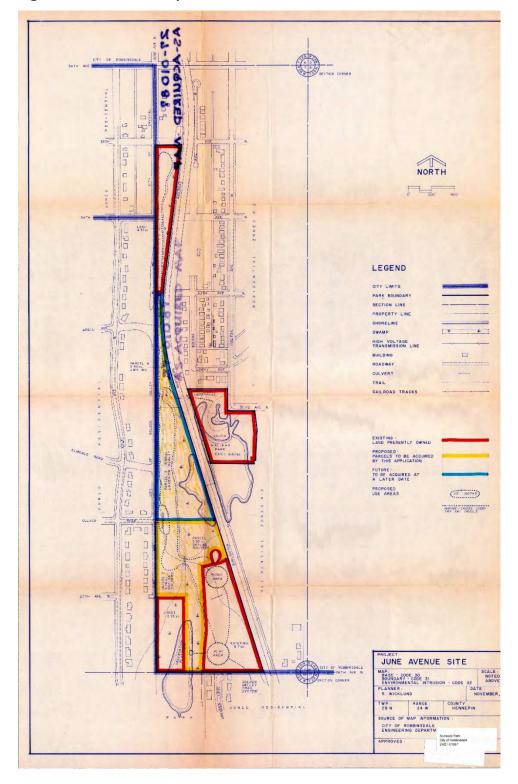
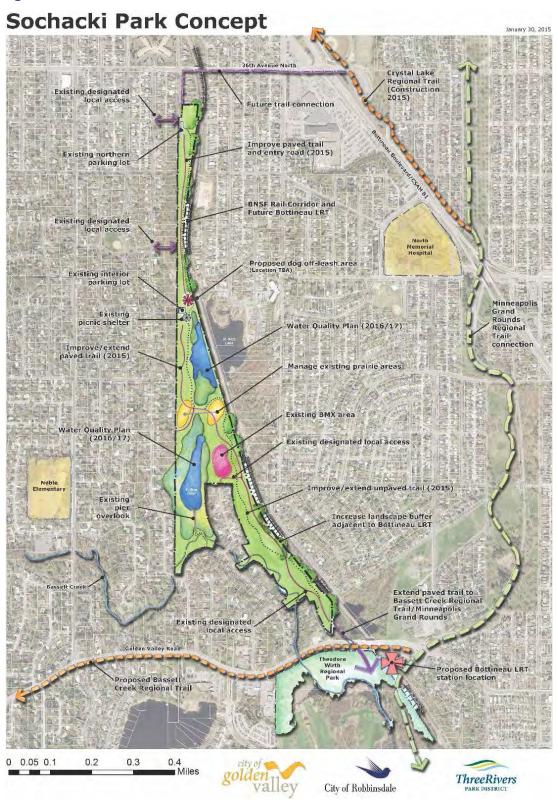




Figure 8.10-2. Sochacki Park Plan - TRPD



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8.10.2.4 Effects of the Proposed BLRT Extension Project on the Section 6(f)(3) Resource

In the City of Robbinsdale, the proposed BLRT alignment is in the existing BNSF rail corridor, a 100-foot-wide transportation right-of-way that is surrounded by a variety of land uses, including Sochacki Park: Sochacki Management Unit. During design activities, the Council has determined that it is necessary to obtain temporary access to part of the Sochacki Park: Sochacki Management Unit to construct a new 1,250-foot-long bridge crossing of Grimes Pond. This temporary access would likely be needed for one to two construction seasons, or approximately 18 months.

