
Section 106 Assessment of Effects and Final Determination of Effect for Historic Properties

July 2017

Northern Lights Express Passenger Rail Project from Minneapolis to Duluth, Minnesota

*Counties: Hennepin, Anoka, Isanti, Kanabec, Pine, Carlton, and St. Louis in Minnesota and
Douglas in Wisconsin*

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1. Introduction

The Northern Lights Express (NLX) Project will introduce new higher speed intercity passenger rail service between Minneapolis and Duluth, Minnesota. Stations are planned in six communities: Minneapolis, Coon Rapids, Cambridge, Hinckley, and Duluth in Minnesota and Superior in Wisconsin. The NLX Project, including station locations, is shown in **Figure 1**. In addition, the NLX Project will include one maintenance facility and one layover facility to provide for daily servicing of the trains. These facilities will either be on separate sites in Sandstone and Duluth, or co-located on one site in Duluth. The NLX Project will operate four round trips per day at speeds up to 90 miles per hour (mph) on 152 miles of existing BNSF Railway (BNSF), formerly Burlington Northern Santa Fe Railway, track in Minnesota (approximately 129 miles) and Wisconsin (approximately 23 miles). The NLX Project crosses Hennepin, Anoka, Isanti, Kanabec, Pine, Carlton and St. Louis counties in Minnesota, and Douglas County in Wisconsin.

The Federal Railroad Administration (FRA) and the Minnesota Department of Transportation (MnDOT), in cooperation with the Wisconsin Department of Transportation (WisDOT), prepared a Tier 1 Service Level Environmental Assessment completed in 2013, and a Tier 2 Project Level Environmental Assessment completed in 2017. The Tier 1 EA evaluated impacts of the NLX Project as a whole and compared multiple route alternatives, and resulted in the selection of a preferred route. FRA issued a Finding of No Significant Impact (FONSI) in August 2013, and MnDOT issued a Negative Declaration and a Finding of Fact and Conclusion in September 2013 (<http://www.dot.state.mn.us/nlx/documents.html>). The FONSI determined that the NLX Project would not have significant environmental impacts and could proceed to preliminary engineering and a Tier 2 EA.

The Tier 2 EA built on the Tier 1 EA, addressing specific NLX Project-related issues and likely environmental effects associated with planned track infrastructure, stations, and maintenance and layover facilities. As part of the Tier 2 EA, MnDOT, in cooperation with FRA and WisDOT, examined refinements to the NLX Project in terms of ridership, operations and service and potential reductions in capital cost (www.mndot.gov/nlx). A FONSI is anticipated by Fall, 2017.

Because the NLX Project has received federal funding from the FRA, the Project is a federal undertaking and must comply with Section 306108 of the National Historic Preservation Act of 1966 (NHPA), as amended (Section 106) and its implementing regulations, 36 Code of Federal Regulations (CFR) 800 and other applicable federal mandates. The Project will also seek permits from several state agencies in Minnesota and Wisconsin. Thus, the study must also comply with applicable Minnesota and Wisconsin laws including the Minnesota Historic Sites Act (Chapter 138); Minnesota Field Archaeology Act (Chapter 138); Minnesota Private Cemeteries Act (Minn. Stat. 307.08); Wisconsin Historical Societies and Historical Preservation (Chapter 44); Wisconsin Burial Sites Preservation (Wis. Stat. 157.70); and Wisconsin Administrative Code HS 2.04. This assessment of effects study was prepared to comply with the aforementioned legislative requirements.

Figure 1. NLX Project Location



In December 2012, FRA delegated authority to the MnDOT Cultural Resources Unit (CRU) to aid FRA in many aspects of the Section 106 process, including initiation of consultation with the SHPO, identification of the Area of Potential Effect (APE), identification of historic resources, and conducting consultation with the SHPO and the public, in accordance with 36 CFR 800.2(a)(3). MnDOT CRU is also assisting FRA with identifying consulting parties, and making determinations of effect, although FRA retains final authority in these areas.

In 2013, a Programmatic Agreement (PA) was prepared and signed by FRA, the Surface Transportation Board, MnDOT, WisDOT, the Minnesota State Historic Preservation Office (MnSHPO) and the Wisconsin State Historic Preservation Office (WisSHPO) (see **Appendix P of NLX Tier 2 EA**). The PA was established for a 10-year period, and describes how Section 106 activities would be conducted, and guides the cultural resources review process for this Project. The PA will guide future cultural resources work that could occur after completion of this Determination of Effects when the NLX Project is funded for final design and construction.

This report provides a summary description of the NLX Project, an overview of the legal and regulatory requirements for Section 106, a summary of the results of efforts completed to identify and evaluate historic properties for the NRHP that could be potentially affected by the Project, and describes consultation completed with interested parties and the public to consider Project effects on historic properties. It also assesses effects of the Project on NRHP listed and eligible properties located within the APE, provides findings of effect for each property, and describes FRA's final determination of effect on historic properties for this undertaking.

2. Project Description

The Northern Lights Express (NLX) Project will introduce new higher speed intercity passenger rail service between Minneapolis and Duluth, Minnesota, and will operate on 152 miles of existing BNSF Railway (BNSF), formerly Burlington Northern Santa Fe Railway, track in Minnesota (approximately 129 miles) and Wisconsin (approximately 23 miles). The NLX Project will operate four round trips per day at speeds up to 90 miles per hour (mph). The NLX Project crosses Hennepin, Anoka, Isanti, Kanabec, Pine, Carlton and St. Louis counties in Minnesota, and Douglas County in Wisconsin. Project improvements are described below by type; more detailed description, photographs and site plans of stations and facilities are provided in section 2.3.2.9 of the NLX Tier 2 EA (www.mndot.gov/nlx).

Stations

Stations are planned in six communities: Minneapolis, Coon Rapids, Cambridge, Hinckley, and Duluth in Minnesota and Superior in Wisconsin.

Target Field Station: The Project begins at Target Field Station in Minneapolis, where construction will extend the existing commuter rail platform approximately 490 feet to the northeast and a stub end track will be constructed on the southeast side of the platform. Existing public parking structures in the area will accommodate NLX Service parking demand.

Coon Rapids: The Coon Rapids Station will be constructed north of Foley Boulevard, east of the BNSF line, on land owned almost entirely by the Anoka County Regional Railroad Authority and BNSF. A total of 192 parking spaces will be provided immediately east of the NLX station.

Cambridge: The Cambridge Station will be located in a publicly owned area in the City Center Mall, with a platform located along the BNSF right of way at the east side (rear) of the Mall. The existing City Center Mall parking spaces will be reconfigured and shared with NLX Service with a total of 346 spaces provided for all users.

Hinckley: The Hinckley Station will be located northeast of downtown Hinckley and near the Hinckley-Finlayson High School, constructed on property owned by the City, and BNSF, with a small portion of land to be acquired from a church. Due to substantial grade changes at the site, the upper portion of the site will contain the station building and passenger drop-off area and the lower level will contain the 166-stall parking lot.

Superior, Wis: The Superior Station will be located at the western edge of downtown, adjacent to the BNSF tracks and just north of the US 2 overpass. A total of 192 parking spaces will be provided immediately east of the station.

Duluth: The Duluth Station will be located adjacent to, and on the rear side of the historic Union Depot, at track level. The station will feature a new dedicated passenger walkway from Michigan Street to the new station entrance near the north side of the Union Depot building. A new station platform will be provided at track level, along with a drop-off lane at track level. The parking demand generated by NLX Service will be accommodated by existing public parking facilities adjacent to Union Depot.

Maintenance and Layover Facility

The NLX Project includes one maintenance facility and one layover facility to provide for daily servicing of the trains. These facilities may either be on separate sites in Sandstone and Duluth, or co-located on one site in Duluth. Both the Sandstone and Duluth sites are located on BNSF right of way, and were formerly rail yards.

Track Infrastructure

Track infrastructure improvements include upgrading track with ballast rehabilitation; adding sidings, turnouts and crossovers to maintain train traffic flow; and adjustments to curves to accommodate higher train speeds.

Bridge and Culvert Modifications

New bridges will be constructed to accommodate additional track at Mississippi Street and Rice Creek in Fridley and over a drainage ditch and Isanti Brook in Isanti County. Open deck bridges will be converted to ballast deck bridges over the following waterways: Coon Creek, Grindstone River, West Balsam Creek, Black River, Nemadji River and Pokegama River. No substructure work occurs in this process. The operating and control systems will be rehabilitated on the Grassy Point swing bridge between Superior, Wisconsin, and Duluth. Culverts will be extended throughout the Project area as needed to accommodate new track infrastructure.

Signal System Improvements

The NLX Project includes upgrades to automate train signal and communication systems. Upgrades include the installation of CTC with a PTC overlay.¹

Roadway and Grade Crossing Improvements

A total of 126 public rail grade crossings exist in the NLX Project. The NLX Project will improve public rail grade crossings, including installation of active warning devices, reconstruction of approach roadways, installation of medians and rail infrastructure improvements, such as construction of an additional track across the roadway. The NLX Project is not proposing to close any public rail grade crossings. Private rail crossings are not under the jurisdiction of MnDOT; any changes to private rail crossings would be addressed by BNSF and the adjacent property owners.

Improvements are needed at certain rail grade crossings to improve site visibility for approaching trains and vehicles. A total of 42 crossings were considered critical, meaning that the slopes of roadway approaches to the railroad did not meet minimum state and federal standards. Improvements to the critical crossing locations include reconstruction of the roadway approaches to flatten the slopes and installation of recommended grade crossing warning devices, signage and striping.

¹ CTC is a train control system whereby a train dispatcher provides operational authority to trains remotely via a wayside signal system and radio communication. PTC is an automated communication-based train control system designed to prevent train accidents. PTC technology is capable of automatically controlling train speeds and movements should a train operator fail to take appropriate action for rail system conditions.

Currently, 62 of the crossings are equipped with automatic gates and flashing lights, and the remainder are stop sign controlled. As part of the NLX Project, each rail grade crossing will be equipped with automatic gate systems and flashing-light signals.

A total of 37 public rail grade crossings will be upgraded to quad gates and flashing lights, 50 public rail grade crossings will be upgraded to dual gates and flashing lights with a median, 21 public rail grade crossings will be upgraded from stop controlled to dual gates and flashing lights with no median, 1 public rail grade crossing will be upgraded from a single gate to dual gates and flashing lights with no median, and 17 public rail grade crossings will have no upgrade to their warning devices or upgrades would be done by others separately from the NLX Project.

Passenger Rail Equipment

MnDOT will purchase or lease the equipment for the NLX Project. The equipment necessary for daily operations will include two train consists. A third consist will be available for use when one of the two active consists requires maintenance. Each 650-foot-long train consist will include six 85-foot-long coaches and two 70-foot-long push-pull locomotives.

Fencing

Fencing will be added in the corridor where it is necessary for safety and security purposes. It will be placed in developed areas where human and train interactions could occur and primarily in urban areas where it is consistent with existing conditions.

3. Section 106 Legal and Regulatory Context

Prior to implementing an undertaking, Section 106 of the NHPA requires Federal agencies to consider the effects of the undertaking on historic properties that are included in, or are eligible for inclusion in, the NRHP. Undertakings include projects a federal agency carries out, approves or licenses, or funds. Federal agencies must also afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the project prior to the agency making a decision.

As described in 36 CFR 800, which implements Section 106, the Section 106 process includes the following steps:

1. Initiation of the Section 106 process:
 - Establish the undertaking;
 - Notify the State Historic Preservation Officer (SHPO) and any Tribal Historic Preservation Officers (THPOs);
 - Plan to involve the public; and
 - Identify other consulting parties.
2. Identification of historic properties:
 - Determine the APE; and
 - Complete a survey of the APE to identify historic properties that are listed in or eligible for inclusion in the NRHP.
3. Assessment of adverse effects:
 - Apply criteria of adverse effect.
4. Resolution of adverse effects:
 - Continue consultation to consider measures to avoid, minimize, or mitigate adverse effects;
 - Reach agreement with the SHPO, any THPOs, and the ACHP if it chooses to participate in the consultation; and
 - Document measures that will be implemented by the Federal agency to avoid, minimize, and/or mitigate adverse effects.

4. Identification of Historic Properties

Area of Potential Effect

An APE is “the geographical area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of the undertaking and may be different for different kinds of effects caused by the undertaking” (36 CFR 800.16[d]). An APE must account for both direct and indirect effects, including permanent and temporary effects.

During the Tier 1 EA, MnDOT CRU, under delegation from FRA and in consultation with MnSHPO and WisSHPO, defined an APE for the NLX Project (see **Appendix P of NLX Tier 2 EA**), and received concurrence from the MnSHPO on March 15, 2012, and from the WisSHPO on April 19, 2012. The APE encompasses potential physical, auditory, atmospheric and visual impacts on historic properties and includes all potential project activities and is applicable for Tier 2 EA analysis of historic properties. Two APEs were established, one for architecture/history properties and one for archaeological resources. APE maps have not been included in this report; they are available as separate volumes or within survey documents identified later in this report.

Architecture/History APE

The APE for architecture/history properties includes all areas within 500 feet on either side of the track center. This distance was determined to include effects from operation of the line, construction of track improvements, stations and facilities (all located adjacent to the track), and visual and auditory effects. For new structures (new bridges) a 0.25 mile radius from the center point was used.

Archaeological APE

For archaeology, the APE was the same as the construction limits and included all areas of construction activities or other potential ground disturbing activities associated with the NLX Project outside the BNSF right of way. The APE also included any non-construction Project activities such as access routes, parking and equipment storage.

For the Tier 2 EA, no archaeological field survey was undertaken within the BNSF right of way. It was assumed that any modification to the extant railroad grade will not extend below the existing grade. Therefore, unknown archaeological sites that may be located below the extant grade will not be impacted and survey of the existing railroad grade is not required. Where possible, areas of disturbance entirely within the BNSF right of way, but potentially extending beyond the existing grade were visually assessed from public areas outside the right of way to rule out the need for future survey.

Identification and Evaluation of Properties

Section 106 requires federal agencies to consider the effects of their undertakings on historic properties that are listed on or are eligible for listing on the National Register of Historic Places (NRHP), which is the nation’s official list of historic places worthy of preservation. Section 106 gives equal consideration to listed and determined eligible properties. A historic property can be eligible for the NRHP individually, as part of a historic district or both.

The NRHP Criteria for Evaluation (36 CFR Part 63) are used to evaluate a historic property to determine whether it possesses historic significance, is of sufficient age, and retains sufficient integrity to convey any potential significance. In order to qualify for listing on the NRHP, a property must possess significance under at least one of four criteria (36 CFR 60.4; National Park Service, 1997):

- A. Association with events that have made significant contributions to broad patterns of history.
- B. Association with the lives of persons significant in our past.
- C. Embodiment of distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction.
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

To be eligible for listing on the NRHP, a property must be 50 years old, or, if it is less than 50 years old, possess exceptional significance. In addition to possessing significance, to be eligible for the NRHP a property must also retain sufficient historic integrity: "Integrity is the ability of a property to convey its significance" (NPS 1997:44). There are seven aspects or qualities that must be considered to determine whether a property retains integrity:

- Location: the place where the historic property was constructed or the place where the historic event occurred;
- Design: the combination of elements that create the form, plan, space, structure, and style of a property
- Setting: the physical environment of a historic property;
- Materials: the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property;
- Workmanship: the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;
- Feeling: a property's expression of the aesthetic or historic sense of a particular period of time; and
- Association: the direct link between an important historic event or person and a historic property.

To identify historic properties within the NLX Project's historical architecture and archaeological APEs, MnDOT CRU, under authority delegated from FRA and in consultation with MnSHPO and WisSHPO, conducted an architecture and history survey (2013), and a Phase IA archaeology survey (2013) and a Phase I archaeology survey (2016). These surveys documented previously identified or evaluated properties, as well as conducted field surveys to document any previously unidentified properties within the defined architectural and archaeological APEs. The reports documenting these surveys include:

- *Phase I and II Architectural History Survey for the Northern Lights Express Project* (The 106 Group, 2013a) (available on the NLX Project website at <http://www.dot.state.mn.us/nlx/documents.html> under “Other documents”)
- *Phase IA Archaeology Survey for the Northern Lights Express Project* (The 106 Group, 2013b)
- *Phase I Archaeological Investigations for the NLX High Speed Rail Project* (Commonwealth Heritage Group, 2017)

Due to the location of the NLX Station at Duluth next to the NRHP-listed Duluth Union Depot, a National Register re-evaluation was completed to clarify NRHP boundaries and criteria for the Depot. The report, *Duluth Union Depot National Register of Historic Places Re-Evaluation* (Summit Envirosolutions, 2016) is available on the NLX Project website at <http://www.dot.state.mn.us/nlx/documents/duluth-depot-reevaluation.pdf>

Results of Investigations

Based on the results of the investigations identified above, MnDOT CRU, under delegation from FRA, made eligibility determinations and provided them to the MnSHPO and WisSHPO for concurrence. The historic architectural properties identified in **Table 1** are those within the APE for the NLX Project that were listed on the NRHP or determined eligible for listing on the NRHP, and reflect concurrence in eligibility as received by the MnSHPO on June 14, 2014, and by the WisSHPO on June 18, 2014.

The Phase IA archaeology survey conducted in 2013 was a preliminary study for the Tier 1 EA and received concurrence of no further work by MnSHPO on January 17, 2014, and WisSHPO on January 16, 2014. The Phase I archaeology survey, reflecting the refined Tier 2 EA, was conducted in 2016. FRA’s determination was that there were no archaeological resources listed, or eligible for listing on the NRHP identified in the NLX APE for the area surveyed. This finding received concurrence from the MnSHPO on May 1, 2017, and WisSHPO on May 2, 2017.

Table 1: Section 106 Review of NRHP Previously Listed and Determined Eligible Properties

Property Name (Historic)		Property Address	NRHP Criteria	Contributing Resources in Railroad Corridors
Hennepin County				
1	Minneapolis Warehouse Historic District (listed) HE-MPC-0441	Vicinity of 1st Avenue North, North 1st Street, 10th Avenue North, and North 6th Street, Minneapolis	Criterion A – Commerce Criterion C – Architecture	
2	St. Anthony Falls Historic District (listed)	Vicinity of Mississippi River between Plymouth Avenue North and 10th Avenue South, Minneapolis	Criterion A – Commerce, industry, transportation Criterion C – Architecture Criterion D – Archaeology	
3	Minneapolis Fire Department Repair Shop (listed) (in St. Anthony Falls Historic District) HE-MPC-2137	24-28 University Avenue Northeast, Minneapolis	Criterion A – Politics/Government	
4	Northrup, King & Company Complex (eligible) HE-MPC-3788	1500 Jackson Street Northeast, Minneapolis	Criterion A – Commerce and industry	
5	Northwestern Casket Company (eligible) HE-MPC-3792	1720 Madison Street Northeast, Minneapolis	Criterion A – Commerce and industry	
6*	St. Paul, Minneapolis and Manitoba/Great Northern Railroad Corridor, Minneapolis Jct. to Breckenridge (eligible) HE-MPC-16387	N/A (NLX includes the segment from Minneapolis Jct. to TFS), Minneapolis	Criterion A – Transportation	Contributing Railroad Bridges: <ul style="list-style-type: none"> *HE-MPC-5961 crossing west channel of Mississippi River *HE-MPC-5962 crossing east channel of Mississippi River
7	Minneapolis & Pacific Railway Co/Mpls/SP & Sault Ste. Marie/Soo Line/Canadian Pacific Railway, Minneapolis to the Minnesota/North Dakota state line west of Tenney, MN (eligible) HE-MPC-17264	N/A crosses Northtown Yard (east/west), Minneapolis	Criterion A – Transportation	Contributing Railroad Bridges: <ul style="list-style-type: none"> HE-MPC-5282 – Bridge no. 5584 crossing over Northtown Yard

	Property Name (Historic)	Property Address	NRHP Criteria	Contributing Resources in Railroad Corridors
8	St. Paul & Northern Pacific Railway/Northern Pacific Railway, Minneapolis to St. Paul Railroad Corridor Historic District (eligible) HE-MPC-17694	N/A (joins XX-RRD-011 near 19th Avenue Northeast), Minneapolis	Criterion A – Transportation, agriculture and industry	Contributing Railroad Bridges: <ul style="list-style-type: none"> HE-MPC-5278 – Bridge no. L8893 crossing over 19th Avenue Northeast HE-MPC-5280 – Bridge no. 92333 crossing over Monroe Street Northeast HE-MPC-17373 – Bridge no. 92335 crossing over 18th Avenue Northeast
9*	St. Paul & Pacific Railroad (St. Vincent Extension)/St. Paul, Mpls & Manitoba Railway/Great Northern Railway (Willmar Div., 1st Sub.)/Burlington Northern RR/Burlington Northern Santa Fe Railway, Mpls. To St. Vincent (eligible) XX-RRD-001	N/A Superseded on map by XX-RRD-011—the overlay district) Minneapolis, Fridley and Coon Rapids	Criterion A – Transportation and agriculture	
10*	St. Paul & Northern Pacific Railway/Northern Pacific Railway (St. Paul Div, 1st Sub)/Burlington Northern RR/Burlington Northern Santa Fe Railway, Minneapolis to Sauk Rapids (eligible) XX-RRD-003	N/A Superseded on map by XX-RRD-011 (the overlay district) Minneapolis, Fridley and Coon Rapids	Criterion A – Transportation and agriculture	