The area within the Sochacki Park: Sochacki Management Unit needed for construction access, which totals 5.6 acres, is shown in **Figure 8.7-8**. Modifications to the park to allow for construction access include new temporary access roads and fenced and gated construction lay down areas. The main north-south access road would generally follow an existing park path, which would be widened to accommodate construction traffic on the east side, and park users on the west side. The construction traffic lane would be separated from park users by temporary construction fencing. Two new temporary access roads connecting the main access to the railroad right-of-way would be constructed and gated, one each near the north and south ends of North Rice Pond. See **Section 8.7.1.5** for more information. A detailed plot of proposed construction impacts can be found in **Appendix J.**

8.10.2.5 Measures to Avoid and/or Minimize Impacts

The LWCF Act requires that prior to conversion of Section 6(f) properties, the agency proposing the conversion must ensure that "all practical alternatives" to converting Section 6(f) properties have been evaluated. The following sections summarize the alternatives that have been evaluated through the Alternatives Analysis and Draft EIS phases of the proposed BLRT Extension project, as well as the alternatives considered as part of the Section 4(f) analysis that would avoid impacts to the Sochacki Park: Sochacki Management Unit.

Alternatives Considered

The development of the proposed BLRT Extension project has included analyses of a number of alternatives. The results of these analyses support the selection of the proposed BLRT Extension project alignment as the preferred route for transit service improvements in the proposed BLRT Extension project area. The following sections summarize the alternative analyses that have occurred to date.

Alternatives Analysis/Draft EIS/Locally Preferred Alternative Processes

Chapter 2 – Alternatives presents a summary of the decision-making process that led to the selection of the current proposed BLRT Extension project alignment. Between spring 2008 and spring 2010, the Council, Hennepin County and FTA completed an Alternatives Analysis (AA) for the proposed BLRT Extension project. Several transit modes and alignments were considered through technical analysis and the input of proposed BLRT Extension project stakeholders. At the conclusion of the AA process, four LRT alternatives and one BRT alternative were recommended for further analysis. These alternatives are shown in **Figure 2.2-1** in **Chapter 2 – Alternatives**. Two alignment segments at the southern end of the alternatives, Alignment D1 and Alignment D2,



represent the differences in impacts to Sochacki Park: Sochacki Management Unit. Alignment D1 would be adjacent to the eastern edge of Sochacki Park: Sochacki Management Unit, while Alignment D2 would mostly run in a different corridor and would have little or no impact to the park.

In 2012, the EIS process for the proposed BLRT Extension project was initiated. During Scoping for the EIS, the four LRT alternatives and one BRT alternative were analyzed further, and additional public input was obtained. The result of the Scoping analysis was to eliminate the BRT alternative, and continue studying the four LRT alternatives, as well as a No-Build Alternative and an Enhanced Bus Alternative.

The Draft EIS, published in March 2014, presented the social, economic, and environmental impacts of the four LRT alternatives, as well as the impacts associated with the No-Build Alternative and the Enhanced Bus Alternative. Based on this analysis, the Draft EIS recommended that Alternative B-C-D1 (the proposed BLRT Extension project) be considered the Preferred Alternative. During the development of the Draft EIS, the Council (with the support of Hennepin County and the cities of Minneapolis, Golden Valley, Robbinsdale, Crystal, and Brooklyn Park) adopted Alternative B-C-D1 (the proposed BLRT Extension project alignment) as the LPA.

The Draft EIS Preferred Alternative recommendation and the LPA selection were based largely on key differences between Alignment D1 and Alignment D2. The analyses revealed that Alignment D1 would result in significantly less property and neighborhood impact, improved travel time, greater cost effectiveness, and less disruption of roadway traffic operations. Furthermore, the presence of concentrations of low income and minority populations along Alignment D2 indicated that there would be notable environmental justice concerns with alternatives using Alignment D2 (see Table 8.7-7).

Section 4(f) Evaluation

As discussed in **Section 8.4.3**, an Individual Section 4(f) Evaluation requires analysis of avoidance alternatives. **Section 8.7.2.10** presents the Draft Section 4(f) Evaluation specific to the Osseo Branch Line of the St. Paul Minneapolis & Manitoba Railway/Great Northern Railroad Historic District (Osseo Branch), including a discussion of avoidance alternatives (see **Section 8.7.2.10**). Avoidance alternatives by definition must avoid impacts to all Section 4(f) resources, including the Sochacki Park: Sochacki Management Unit. Therefore the avoidance alternative analysis conducted for the Osseo Branch is applicable to the examination of "all practical alternatives" to the Section 6(f)(3) conversion of Sochacki Park: Sochacki Management Unit.