	Property Name (Historic)	Property Address	NRHP Criteria	Contributing Resources in Railroad Corridors
11*	Great Northern and Northern Pacific Railway, Minneapolis Junction to Sauk Rapids Railroad Corridor Overlay Historic District (eligible) XX-RRD-011	Minneapolis, Fridley and Coon Rapids	Criterion A – Transportation and agriculture	Contributing Railroad Bridges: (not individually eligible) <ul style="list-style-type: none"> • *HE-MPC-17266 - Bridge No. L8895 (MP 9.86) • *HE-MPC-17265 - Bridge No. 92336 (MP 10.82) • *HE-MPC-17262 - Bridge No. L8892 (MP 10.91) • *HE-MPC-17263 - Bridge No. L8891 (MP 11.11) • *HE-MPC-17267 - Bridge No. 92332 (MP 11.22) • *HE-MPC-8444 – Lowry Avenue (MP 11.35) • AN-CRC-008 - Bridge No. 6011A • AN-CRC-009 - Bridge No. 6011B
12	Bridge No. 90664 (eligible) HE-MPC-9002	St. Anthony Boulevard over the BNSF, Minneapolis	Criterion A – contributing to eligible Grand Rounds Historic District	
Anoka County				
13	Fridley Water Filtration Plant/Minneapolis Water Works – Fridley Plant (eligible) AN-FRC-178	4300 Marshall St, off East River Road, Fridley	Criterion A – Community planning and development Criterion C – Architecture	
14	Northern Pump Co./Northern Ordnance Plant (eligible) AN-FRC-177	4800 E. River Road, Fridley	Criterion A – Engineering, industry and military	
15	Cedar Potato Warehouse (eligible) AN-OKG-005	Main Street Northwest and Viking Boulevard, Cedar (Oak Grove)	Criterion A – Agriculture and commerce	
Isanti County				
16	Isanti Farmers Creamery Cooperative (eligible) IA-ISC-002	104 Main Street W., Isanti	Criterion A – Agriculture and commerce	

	Property Name (Historic)	Property Address	NRHP Criteria	Contributing Resources in Railroad Corridors
17	Oscar Olson House (listed) IA-BRC-006	309 Beechwood Avenue North, Braham	Criterion B – Oscar Olson Criterion C – Architecture	
Pine County				
18	Minneapolis Trust Company Building (listed) PN-SSC-011	Main Street North, Sandstone	Criterion A – Settlement /Commerce Criterion B – James J. Hill, Samuel Hill	
19	Kettle River Sandstone Company Quarry (listed) PN-SSC-008	Off MN 23, Sandstone	Criterion A – Exploration/Settlement industry	
20	Askov Great Northern Passenger Depot (eligible) PN-ASC-005	Brogade Street, Askov	Criterion C – Architecture	
21	Partridge Township Hall (listed) PN-ASC-006	6345 Kobmagergade Street (Main Street), Askov	Criterion A – Settlement /Politics/Government	
22	Askov American (eligible) PN-ASC-056	6351 Kobmagergade Street, Askov	Criterion B – Communication/ Politics/Government for association with Hjalmar Petersen	
23	Louis Hultgren House and Sand Pit (listed) PN-KEC-003	8375 MN 23, Kerrick	Criterion A – Settlement and industry Criterion B – Louis Hultgren	
24	Kerrick Cheese Factory & Creamery (eligible) PN-KEC-002	5357 Hogan Avenue, Kerrick	Criterion A – Agriculture and industry	
St. Louis County				
25*	Grassy Point Railroad Bridge (eligible) SL-DUL-0009	Grassy Point and Waterfront, Duluth	Criterion A – Transportation/Commerce Criterion C – Engineering	
26*	Duluth Short Line Railway/St. Paul & Duluth RR/Northern Pacific Railway “Grassy Point Line”/Burlington Northern RR/BNSF /LST&T Jct. to West Duluth Jct. (eligible) XX-RRD-025, (Field No. 1864 in Wis)	N/A (previously SL-XRR-003; renumbered to XX-RRD-025), Duluth	Criterion A – Agriculture, commerce, industry and transportation	

	Property Name (Historic)	Property Address	NRHP Criteria	Contributing Resources in Railroad Corridors
27	North Western-Hanna Coal Dock No. 5 (eligible) SL-DUL-0012	303 37th Ave. W, Duluth	Criterion A – Industry and transportation related to iron ore and coal mining	
28	Duluth, Missabe & Iron Range Ore Docks (eligible) SL-DUL-0014	34th Avenue West and Waterfront, Duluth	Criterion A – Transportation/Industry	
29	Duluth, Missabe & Iron Range Railway (eligible) SL-DUL-2499	I-35 and 34th Avenue West to I-35 and 31st Avenue West, Duluth	Criterion A – Transportation	
30	Portion of Lake Superior & Mississippi Railroad mainline (eligible) SL-DUL-2500	Under I-35, west of 31st Avenue West, Duluth	Criterion A – Transportation	
31	Great Northern Power Co/MN Power & Light Co/Mn Power Substation (eligible) SL-DUL-0191	30 W. Superior St., Duluth	Criterion A – Engineering and industry Criterion C – Architecture	
32	Duluth Union Depot (listed) SL-DUL-0658	506 W. Michigan St., Duluth	Criterion A – Transportation Criterion C – Architecture	
33	William Crooks Locomotive (listed) (housed in Depot) SL-DUL-2465	506 W. Michigan St., Duluth	Criterion A – Transportation	
34	Soo Line Locomotive#2719 (listed) (AHI#30666; moved from Wisconsin/housed in Depot)	506 W. Michigan St., Duluth	Criterion C – Engineering	

All architectural history properties located in Minnesota.

An asterisk () indicates that the NLX Project will operate on the railroad line.*

5. Section 106 Consultation

FRA's Section 106 compliance is being achieved through consultation with MnSHPO, WisSHPO, Indian tribes, local governments and other interested parties. To comply with Section 106 requirements, FRA initiated consultation with MnSHPO and WisSHPO in March 2012, notifying both offices of the NLX Project and FRA's intent to delegate authority to MnDOT CRU to complete some aspects of the Section 106 process on its behalf, as previously described.

Tribal Consultation

In December 2011, as part of the Tier 1 EA, FRA sent letters to potentially affected Indian tribes in Minnesota and Wisconsin (see **Appendix P of the NLX Tier 2 EA**), requesting that they identify any concerns about the NLX Project's potential effects and inviting them to participate in the Section 106 process. No tribes indicated concerns or interest in participating in the process at that time.

In June 2016, FRA again sent letters to the potentially affected tribes to request their interest in participation in the NLX Tier 2 EA process. No tribes expressed concerns or interest in participating in the process at this time. If properties are identified in the future or unanticipated discoveries occur in final design and construction, consultation will proceed in accordance with 36 CFR 800.13, and in accordance with the directions in the PA (Stipulation XI) for this Project.

Public Involvement

In September 2016, MnDOT CRU on behalf of FRA, notified local governments and heritage preservation commissions in the cities in which stations will be located and invited them to participate in consultation. Further invitations were issued by telephone in April 2017. The following groups, agencies and organizations participated in one or both of the conference calls held on April 25 and May 23, 2017, to discuss historic properties and potential effects in the NLX Project study area: FRA, Surface Transportation Board (STB), MnSHPO, Pine County Historical Society, and the cities of Askov, Fridley, Minneapolis, Cambridge and Isanti. Minutes of both meetings were provided to participants and all other agencies and cities that were invited but unable to participate; MnDOT CRU staff followed up with any questions, and met in person with Duluth city staff on May 17 to brief them on the ten historic properties and potential effects in Duluth. Consultation with these groups will be ongoing as work is carried out under the PA and when funding is available for final design for the NLX Project.

A presentation board showing the identified eligible and listed history architecture properties was also included in NLX Project public meetings in 2016 and 2017. The eligible and listed historic resource information was included, with CRU staff present, at four public meetings in February and March 2016; and again at the three public meetings in May 2017.

6. Assessment of Effects

Assessing Effects on Historic Properties

The Section 106 process requires an assessment of adverse effects of a Federal undertaking on historic properties that are listed in or are eligible for listing in the NRHP. The NRHP regulations specify in 36 CFR 800.5 (a) (1):

An adverse effect on a historic property is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

An adverse effect can occur if any aspect of a historic property's integrity is diminished. Examples of adverse effects are identified in 36 CFR 800.5(a)(2) and include, but are not limited to:

- Physical destruction of or damage to all or part of the property
- Alternation of a property that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68) and applicable guidelines
- Removal of the property from its historic location
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features
- Neglect of a property that causes its deterioration
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance

It is important to note that while an undertaking may have an effect on a historic property it does not necessarily constitute an adverse effect. For example, project elements may be visible from a historic property without the effect rising to the level of an adverse effect. In this example, factors to consider when assessing whether the visual effect is adverse would include proximity of project components to the historic property, the nature of the element being introduced to the setting, the significance of the views to and from the historic property, and the overall importance of integrity of setting to the historic property's ability to convey its significance and maintain its eligibility for the NRHP. Direct effects, however, are often more likely to result in an adverse effect due to the actual physical changes they often cause to a historic property.

Effects Assessment

In accordance with 36 CFR 800.5(a), the criteria of adverse effect was applied to the 34 NRHP listed and eligible historic properties located within the Project's architecture/history APE. Effects on historic properties may be direct or indirect. The types of potential effects identified for this assessment are primarily indirect because most NLX Project operations and construction will occur within the railroad right of way and because the historic properties (other than historic railroads) are generally located outside the right of way. The types of NLX Project activities that may cause effects on historic properties are described in the following paragraphs. References to specific sections of the Tier 2 EA are included as appropriate.

The NLX Project will introduce eight daily passenger trains traveling at speeds of up to 90 mph on the existing BNSF line. Each 650-foot train consist will include six 85-foot-long coaches and two 70-foot-long push-pull locomotives. New construction will include six stations, as well as maintenance and layover facilities.

The NLX Project is not introducing rail traffic to any new locations in the corridor. The segments of railroad that make up the NLX Project study area were all developed and used as railroad corridors prior to 1900. Although tracks, crossings and warning devices have been added and improved, and maintenance has occurred, the corridors have had trains in operation since 1900 or prior. Many historic properties identified in this study were built after the railroad was already in operation and were located in proximity to railroads for access or shipping of goods.

Various NLX Project construction activities, including track, bridge and roadway improvements; station and facility construction and associated roadway and parking; and staging areas for construction activities, could cause effects to historic properties. Direct effects would occur if the NLX Project caused physical destruction or damage to part or all of a property or alteration of a property. Effects could also be indirect, in which a historic property could be affected by nearby construction or ongoing railroad operations activity and cause visual or auditory effects. Indirect effects would occur if the NLX Project resulted in changes to the character of the property's use or physical features that contribute to the property's setting, or if the NLX Project activities introduced visual or auditory elements that diminished the integrity of the property's significant historic features.

Noise and vibration effects and criteria are discussed in Section 4.9 of the Tier 2 EA. Construction and/or operations noise may introduce audible elements that diminish the integrity of the property's significant historic features. Briefly, the FRA Noise Impact Criteria group noise sensitive land uses into three categories:

- Category 1: Tracts of land where quiet is an essential element in their intended purpose
- Category 2: Residences and building where people normally sleep (includes homes, hospitals, hotels)
- Category 3: Institutional land uses with primarily daytime and evening use (schools, libraries, churches, medical offices, concert halls)

Effects from noise were considered if a historic property was included in one of the three noise sensitive land use categories noted above.

For vibration, ground-borne vibrations generally reduce in level with distance. Assessment of potential vibration impacts during operation of the NLX Project indicated only one projected impact, at a property that is not historic. The vibration analysis specifically examined the Duluth Depot Great Hall auditorium for vibration and noise, and the results are included in the following section. Potential damage of historic properties was considered in proximity to bridge construction or pile-driving; no historic properties were identified as at risk for these impacts.

Visual effects may result from the construction of new facilities, such as stations or maintenance and layover facilities, or from ongoing operations of the NLX Project, as noted above. Fencing could introduce a visual change to the rail corridor. Fencing is planned only for safety and security purposes in developed areas where human and train interactions could occur and primarily in urban areas where it is consistent with existing conditions. Potential locations for fencing have been identified in the *NLX Project Proposed Infrastructure Improvements* (working draft, April 25, 2017); however, these locations are subject to discussion with BNSF and will not be confirmed until final design.

The preliminary assessment of effects considered visual and auditory effects from improvements to public rail grade crossings along the NLX Project (see **Appendix E of the Tier 2 EA** for crossing information). Improvements will include installation of active warning devices, reconstruction of approach roadways, installation of medians and improvements to rail infrastructure. The NLX Project is not proposing to close any public rail crossings.

The following section describes the potential effects and effects finding for each of the 34 properties listed on or eligible for the NRHP in the NLX Project APE. Each property has a photograph and small orientation map within the text. Note that each property is also identified in Appendix A of this report showing the historic property on the Project alignment maps.

Determination of Effect and Findings

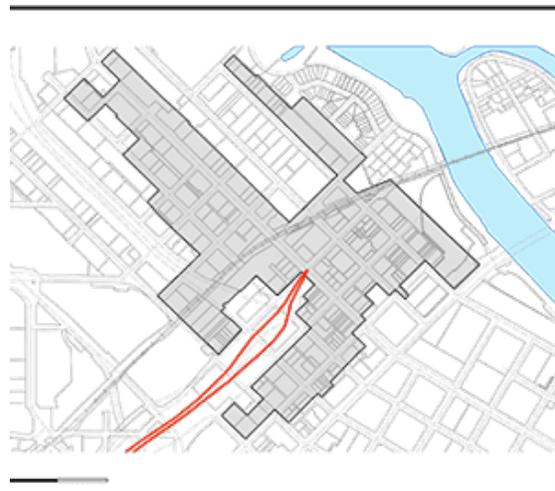
1. **Minneapolis Warehouse Historic District - Minneapolis (HE-MPC-0441) NRHP Listed**

Vicinity of 1st Ave N, N 1st Street, 10th Ave N, N 6th Street (See [Map 1 \(page 1\)](#) in Appendix A)

The NRHP-listed Minneapolis Warehouse Historic District consists of 147 contributing properties in a 30-block area of early commercial growth in downtown Minneapolis with a period of significance from 1865 to 1930. The district is located in the vicinity of 1st Avenue North, North 1st Street, 10th Avenue North and North 6th Street. The district is significant under Criterion A for Commerce, representing Minneapolis' importance as the major distribution center in the Upper Midwest; and Criterion C for architecture with examples of Italianate, Queen Anne, Richardsonian Romanesque, Classical Revival, and commercial styles.

Finding: No Adverse Effect. The Minneapolis Warehouse Historic District will not be physically impacted or altered by NLX Project elements. The addition of the platform and track upgrades at Target Field Station will be visible from the Minneapolis Warehouse Historic District, but will be similar to the station uses already existing within the BNSF right of way, that includes BNSF freight and Northstar trains and will include the NLX trains on BNSF track. Chain link and/or decorative fencing may be added at the site based on discussions with affected agencies. Neither the addition of eight daily passenger trains within the railroad right of way nor fencing will result in either visual or auditory effects on the Historic District, which was developed adjacent to the railroad and currently experiences regular BNSF and Northstar rail activity in a busy downtown Minneapolis setting.

In accordance with the PA for this Project, consultation with the MnSHPO will occur when funding is available and plans are developed for the Target Field Station. Due to its location in the Minneapolis Warehouse District, consultation will occur to confirm that there is no adverse effect resulting from the NLX station construction.

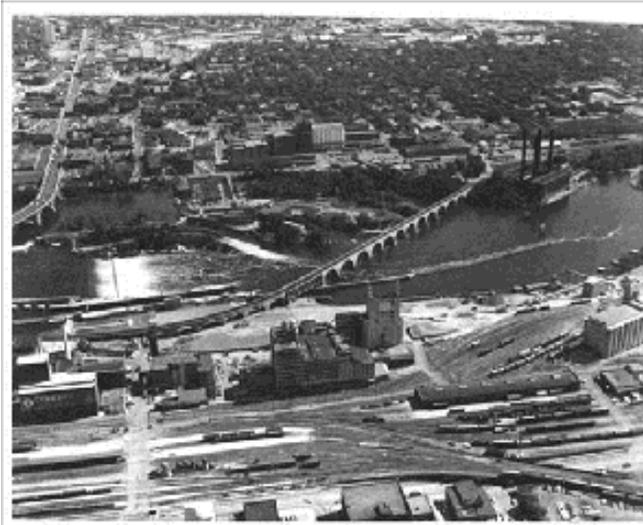


2. St. Anthony Falls Historic District – Minneapolis; NRHP Listed

Vicinity of Mississippi River Between Plymouth Ave N and 10th Ave S (See Maps 1 & 2 in Appendix A)

The NRHP-listed St. Anthony Falls Historic District includes 85 contributing properties in an area either side of the Mississippi River between Plymouth Avenue North and 10th Avenue South. The St. Anthony Falls District includes a variety of areas built as early as 1848, including the historic St. Anthony Falls Locks and Dam, numerous historic flour mills that have been renovated for new uses, individual historic residences, businesses and public buildings, and multiple archaeological sites. The NLX Project corridor is within the St. Anthony Falls District from roughly 2nd Avenue North, across the Mississippi River to the crossing at University Avenue. The St. Anthony Falls Historic District is significant under Criterion A for commerce, industry and transportation; under Criterion C for architecture; and Criterion D for archaeology.

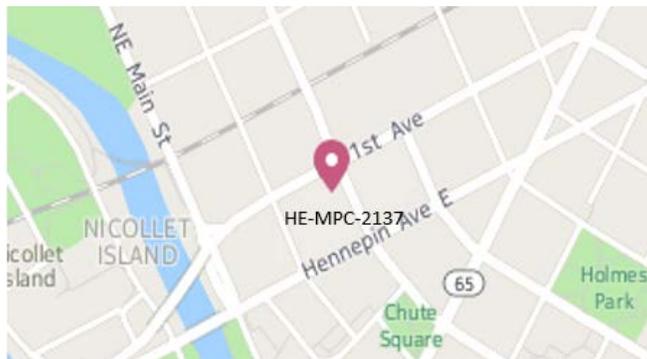
Finding: No Adverse Effect. The St. Anthony Falls Historic District will not be physically impacted or altered by NLX Project elements. Track upgrades within this Historic District will support the existing transportation use within the BNSF right of way that already includes BNSF freight and Northstar trains. The addition of eight daily passenger trains within the railroad right of way will not have either visual or auditory effects on the Historic District, which was developed adjacent to the railroad and currently experiences regular BNSF and Northstar rail activity in a downtown Minneapolis setting.



3. Minneapolis Fire Department Repair Shop – Minneapolis (HE-MPC-2137) NRHP Listed
24-28 University Ave NE (See Map 2 in Appendix A)

The Minneapolis Fire Department Repair Shop is individually listed in the NRHP and is located within the St. Anthony Falls Heritage District. This two-story brick industrial building built in 1910 is significant under Criterion A in the area of Politics/Government and represents Minneapolis' efforts to reorganize and centralize specific municipal operations. It represents the early consolidation of fire department operations and the conversion from horse-drawn to motorized vehicles. The period of significance is 1909 to 1933.

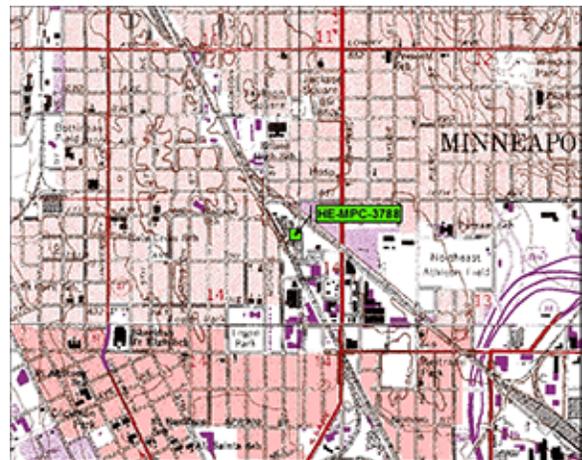
Finding: No Adverse Effect. This building is located east of 1st Avenue North, one block from the BNSF track and will not be physically impacted or altered by NLX Project elements. No track improvements are planned in this area. The addition of eight daily passenger trains within the BNSF right of way that already includes BNSF freight and Northstar trains will not have either visual or auditory effects in this commercial district neighborhood. The NLX track is depressed at this location and not visible from the Minneapolis Fire Department Repair Shop.



4. Northrup, King & Company Complex – Minneapolis (HE-MPC-3788) NRHP Eligible
1500 Jackson Street NE (See Map 4 in Appendix A)

The Northrup, King & Company Complex is eligible for listing in the NRHP under Criterion A, within the areas of commerce and industry. The 11-acre Complex with 15 industrial buildings (built primarily 1916–1947) is located adjacent to the BNSF track. It is an intact example of one of Northeast Minneapolis’ largest manufacturing complexes, and the location of one of the largest seed distributors and a major developer and shipper of climate-resistant seeds in the country in the early and mid-twentieth century. The period of significance is 1916 to 1962.