The avoidance alternative analysis examines the No-Build and Enhanced Bus alternatives, and dismisses them since they do not meet the purpose and need of the proposed BLRT Extension project. A deep tunnel alternative and two alignment shift alternatives are also considered in **Section 8.7.2.10**. The Deep Tunnel Alternative was determined to not be prudent because the Deep Tunnel would have excessive capital and operating costs, and would cause significant impacts to residential property as a result of the necessary surface access features. The alignment shift alternatives were determined to not be prudent because of extensive residential and business impacts.

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Grimes Pond Bridge Construction Alternatives

In addition to location alternatives, alternatives to avoid or minimize impacts to the Sochacki Park: Sochacki Management Unit during construction have been evaluated and the proposed BLRT Extension project, as defined, results in less overall impact to the resource. Conditions adjacent to the Sochacki Park: Sochacki Management Unit present several challenges to the construction of the proposed BLRT Extension project, as discussed in the following review of construction alternatives.

- Building on an Embankment Building the proposed BLRT Extension project through the Grimes Pond/North Rice Pond area would either require significant filling of the ponds to build an embankment, or bridging over one or both of the ponds. Building an embankment could be achieved without needing the access and laydown space in Sochacki Park: Sochacki Management Unit, because with an embankment construction, there would not be the need to stage bridge piles and bridge beams. However, extensive wetland and floodplain impacts would occur if the proposed BLRT Extension project were built on fill in this area and mitigation for those impacts would require permanent excavation for compensatory flood storage. Furthermore, the soils in this portion of the corridor are soft and highly organic, and would require extensive engineering to allow the proposed BLRT Extension project to be built on fill. In order to avoid permanent water resource impacts and to help alleviate concerns over soft soils, constructing a bridge structure over Grimes Pond has been identified as the preferred solution.
- Alternative Construction Access Points Access to construct the bridge structure over Grimes Pond was considered to be difficult given the topography and surrounding land uses. Several potential access points in the Sochacki Management Unit and the surrounding area were reviewed. In general, access points outside the park have several limitations; they either are in very steep areas, very wet and swampy areas, or would require the acquisition and demolition of homes. In addition, construction staging and laydown space (for the delivery and storage of construction materials such as piling, bridge beams, and other similar items) is not available in the area of the proposed bridge over Grimes Pond, with the exception of areas within the Sochacki Park: Sochacki Management Unit.

Alternatives Analysis Conclusion

Several alternatives to the proposed BLRT Extension project alignment that would not require a conversion of a portion of Sochacki Park: Sochacki Management Unit have been considered; these include location alternatives, mode alternatives, a tunnel alternative, and construction access and staging alternatives. The impacts associated with these alternatives to the proposed BLRT Extension project are greater than the effect of converting a portion of the park. Therefore, there are no practical alternatives to the conversion of 5.6 acres of Sochacki Park: Sochacki Management Unit for the construction of the proposed BLRT Extension project.



Mitigation Considerations

As a result of coordination among the Council, DNR, FTA, NPS, and the Sochacki Park JPA partners (i.e., the city of Robbinsdale, the city of Golden Valley, and TRPD), a proposed restoration plan has been developed and shared with these entities and the public. The portion of the park to be temporarily occupied during construction would be restored to existing conditions or better—this includes the following mitigation commitments (see **Appendix J** for a copy of the JPA Board action):