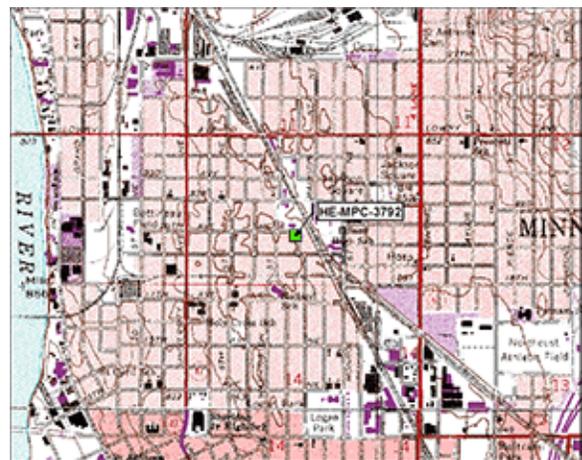
Finding: No Adverse Effect. The Northrup, King & Company Complex is located on the east side of the BNSF track and will not be physically impacted or altered by NLX Project elements. No NLX Project improvements are planned for the track adjacent to this property. The addition of eight daily passenger trains within the BNSF right of way will not have either visual or auditory effects on the Northrup-King and Company complex, which was developed adjacent to the railroad and currently experiences regular BNSF and Northstar rail activity.



5. Northwestern Casket Company – Minneapolis (HE-MPC-3792) NRHP Eligible
1720 Madison Street NE (See Map 4 in Appendix A)

The Northwestern Casket Company is eligible for listing in the NRHP under Criterion A, within the areas of commerce and industry, as the manufacturing home of caskets, coffins, and other funerary accessories. The company was located on this site from the construction of the main building in 1887 until 2006, which provided easy access to railroad lines for product shipment. Five contributing buildings of the complex remain on this site; the period of significance is 1887 to 1962.

Finding: No Adverse Effect. The Northwestern Casket Company is located approximately one-half block west of the BNSF track and will not be physically impacted or altered by NLX Project elements. No NLX Project improvements are planned for the track adjacent to this property. The addition of eight daily passenger trains within the railroad right of way will not have either visual or auditory effects on the property, which was developed to take advantage of railroad access.

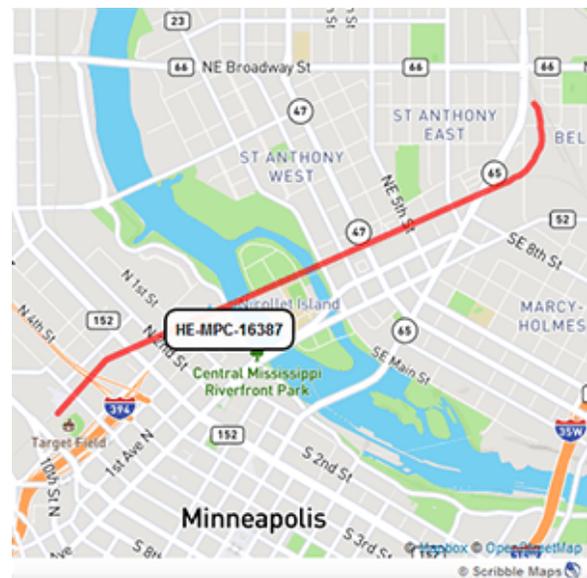


**6. St. Paul, Minneapolis and Manitoba/Great Northern Railroad Corridor (HE-MPC-16387)
NRHP Eligible**

Minneapolis Junction to Breckenridge, MN (See Maps 1-3 in Appendix A)

This railroad corridor is eligible for listing in the NRHP under Criterion A as a transportation corridor in Minnesota. The period of significance is 1880 to 1956. There are two contributing railroad bridges: HE-MPC-5961 and HE-MPC-5962, which cross the east and west channel of the Mississippi River (also within the St. Anthony Falls Historic District). The NLX Project will operate on this historic district track from Target Field Station to Minneapolis Junction, and will also operate on the two contributing railroad bridges that cross the Mississippi River.

Finding: No Adverse Effect. The NLX Project will operate on track within this historic rail corridor. Track upgrades along this historic rail corridor will occur within the existing BNSF right of way, with 0.69 mile of siding converted to a second main track between Harrison and Van Buren Street at Minneapolis Junction and crossing improvements at Harrison Street. No improvements for the NLX Project are planned on the two contributing bridges, which already have two tracks that cross the Mississippi River. The track improvements to the historic railroad segments are in keeping with the railroad’s historic functions, and will maintain the corridor for continued transportation use. The track upgrades and reconfiguration to the historic railroad segments for the NLX Project do not affect the railroad’s significance under Criterion A for their historic transportation connections in the state, but will reinforce continued use as a rail corridor.



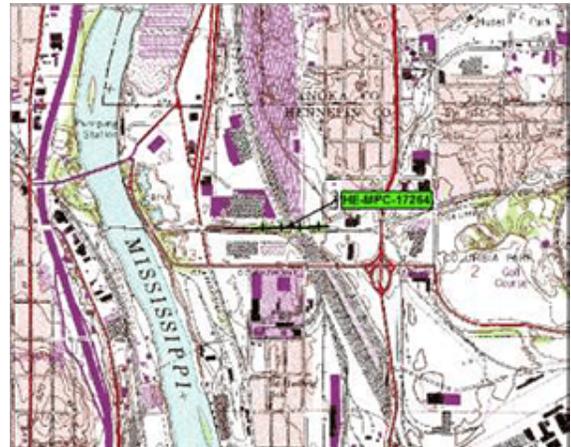
7. Minneapolis & Pacific Railway Co/Mpls/SP & Sault Ste. Marie/Soo Line/Canadian Pacific Railway, Minneapolis to the Minnesota/North Dakota state line west of Tenney, MN (HE-MPC-17264) NRHP Eligible

Minneapolis to ND state line; Segment crossing over Main Street NE in Mpls

(See Map 6 in Appendix A)

This railroad corridor is eligible for listing in the NRHP under Criterion A for its associations with the Minneapolis mill owners who built the line in 1886-1887 to secure their own connection to wheat growers in western Minnesota and North Dakota. It is significant within the areas of transportation, agriculture, commerce and industry as a transportation corridor in Minnesota. This line bridges Northtown Yard over the NLX Project track; the NLX Project does not use this railroad track although it is within the Project APE. The period of significance is 1886 to 1961.

Finding: No Adverse Effect. The Minneapolis & Pacific Railway Co/Soo Line/Canadian Pacific Railway will not be physically impacted or altered by NLX Project elements and no indirect effects are expected for this railroad line.



8. St. Paul & Northern Pacific Railway/Northern Pacific Railway, Minneapolis to St Paul Railroad Corridor Historic District, Minneapolis to St. Paul (HE-MPC-17694) NRHP Eligible
St. Paul to Minneapolis (See Map 4 in Appendix A)

Built in 1886, this railroad is eligible for listing in the NRHP under Criterion A within the areas of transportation, agriculture and industry and connecting the Northern Pacific system to St. Paul and then to Chicago. The period of significance is 1886 to 1970. This rail line connects to the NLX Project track at 19th Avenue Northeast in Minneapolis; the NLX Project does not use this railroad track although it is within the APE of the NLX Project.

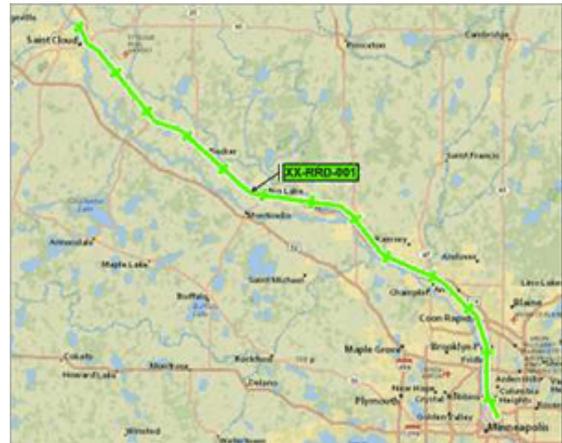
Finding: No Adverse Effect. The St. Paul & Northern Pacific Railway will not be physically impacted or altered by NLX Project elements and no indirect effects are expected for this railroad line.



9. St. Paul and Pacific Railroad (St Vincent Extension)/St. Paul, Mpls & Manitoba Railway/Great Northern Railway (Willmar Div., 1st Sub.)/Burlington Northern RR/Burlington Northern Santa Fe Railway, Mpls. To St. Vincent (XX-RRD-001) NRHP Eligible
Minneapolis, Fridley, Coon Rapids (See Maps 3-18 in Appendix A)

The St. Paul & Pacific (St. Vincent Extension) was constructed between St. Anthony (Minneapolis Junction) and Sauk Rapids from 1863-1867. Originally built as a branch line, it became the main line when it was completed to St. Vincent in 1879; this line eventually became part of James J. Hill's Great Northern Railway, and ultimately part of the BNSF. It is eligible for the NRHP under Criterion A, in the areas of transportation and agriculture, for the significant role it played in the development of the agricultural and railroad industries in Minnesota. The period of significance is from 1863, when construction began on the line, and concludes in 1970 with the formation of the BN (Burlington Northern). The NLX Project will operate on this track.

See No. 11 below for Finding.



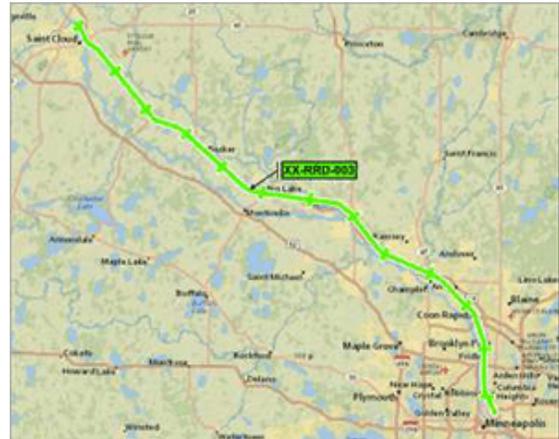
10. St. Paul and Northern Pacific Railway/Northern Pacific Railway (St. Paul Div., 1st Sub.)/ Burlington Northern RR/Burlington Northern Santa Fe Railway, Minneapolis to Sauk Rapids (XX-RRD-003) NRHP Eligible

Minneapolis, Fridley, Coon Rapids (See Maps 3-18 in Appendix A)

The St. Paul and Northern Pacific Railway was constructed in 1884 from Sauk Rapids to Minneapolis Junction to provide the Northern Pacific with a direct link to the Twin Cities from its northern Minnesota route, and conversely to allow the Northern Pacific to compete for passenger and freight traffic from the Twin Cities. It is eligible for the NRHP under Criterion A, in the areas of transportation and agriculture, for the significant role it played in the development of the railroad industry in Minnesota. The period of significance is 1884 to 1970.

When built in the 1880s, the St. Paul and Northern Pacific acquired a 43-foot right of way from the St. Paul & Pacific to construct their parallel track. From that beginning, the GN and the NP operated these tracks as joint parallel lines between Minneapolis Junction and Sauk Rapids, Minnesota, from the time when the NP completed their line in 1884, until 1970 when the GN and NP merged with other operators to form the BN, which is operated today as the BNSF. Dating back to 1879, the NP had trackage rights with the GN for perpetual joint use of their track from Minneapolis Junction to Sauk Rapids. The NLX Project will operate on this track.

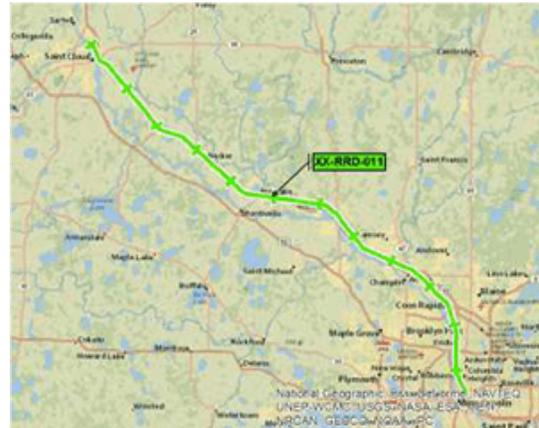
See No. 11 below for Finding.



11. Great Northern and Northern Pacific Railway, Minneapolis Junction to Sauk Rapids Railroad Corridor Overlay Historic District (XX-RRD-011) NRHP Eligible
Minneapolis, Fridley, Coon Rapids (See [Maps 3-18](#) in Appendix A)

The Great Northern and Northern Pacific Railway, Minneapolis Junction to Sauk Rapids Railroad Corridor Overlay Historic District, was developed to encompass the previously determined eligible GN and NP lines between Minneapolis Junction and Sauk Rapids. The Overlay Historic District is eligible under Criterion A for the significant role these lines played in the development of the agricultural and railroad industries in Minnesota. The period of significance is 1884 to 1970. After the GN and NP partnered in 1884 these two parallel lines were used as a double-track mainline, with the GN line serving as the eastbound route and NP line serving as the westbound route. Because they were operated as a double-track mainline between 1884 and 1970 when the BN was created, they shared bridges, maintenance facilities, and other railroad-related resources along this corridor. The Overlay Historic District includes the historic railroad right of way containing the double-track railroad lines between Minneapolis Junction and Sauk Rapids, Minnesota, which encompassed a minimum of 50 feet.

The NLX Project will operate on this track. The portion of the Overlay Historic District within the NLX Project is the section from Minneapolis Junction to Coon Creek Junction. At Coon Creek Junction, the NLX Project continues north and the Overlay Historic District follows the BNSF main line west. Contributing resources to the Overlay Historic District were identified within the NLX Project segment and include a number of railroad bridges that are contributing to the Overlay Historic District but are not individually eligible (listed in **Table 1**). All contributing bridges identified in the Overlay Historic District are located between Harrison Street and Lowry Avenue in northeast Minneapolis, with the exception of two bridges in Anoka County just northwest of Coon Creek Junction.



Finding: No Adverse Effect. The NLX Project will operate on the track within the Great Northern and Northern Pacific Railway Overlay Historic District. This Overlay Historic District was created to recognize the dual nature of the GN and NP tracks and their combined operation for approximately 90 years, in which the two companies operated and shared bridges, maintenance facilities and other railroad-related resources. No improvements for the NLX Project are planned to the contributing railroad bridges in the Overlay Historic District. The changes to the Overlay Historic District include construction of 6.2 miles of new third main track between I-694 and Coon Creek Junction in Coon Rapids and improvements

to accommodate the new third main in that section of the corridor. Improvements include track shifts within the railroad right of way and at MN 610 (in Coon Rapids) to allow for the additional track space under the MN 610 bridge, and two new railroad bridges to carry the third main over Mississippi Street and Rice Creek (both in Fridley).

There will be temporary construction impacts for these improvements. A narrow, temporary easement north of Mississippi Street will be required on the east side of the right of way for new track construction. There will also be temporary construction impacts outside of the right of way for the Mississippi Street and Rice Creek bridges.

Over time, the GN and NP tracks within the Overlay Historic District have experienced minor alignment changes within the right of way, including addition and subtraction of tracks, sidings and warning signals over time. They continue to experience track improvements for supporting businesses, transportation efficiency and safety upgrades. The construction of the 6.2 miles of new third main track will not detract from a transportation corridor setting that has numerous sidings and industrial spurs along its corridor, and does not detract from the double-track main line pair that have been the primary feature of this Overlay Historic District. For the NLX Project, the railroad track improvements to the historic railroad segments are in keeping with the railroad's historic functions, which includes the operation of passenger trains from Minneapolis to Duluth, and will maintain the corridor for continued rail transportation use. Given that the GN/NP Overlay Historic District is significant under Criterion A as a transportation corridor important for the development of agriculture and transportation routes in the state, the planned NLX Project improvements will not affect the railroad's significance under Criterion A for their historic transportation connections in the state.

12. Bridge No. 90664 -- Minneapolis (HE-MPC-9002) NRHP Eligible (NO LONGER ELIGIBLE; BRIDGE REPLACED)

St. Anthony Boulevard over the BNSF (See Map 6 in Appendix A)

The St. Anthony Parkway Bridge (Bridge No. 90664) carried St. Anthony Boulevard as part of the Grand Rounds Historic District, over 24 tracks including the NLX tracks, in BNSF's Northtown Rail Yard. The bridge was eligible under Criterion A as a contributing resource to the NRHP-eligible Grand Rounds Historic District. Since 2014, the City of Minneapolis removed the five-span Warren through truss bridge and replaced it with a new truss bridge (work in progress). Removal of this eligible bridge was determined an adverse effect under Section 106 and mitigation measures were documented in a Memorandum of Agreement signed by FHWA, MnSHPO and the Advisory Council on Historic Preservation. Because the historic property has been removed, the property is no longer eligible and there will be no effects from the NLX Project.



Historic St. Anthony Parkway Bridge



Replacement St. Anthony Parkway Bridge

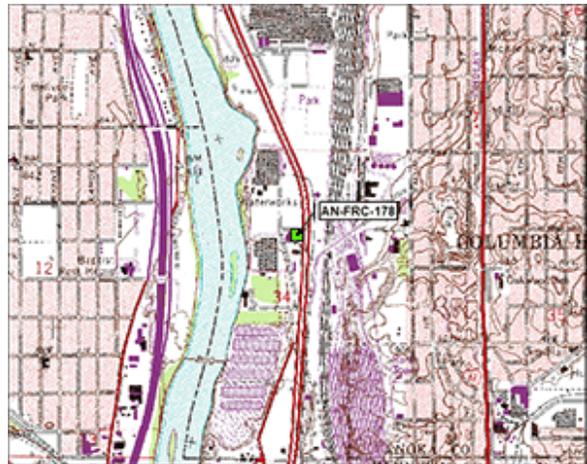
13. Fridley Water Filtration Plant/Minneapolis Water Works – Fridley Plant (AN-FRC-178)

NRHP Eligible

4300 Marshall Street (Off East River Road) (See Map 8 in Appendix A)

The Fridley Water Filtration Plant/Minneapolis Water Works- Fridley Plant is eligible for listing in the NRHP under Criterion A within the area of community planning and development; and under Criterion C, within the area of architecture. The facility is significant for the role it played in the urban development of Minneapolis in creating a potable water system and the provision of safe drinking water for residents from its construction in 1925. It is eligible under Criterion C as an excellent surviving example of an Italian Renaissance Revival style as applied to a public works building in the Twin Cities. There are six contributing buildings on the approximately 72-acre site, all built in 1925 or prior. The period of significance is 1925 to 1962.

Finding: No Adverse Effect. The Fridley Water Plant was built in 1925 on a location west of the BNSF Northtown Rail Yard and East River Road, and adjacent to the Mississippi River. The Fridley Water Plant will not be physically impacted or altered by NLX Project elements. No NLX Project improvements are planned for the track in the Northtown Rail Yard. The addition of eight daily passenger trains within the railroad right of way will not have either visual or auditory effects on the Fridley Water Plant.



14. Northern Pump Co./Northern Ordnance Plant – Fridley (AN-FRC-177) NO LONGER ELIGIBLE

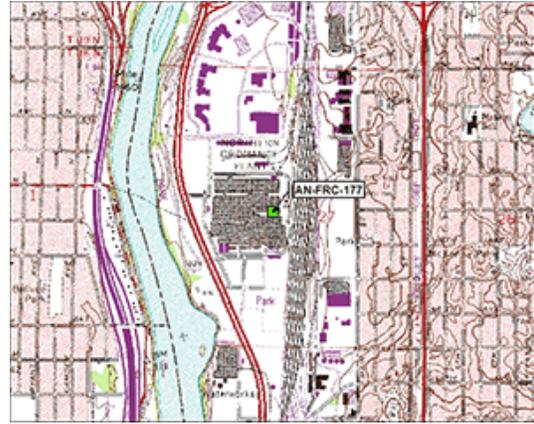
4800 East River Road (See Map 9 in Appendix A)

The Northern Pump Company/Northern Ordnance Plant Complex, an approximately 140-acre site, is eligible for the NRHP under Criterion A within the areas of engineering, industry, and military. The complex was the largest manufacturing plant in Minnesota and played an integral role in the development, engineering, and production of advanced military weaponry for the Army and Navy beginning in 1940. Innovative and technologically advanced military weapons systems were developed and produced at the plant throughout its succession of military defense company ownerships. The period of significance is from 1940, when the first buildings were constructed, to 1962.

Finding: Recent observation of the Northern Pump Company/Northern Ordnance Plant Complex indicated that much of this site has been redeveloped, with many buildings removed. Modern office/industrial structures have been built that are smaller, and have different placement and orientation than the previous buildings that were used for manufacturing. The remaining historic buildings at the northeast corner of the large site have been altered with new exterior cladding. The property no longer represents the historic Northern Pump Company/Northern Ordnance Plan Complex due to loss of many buildings that made up the large complex (see photos), and loss of integrity on remaining buildings. As a result, it is no longer eligible and no assessment of effects from the NLX Project has been conducted.