- Removal of existing vegetation as agreed to by Council staff and JPA staff within the restoration zone, defined as A) the southern construction staging area, and B) the northern staging area (see Map Attachment A), blending into the adjacent disturbed areas in the northeast quadrant of the park.
- Removal and disposal of all surface rubble within the restoration zone, in accordance with MPCA permitting requirements.
- Addition of clean fill and top soil in the restoration zone in accordance with MPCA permitting requirements and consistent with the re-use of this area as guided by stakeholders.
- Development and implementation of a revegetation plan approved by the JPA staff. The plan would address all areas disturbed by construction activities, including secondary construction activities in BNSF right-of-way, such as moving the Xcel power lines. In addition, the plan would identify practicable additional thickening of the vegetative buffer such as plantings of evergreen trees between the park and the LRT Corridor for the purposes of reducing visual impacts of the LRT on park visitors.
- In the southern staging area, North Rice Lake water edge restoration work and vegetation plantings to provide learning opportunities for park users (design and species TBD).
- Restoration of the existing paved interior road to provide for safe two way traffic.
- Removal or replacement of the northern parking lot to be determined in consultation with JPA staff.
- Reconstruction and expansion of the interior paved parking lot (exact site TBD in consultation with JPA staff), to include room for a school bus turnaround.
- Clearing, revegetation and fencing of an area immediately east and north of the interior parking lot within the northern staging area for future use as a dog off leash area.
- Providing practicable utility services to a site adjacent to the interior parking lot for future development of a bathroom/storm shelter, and drinking water fountain.
- Ground preparation for a future education shelter sized for 50 students in a location TBD.
- Construction of a water education platform on North Rice Lake
- Redevelopment of a safe 10-foot-wide paved trail through the length of the park, running from the northern entrance to the current trail terminus by Bonnie Lane; with restoration along the trail edge as needed.
- Construction of an off-road trail connection from the existing terminus of the Sochacki Park trail at Bonnie Lane, crossing underneath the reconstructed Golden Valley Road Bridge and connecting to the existing trail in TWRP.

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8.10.2.6 Section 6(f)(3) Conversion of Sochacki Park: Sochacki Management Unit

As previously discussed, when an area acquired or developed with LWCF assistance would be used for other than public outdoor recreation use for a period longer than 6 months, this use constitutes a conversion under Section 6(f)(3). The proposed BLRT Extension project proposes to use a portion of the Section 6(f)(3) property, the Sochacki Park: Sochacki Management Unit during construction, and would thus be subject to the conversion requirements of Section 6(f)(3). Following construction, the park property would be restored and enhanced, and would remain under the ownership and control of the city of Robbinsdale and the JPA partners.

Eight steps in the Section 6(f)(3) conversion process are presented in **Section 8.10.2.1**. The following is a summary of the status of each of those steps.

- 1. **All practical alternatives to the proposed conversion have been evaluated** The information presented in **Section 8.10.2.5** demonstrates that all practical alternatives have been considered, and that the conversion of a portion of Sochacki Park: Sochacki Management Unit is the only practical alternative for the proposed BLRT Extension project.
- 2. The fair market value of the park property to be converted has been established and that the property proposed for substitution is of at least equal fair market value, as established by an approved appraisal in accordance with the Uniform Appraisal Standards for Federal Land Acquisition, excluding the value of structures or facilities that will not serve recreational purposes The Council will be conducting the appropriate appraisal activities for the easement in Sochacki Park: Sochacki Management Unit in the summer or fall of 2016, and will be working with the JPA partners and DNR to identify and appraise replacement property in a similar timeframe.
- 3. The proposed replacement property is of reasonably equivalent usefulness and location as the converted property The coordination process with the JPA partners and DNR will include assessment of the usefulness and location of the replacement property; only property that meets those criteria will be proposed as replacement property.
- 4. The property proposed for substitution meets the eligibility requirements for LWCF-assisted acquisition The Council will work with DNR to confirm that the replacement property meets the appropriate eligibility requirements.
- 5. For properties that are proposed to be partially rather than wholly converted, the impact of the converted portion on the remainder must be considered and the unconverted area must remain recreationally viable, or be replaced as well During the construction of the proposed BLRT Extension project, approximately 5.6 acres of the 37.4-acre Sochacki Park: Sochacki Management Unit resource would be unavailable for recreational purposes for about 18 months. Access to the remaining portions of the park will be maintained throughout construction. At the end of that 18 month period, the 5.6 acres would be restored and returned to the city of Robbinsdale and the JPA partners. Since the proposed BLRT Extension project requires only the temporary use, albeit it for a period of longer than 6 months, of a portion of the Sochacki Park: Sochacki Management Unit, and since the property will be returned to park