Northern Pump Company 2013



Northern Pump Company Map Location



Northern Pump Company Site New Construction 2017



Northern Pump Company Site 2017



Northern Pump Company Site Aerial Map 2013



Northern Pump Company Site Aerial Map 2017

15. Cedar Potato Warehouse – Cedar (Oak Grove) (AN-OKG-005) NRHP Eligible

Main Street NW and Viking Blvd (See Map 34 in Appendix A)

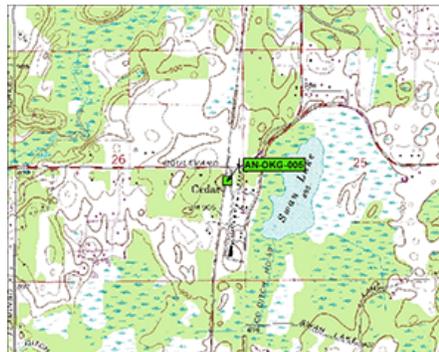
The Cedar Potato Warehouse is eligible for the NRHP under Criterion A, within the areas of agriculture and commerce. The ca. 1920 building is a physical representation of the booming potato industry in Anoka County that enabled farmers in the area to diversify their crop yields and prosper both in local Twin Cities markets as well as engage in the national potato market. The building appears to be the only surviving potato warehouse in Cedar, a small rural community (located in Oak Grove) that once had four potato warehouses along the railroad. The period of significance is 1920 until 1940, when trucking eclipsed the railroad for shipping potatoes to markets.

Finding: No Adverse Effect. The Cedar Potato Warehouse is located on BNSF right of way, approximately 50 feet east of the railroad centerline and approximately 300 feet south of the intersection of the NLX track and Viking Boulevard NW in Cedar (Oak Grove). The Viking Boulevard crossing (crossing no. 29) will be improved with the addition of dual gates and median construction, although without widening Viking Boulevard NW. No specific construction staging area has been identified. The NLX Project will avoid using the southeast quadrant of the intersection for construction staging on the roadway or other NLX Project activities to avoid effects on the Cedar Potato Warehouse.

The Cedar Potato Warehouse faces the railroad tracks on the west and Main Street on the east and will not experience a visual effect from the roadway improvement to the north. The addition of eight daily passenger trains within the railroad right of way will not have either visual or auditory effects on the property, which was developed to take advantage of railroad access.

Fencing is planned along the BNSF right of way line at this location as part of the NLX Project. Because this property is within the BNSF right of way, fencing will follow the right of way line (generally adjacent to Main Street) south of the Cedar Potato Warehouse but near the building will extend west, north and east again to the right of way line, with an appropriate buffer around the potato warehouse so that it remains accessible on each side. This fencing plan will be incorporated into construction drawings developed in final design, and will be subject to approval by BNSF as part of final design.

Consultation with MnSHPO and other interested parties, including BNSF, will occur to confirm that measures regarding construction staging and fencing will be carried out to avoid adverse effects on the Cedar Potato Warehouse.

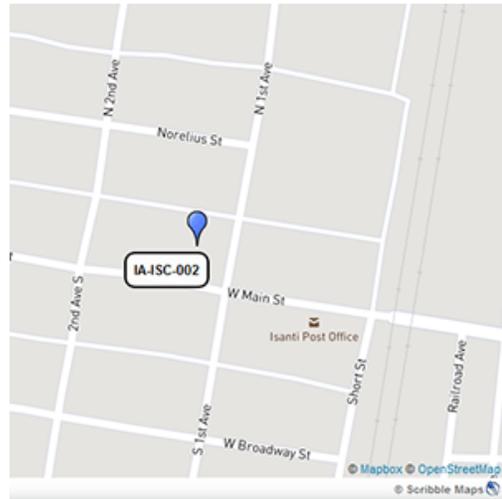


16. Isanti Farmers Creamery Cooperative – Isanti (IA-ISC-002) NRHP Eligible

104 Main Street W (See Map 50 in Appendix A)

The Isanti Farmers Creamery Cooperative is eligible for the NRHP under Criterion A, within the areas of agriculture and commerce. The creamery, constructed in 1924, is significant as a representative example of the overall importance of cooperative creameries to the dairy industry of Isanti County and the state of Minnesota. The period of significance is 1924 until 1970, when the creamery operation was ended.

Finding: No Adverse Effect. The Isanti Farmers Creamery Cooperation will not be physically impacted or altered by NLX Project elements. The Creamery is located along Main Street, approximately one block west of the BNSF track in Isanti, where the Main Street crossing of the BNSF (crossing no. 43) will be improved with quad gates and fencing is planned along the rail corridor. The addition of eight daily passenger trains and the crossing improvements and fencing within the railroad right of way will not cause any auditory or visual impacts on the Creamery.



17. Oscar Olson House – Braham (IA-BRC-006) NRHP Listed

309 Beechwood Ave N (See Map 72 in Appendix A)

The Oscar Olson House is listed on the NRHP under Criterion B for its association with community leader and banker Oscar Olson; and under Criterion C for its Colonial Revival architecture. Designed by M.E. Beebe and built in 1914, the large, two-story frame dwelling was Olson’s home from 1919 until his death in 1973. The period of significance is 1914 to 1962.

Finding: No Adverse Effect. The Oscar Olson House will not be physically impacted or altered by NLX Project elements. The Olson house is located approximately 300 feet east of the BNSF track, buffered by houses, vegetation, and a street, in a residential neighborhood within the community of Braham. The addition of eight daily passenger trains and the fencing through Braham within the railroad right of way will not be visible from the Olson House, and noise monitoring in the neighborhood indicates no noise impact in this area.



18. Minneapolis Trust Company Building – Sandstone (PN-SSC-011) NRHP Listed

Main Street North (See [Map 118](#) in Appendix A)

The Minneapolis Trust Company Building is listed on the NRHP under Criterion A, for its association with settlement and commerce, and Criterion B, for its association with James J. Hill and his son, Samuel Hill. This two-story commercial building was constructed of locally quarried Kettle River sandstone and represented the rapid rebuilding of Sandstone after the disastrous Hinckley Fire of September 1, 1894, destroyed the settlement. The Minneapolis Trust Company, of which Samuel Hill was president, moved the railroad division headquarters from Hinckley to Sandstone after the fire, developed a plat for the community and built several buildings, including this one. The period of significance is 1894 when the building was constructed.

Finding: No Adverse Effect. The Minneapolis Trust Company Building will not be physically impacted or altered by NLX Project elements. The Trust Company Building is located on the east side of Main Avenue in Sandstone’s commercial district approximately 265 feet from the BNSF track. The west side of Main Avenue directly across from the Minneapolis Trust Company Building contains a parking lot lined by evergreens and a park area that provide a buffer between the BNSF tracks and BNSF right of way, and the Minneapolis Trust Company Building. Beyond the parking lot and trees, a platform will be constructed along the tracks.

Fencing is planned along the BNSF right of way through Sandstone. This fencing plan will be incorporated into construction drawings developed in final design, and will be subject to approval by BNSF as part of final design.

The addition of fencing, and the eight daily passenger trains within the railroad right of way, buffered by the park area, will not cause any visual or auditory impacts on the Minneapolis Trust Company Building.



19. Kettle River Sandstone Company Quarry – Sandstone (PN-SSC-008) NRHP Listed

MN 123 (See Map 119 in Appendix A)

The Kettle River Sandstone Company Quarry is listed on the NRHP under Criterion A in the areas of exploration/settlement and industry. The quarry was the site of Minnesota’s most extensive sandstone quarry in the late nineteenth and early twentieth centuries and led to the platting and development of the town of Sandstone. The quarry supplied high quality stone used for buildings and for street pavers throughout the United States. The Quarry site includes approximately 42 acres, with a period of significance from 1885 when the quarry began, to 1919 when the quarry closed.

Finding: No Adverse Effect. The Kettle River Sandstone Company Quarry site will not be physically impacted or altered by NLX Project elements. The Quarry site boundaries extend under the BNSF track as it approaches the Kettle River bridge high over the river gorge on the northeast end of Sandstone. The rest of the Quarry site south of the railroad right of way is now Robinson Park, including the bluffs and the land below along the River. Fencing is planned along the BNSF right of way line through Sandstone and will extend to the Kettle River bridge abutment. As the line meets the park land prior to the bridge, fencing will be constructed at the toe of the railroad grade slope because of the steep topography and to avoid any effect to the Quarry site or the adjacent park land. This fencing plan will be incorporated into construction drawings developed in final design, and will be subject to approval by BNSF as part of final design.

No other track improvements are planned at the bridge approach or on the Kettle River Bridge. The addition of eight daily passenger trains will not have a visual or auditory effect on the historic characteristics of the Quarry.

Consultation with MnSHPO and other interested parties, including BNSF, will occur to confirm that measures regarding fencing will be carried out to avoid adverse effects on the Kettle River Sandstone Company Quarry.



20. Askov Great Northern Passenger Depot – Askov (PN-ASC-005) NRHP Eligible

Brogade Street (See Map 126 in Appendix A)

The Askov Great Northern Passenger Depot is eligible for the NRHP under Criterion C, for architecture, as an exceptional example of a GN standard plan passenger depot. The GN utilized several standard passenger depot plans, such as this one-story frame building with a side gable roof that created a uniform look. Many of the depots along this corridor have been relocated and others later retired; the Askov GN Passenger Depot is the only remaining passenger depot within this BNSF right of way. The period of significance is 1926, when it was moved to Askov (from Bovey) to replace a depot that burned, to 1970 when the GN consolidated with other companies to form the BN.

Finding: No Adverse Effect. The Askov Great Northern Passenger Depot will not be physically impacted or altered by NLX Project elements. The Depot is located along Brogade Street and the BNSF line, just west of the intersection with Bregnedalgade crossing of the NLX track (crossing no. 103) that will be improved with quad gates and flashing lights. No track improvements are planned within Askov.

Fencing is planned along the BNSF right of way line at this location. Because this property is within the BNSF right of way, fencing will follow the right of way line (generally adjacent to Brogade Street) south of the Depot but near the building will extend east and north to the Bregnedalgade crossing, with an appropriate buffer around the Depot so that the historic Depot remains accessible to Bregnedalgade Street. While this building is close to the tracks and historically would have had access to the railroad, it is no longer in active railroad use. Going forward, reuse options would likely require access from the street, rather than the railroad side of the building. In addition, safety concerns indicate a need for fencing between the Depot and the railroad track to support reuse activities. This fencing plan will be incorporated into construction drawings developed in final design, and will be subject to approval by BNSF as part of final design.

Neither visual nor auditory impacts will affect this property, and the addition of eight daily passenger trains within the railroad right of way is consistent with the depot's historic use and location as a train depot adjacent to the BNSF track.

Consultation with MnSHPO and other interested parties, including BNSF, will occur to confirm that measures regarding fencing will be carried out to avoid adverse effects to the Askov Great Northern Passenger Depot.