- use and park enhancements will be provided, the entirety of Sochacki Park: Sochacki Management Unit will remain recreationally viable.
- 6. All necessary coordination with other federal agencies has been satisfactorily accomplished The proposed BLRT Extension project development process has included coordination with all appropriate federal agencies, including coordination with the US Fish and Wildlife Service under Section 7 of the Endangered Species Act, and coordination between FTA and MnHPO in compliance with Section 106 of the National Historic Preservation Act. In addition, the Council and FTA have coordinated with NPS on the conversion of the portion of Sochacki Park: Sochacki Management Unit required for the proposed BLRT Extension project. All applicable federal agency coordination that has been conducted as part of the proposed BLRT Extension project development process will be updated as necessary, and incorporated in the environmental documentation for the Section 6(f)(3) conversion of a portion of Sochacki Park: Sochacki Management Unit.
- 7. The guidelines for environmental evaluation have been satisfactorily completed and considered by the NPS during its review of the conversion proposal The Council and FTA, in cooperation with DNR, will complete a separate Environmental Assessment (EA) and a PD/ESF for both the conversion property (i.e., the portion of Sochacki Park: Sochacki Management Unit to be used for the proposed BLRT Extension project) and the replacement property in accordance with NPS requirements and for NPS review and approval. The anticipated timeframe for the completion of this documentation is fall-winter 2016.
- 8. The proposed conversion is in accordance with the applicable Statewide Comprehensive Outdoor Recreation Plan (SCORP) and/or equivalent recreation plans The Council and FTA have consulted and will continue to consult with DNR to confirm that the proposed conversion is in accordance with the Minnesota SCORP.

The Council and FTA anticipate that the conversion process will be completed in early to mid-2017, and acknowledge that no BLRT Extension project construction activities will be allowed until the NPS has approved the Section 6(f)(3) conversion of a portion of Sochacki Park: Sochacki Management Unit.

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8.10.3 DNR Outdoor Recreation Grant Program

8.10.3.1 State Regulatory Requirements

According to the Outdoor Recreation Grant Program FY2016 Program Manual, "All land improved or acquired with assistance from this grant program must be retained and operated solely for outdoor recreation." Similarly to Section 6(f)(3) of the LWCF Act, DNR would consider conversions of these state-funded outdoor recreation areas to other uses only if all practical alternatives to the conversion have been evaluated and rejected on a sound basis, and the converted lands are replaced with other lands of at least equal fair market value and reasonably equivalent recreational usefulness as determined by the State.

8.10.3.2 Description of Resources Funded by the Outdoor Recreation Grant Program

Sochacki Park: Sochacki Management Unit has received DNR Outdoor Recreation Grant funds; impacts and findings under Section 6(f)(3) would be the same as those under DNR's Outdoor Recreation Grant Program. No additional analysis or documentation is required for the Sochacki Management Unit.

Two additional parks received funds from DNR's Outdoor Recreation Grant Program: Glenview Terrace Park and Sochacki Park: Mary Hills Management Unit.

Glenview Terrace Park

In September 1977, the city of Golden Valley was granted a total of \$6,655 in funding through the Outdoor Recreation Grant Program for the lighting of two tennis courts at the existing Glenview Terrace Park.

Glenview Terrace Park is a city of Golden Valley-operated section of the Glenview Terrace/Valley View Park on property owned by MPRB. Glenview Terrace/Valley View Park is a 17.5-acre park, and the Glenview Terrace section is a 12.6-acre neighborhood park located at 2351 Zenith Avenue in the City of Golden Valley. A "Neighborhood Park" is defined by the city of Golden Valley as an "active area designed for intensive use by children and family groups close to home and affording opportunities for informal recreation and possibly some scheduled activities for all ages" (City of Golden Valley Comprehensive Plan 2008–2018). Glenview Terrace Park consists of walkways and trails, playground equipment, two lighted tennis courts, and game squares. Ten off-street parking spots are available to visitors.

Sochacki Park: Mary Hills Management Unit

In October 1981, the city of Golden Valley was granted \$1,630 in funding for the development of a 2,500-foot biking and hiking trail within the existing Mary Hills Park, the former design designation of the Sochacki Park: Mary Hills Management Unit.

The Mary Hills Management Unit is a 15.7-acre open-space nature area located at 2190 Bonnie Lane in the City of Golden Valley. A "Nature Area" is defined by the city of Golden Valley as "public land set aside for preservation of natural resources and visual aesthetics/buffering, which may include areas for trails and other passive recreation uses" (City of Golden Valley Comprehensive Plan 2008–



2018). The Mary Hills Management Unit is comprised of upland and wetland woodland communities and has picnic and seating areas. A meandering internal trail system connects to the Sochacki Management Unit to the north in the City of Robbinsdale. The existing rail corridor borders the east side of the recreational property. As noted above, the Mary Hills Management Unit has been operationally incorporated into Sochacki Park, and is managed through a JPA between TRPD, the city of Robbinsdale, and the city of Golden Valley.

8.10.3.3 Effects of the Proposed BLRT Extension Project on Resources Funded by the Outdoor Recreation Grant Program

In the City of Golden Valley, the proposed BLRT Extension project alignment is in the existing BNSF rail corridor in the eastern portion of the City and flanked by parklands (TWRP and Sochacki Park: Mary Hills Management Unit) to its west and residential neighborhoods and Glenview Terrace Park to its east.

Glenview Terrace Park

As part of the proposed BLRT Extension project, a new 700-foot-long LRT bridge would be constructed adjacent to the western edge of Glenview Terrace Park, crossing the wetlands immediately north of Golden Valley Road. As described in **Section 8.7.1.3**, approximately 0.25 acre of temporary construction easements within the park would be required for access and construction work along the proposed BLRT Extension project corridor (see **Figure 8.7-6**). In addition, a 0.01-acre unimproved portion of designated parkland (currently a wetland) in the southwestern corner of the park would be impacted with the construction of the proposed BLRT Extension project (see **Figure 8.7-6**). Both the temporary and permanent uses of the park are located in a wetlands area of the park not used for active recreation, substantially remote from the intended uses of the park.

Sochacki Park: Mary Hills Management Unit

The proposed BLRT Extension project would require a temporary occupancy of approximately 0.57 acre along the eastern border of the Mary Hills Management Unit to facilitate construction activities and stormwater conveyance improvements. In addition, enhanced pedestrian and bicycle connections between TWRP and other parks to its north including the Mary Hills Management Unit, are included in the proposed BLRT Extension project design. These enhancements include a new trail connection to be constructed under the Golden Valley Road Bridge that would provide a safe and convenient connection between TWRP and the Mary Hills Management Unit and ultimately all of Sochacki Park.

8.10.3.4 Measures to Avoid and/or Minimize Impacts

Similarly to the LWCF Act, DNR's Outdoor Recreation Grant Program requires that prior to the conversion of any Program-funded parks to non-outdoor recreational uses, all practical alternatives to the conversion have been evaluated and rejected on a sound basis. As described in **Chapter 2**, the siting of the proposed BLRT Extension project alignment was evaluated in the Draft EIS and the alternative that includes the BNSF rail corridor adjacent to the Program-funded parks was selected.

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Glenview Terrace Park

For the proposed BLRT Extension project construction elements within Glenview Terrace Park, temporary use of the park property is necessary for the construction of bridge structures. There are no practical alternatives to the locations of the new LRT bridge over the wetlands pond north of Golden Valley Road. The LRT bridge over the wetlands area of Glenview Terrace Park is preferred over the option of building the LRT tracks on fill, which would result in substantial permanent wetlands impacts and required mitigation.

The 0.01-acre permanent easement is required for the operations of the proposed BLRT Extension project just north of the Golden Valley Road Station. Operations of the proposed BLRT Extension project east of the BNSF tracks requires minimal distances between tracks and that distance widens at approaches to LRT stations with center platforms. The proposed BLRT Extension project includes the minimal distance between tracks at the new LRT bridge over the wetlands/pond area north of Golden Valley Road; therefore, there is no practical alternative to avoid this permanent impact.

The Council and FTA have participated in coordination activities with the city of Golden Valley and MPRB to identify avoidance, minimization, and mitigation measures to address the proposed BLRT Extension project's use of and effects on the recreational attributes, facilities, and activities of the Glenview Terrace Park. The coordination efforts between the Council, the city, and MPRB included the development of additional design concepts and enhancements for the Golden Valley Road Station area that would improve trail connections to park resources, provide wayfinding signs to direct potential park users to park resources, and improve pedestrian and bicycle safety at the Golden Valley Road/Theodore Wirth Parkway intersection.

Sochacki Park: Mary Hills Management Unit

For the proposed BLRT Extension project construction elements adjacent to the Mary Hills Management Unit, temporary use of the property is necessary to allow construction to occur within the BNSF rail corridor to tie in grades and to maintain drainage. The areas of the Mary Hills Management Unit to be occupied during construction would be restored prior to the proposed BLRT Extension project completion. In addition, a new pedestrian trail under the Golden Valley Road Bridge is proposed that would provide a connection between the Mary Hills Management Unit and TWRP to the south.

The Mary Hills Management Unit would still be accessible to the public throughout construction via existing trails and paths. Construction activities would be coordinated with staff from the city of Golden Valley to avoid conflicts with park activities. Moreover, impacts related to temporary changes to access would be mitigated by development of a Construction Communication Plan, which would include advance notice of construction activities and highlighting trail closures and detour routes.



8.10.3.5 Conversion of Resources Funded by the Outdoor Recreation Grant Program

The proposed BLRT Extension project results in impacts to two parklands partially funded by DNR's Outdoor Recreation Grant Program.

The city of Golden Valley was awarded funds to install lighting for two tennis courts in Glenview Terrace Park, and 3 years later to develop a trail within the Mary Hills Management Unit. The proposed BLRT Extension project not only does not impact the functions of the two parks funded by the Program (tennis court use and trail), but it also does not impact the overall active use of the parks. Moreover, the addition of trail connections with the proposed BLRT Extension project enhances the functions of the parks. The temporary construction access use of both parks would be of short duration and would be contained along the edge of each park.

Since the construction activities within the Mary Hills Management Unit would be temporary, and would either involve grading for LRT construction followed by restoration, or consist of the construction of a recreational trail, no conversion of a state grant-funded park would occur and no additional mitigation is necessary.

The acquisition of a 0.01-acre permanent easement at the southwestern corner of Glenview Terrace Park to accommodate LRT operations would not diminish the public enjoyment of the park. However, the acquisition does constitute a conversion of state grant-funded park property. Normally, replacement property of equal value and recreational usefulness is required when a conversion of state grant-funded park land occurs. However, in this case the land to be converted was not acquired with grant assistance, the proposed conversion is of a very small area, and the identification and acquisition of replacement property is not practical. The Council has proposed alternate mitigation for the conversion of 0.01 acre of Glenview Terrace Park, including:

- Reconstruction of the nearby Golden Valley Road/Theodore Wirth Parkway intersection which
 would provide greater safety and improved accessibility for pedestrians and bicyclists traveling
 to Glenview Terrace Park.
- Incorporation of wayfinding signs at the Golden Valley Road Station park-and-ride and trailhead that include maps of and directions to area park resources, including Glenview Terrace Park.

DNR has concurred with the proposed alternate mitigation for the Glenview Terrace Park conversion in a communication dated June 17, 2016. A copy of the communication is provided in **Appendix J**.

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