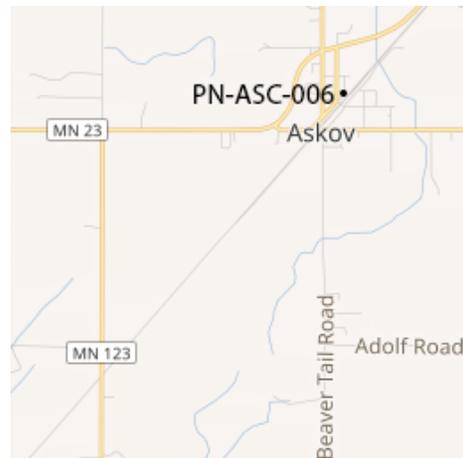


21. Partridge Township Hall – Askov (PN-ASC-006) NRHP Listed

6345 Kobmagergade (Main) Street (See [Map 126](#) in Appendix A)

The one-story frame construction Partridge Township Hall is listed on the NRHP under Criterion A for its role in settlement, early politics and government in Pine County. Built in 1901 at Partridge Station along the Eastern Railway (GN), it represented the transition of the rural Partridge Station railroad stop into the community of Askov by 1908. The period of significance is 1901 until 1970, when Askov erected a new governmental building.

Finding: No Adverse Effect. The Partridge Township Hall will not be physically impacted or altered by NLX Project elements. The Town Hall is located approximately 400 feet west of the BNSF track along Kobmagergade Street, Askov’s main commercial street, which is perpendicular to the BNSF track. No track improvements are planned within Askov, although fencing will be added through Askov and the Bregnedalgade Street crossing of the BNSF (crossing no. 103) and another crossing one block farther west (crossing no. 102) will be improved with quad gates and flashing lights. The addition of eight daily passenger trains within the railroad right of way and the fencing, and quad gates with flashing lights will not be directly visible to the Partridge Town Hall.



22. Askov American – Askov (PN-ASC-056) NRHP Eligible

6351 Kobmagergade (Main) Street (See [Map 126](#) in Appendix A)

The Askov American building is eligible for the NRHP under Criterion B in the areas of communication and politics/government for its association with Hjalmar Petersen, who was the founder, owner, editor, and publisher of the Askov American newspaper for over 50 years. Petersen served in political office at the local and state level, including a short term as Governor in the 1930s. The newspaper was an important employer in the community and he used the publication to promote the community and his political ideals. The period of significance begins with the 1926 construction of this one-story, brick building to house the Askov American, and ends with Petersen's death in 1968.

Finding: No Adverse Effect. The Askov American building will not be physically impacted or altered by NLX Project elements. The building is located approximately 500 feet west of the BNSF track along Kobmagergade Street, Askov's main commercial street, which is perpendicular to the BNSF track. No track improvements are planned within Askov, although fencing will be added through Askov and the Bregnedalgade Street crossing of the BNSF line (crossing no. 103) and another crossing one block farther west (crossing no. 102), will be improved with quad gates and flashing lights. The addition of eight daily passenger trains within the railroad right of way, and the fencing and quad gates with flashing lights will not be directly visible to the Askov American building.



23. *Louis Hultgren House and Sand Pit – Kerrick (PN-KEC-003) NRHP Listed*

8375 MN 23 (See [Map 146](#) in Appendix A)

The Louis Hultgren House and Sand Pit are listed on the NRHP under Criterion A for settlement and industry and Criterion B for association with Louis Hultgren and settlement in Pine County. An immigrant from Sweden, Hultgren settled in Kerrick in 1888 just as the railroad was being constructed. Hultgren’s T-shaped, two-story frame dwelling was one of the first in Kerrick and served as a school and an entry point for numerous settlers that followed. He began removing sand from the pit on his property in the mid-1890s; the sand was used for moulding in foundries in the Upper Midwest and Central Canada and was an early industry that supported the development of Kerrick. The period of significance is 1896 when the house was constructed until 1970, when the sand pit operation ended.

Finding: No Adverse Effect. The Louis Hultgren House and Sand Pit will not be physically impacted or altered by NLX Project elements due to the distance from improvements and vegetation around the Hultgren House. The House and Sandpit are located west of MN 23 and approximately 450 feet west of the BNSF track, and approximately 1,000 feet southwest of the Deerfield Road/Main Street crossing (crossing no. 114). Fencing will be added through Kerrick along the BNSF right of way line. The Deerfield Road/Main Street crossing will be improved and widened to accommodate a median, dual gates and flashing lights. Due to vegetation and MN 23 west of the BNSF track, the addition of eight daily passenger trains within the railroad right of way and addition of fencing, and dual gates and flashing lights at the crossing will not have any visual impacts on the Hultgren house. There will be no adverse noise effects on the Hultgren House and Sand Pit. Noise measurement of a nearby dwelling that is approximately 250 feet from the NLX track resulted in a moderate noise impact under the Sandstone Maintenance facility option. The Hultgren House, being 200 feet farther from the track, will not experience any effects from noise.



24. Kerrick Cheese Factory & Creamery – Kerrick (PN-KEC-002) NRHP Eligible

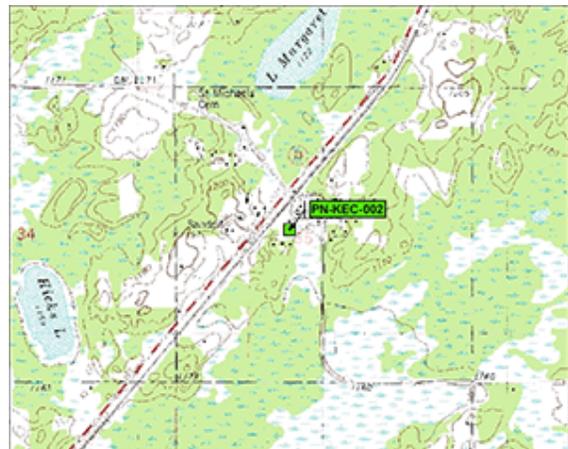
5357 Hogan Avenue (See Map 146 in Appendix A)

The Kerrick Cheese Factory & Creamery is eligible for the NRHP under Criterion A, within the areas of agriculture and industry. As the first cheese factory constructed in Pine County, it is significant as a representative example of the importance of cheese factories and creameries in the dairy industry in the crossroads settlement of Kerrick and within Pine County. The period of significance is 1935, when the two-and-one-half story brick-faced building was constructed, through 1954 when operations ceased at the creamery.

Finding: No Adverse Effect. The Kerrick Cheese Factory and Creamery will not be physically impacted or altered by NLX Project elements. The building faces away from the BNSF tracks, with the rear service portion of the building closest to the tracks and crossing. The Cheese Factory and Creamery is approximately 575 feet from the Deerfield Road/Main Street crossing (crossing no. 114) planned to be improved and widened to accommodate a median, dual gates and flashing lights. The NLX Project will provide an adequate buffer around the Cheese Factory and Creamery in planning for construction staging on the roadway and crossing to avoid effects on the Kerrick Cheese Factory and Creamery. The addition of eight daily passenger trains within the railroad right of way and the addition of the median, dual gates and lights will not cause any visual effects for the Cheese Factory and Creamery.

Fencing will be added through Kerrick along the BNSF right of way line, which is 50 feet from the centerline south of Kerrick and extends to 200 feet around the crossing. The NLX Project will keep the fencing at 50 feet from the centerline through the crossing area, rather than extending the fencing the full 200 feet from centerline. This will establish a consistent fencing line and avoid extending the fencing deeper into Kerrick and to avoid any potential effects to the Cheese Factory and Creamery. This fencing plan will be incorporated into construction drawings developed in final design, and will be subject to approval by BNSF as part of final design.

Consultation with MnSHPO and other interested parties, including BNSF, will occur to confirm that measures regarding construction staging and fencing will be carried out to avoid adverse effects on the Kerrick Cheese Factory and Creamery.



25. Grassy Point Railroad Bridge – Duluth (SL-DUL-0009) (see also No. 26, Duluth Short Line Railway) NRHP Eligible

Grassy Point and waterfront (See Map 204 in Appendix A)

The Grassy Point Bridge is eligible for the NRHP under Criterion A for transportation and industry and under Criterion C for engineering. It is one of two railroad bridges to connect the Minnesota and Wisconsin sides of the Duluth-Superior Harbor. Grassy Point Bridge provides a direct connection between the two sides of the downtown waterfront, while the other railroad bridge, the Oliver Bridge, is located farther south and serves as a bypass around the busy port areas of Duluth and Superior. Built in 1912 to replace an earlier bridge, the Grassy Point Bridge is a steel truss swing span bridge an estimated 1,645 feet in length; the middle span opens to allow ships to pass through the harbor to the south. The Bridge was built to handle two parallel railroad tracks, but only one track is installed on the swing span. The period of significance is 1912 to 1970. The Grassy Point Bridge has been determined individually eligible, but is also contributing to the Duluth Short Line Railway Historic District.

Finding: No Adverse Effect. The NLX Project trains will cross over St. Louis Bay from Wisconsin to Minnesota on the Grassy Point Bridge. The NLX Project will rehabilitate the bridge operating and control systems, which consists of upgrading the mechanical parts that support the opening and closing of the swing bridge. These upgrades will increase the efficiency and safety of the bridge and will be entirely within the mechanical portions of the bridge. There will be no impact on the steel truss of the bridge, its appearance, or any of the characteristics that make it eligible for the NRHP.



26. Duluth Short Line Railway/St. Paul & Duluth RR/Northern Pacific Railway “Grassy Point Line” / Burlington Northern RR/BNSF/LST&T Jct. to West Duluth Jct. (Field No. 1864 in Wis.) – Duluth (XX-RRD-025)² NRHP Eligible

LST&T Junction (WI) to West Duluth Junction (MN) (See Maps 204-205 in Appendix A)

This segment of the Duluth Short Line Railway is eligible for the NRHP under Criterion A, within the areas of transportation, agriculture, commerce and industry. The Short Line Railway is significant for linking the Duluth, Minnesota and Superior, Wisconsin railroad networks across the Grassy Point Bridge, as opposed to maintaining all-Minnesota or all-Wisconsin railroad networks. The period of significance is 1888, when construction started on the line, and ends with 1970 and the formation of the BN Railroad.

Finding: No Adverse Effect. The NLX Project will operate on track within this historic rail corridor. NLX Project improvements on the section of the Duluth Short Line Railway in Minnesota will consist of upgrading the operating and control systems on the individually eligible Grassy Point Bridge, as noted above. A new second track and turnout will be added at Berwind Junction as the NLX track curves north and leaves the eligible Duluth Short Line segment. This track and turnout re-establish a line that previously existed and will not change the relationship to, or any features of, the eligible Duluth Short Line.



² FRA determined the entire section from LST&T Junction in Superior, Wisconsin, and across St. Louis Bay to West Duluth Junction as eligible; the WisSHPO did not concur in the eligibility determination for the rail segment in Wisconsin. Effects have been evaluated for the section of the line from Grassy Point Bridge east into Minnesota. No effects are assessed for the approximately 1-mile rail segment in Wisconsin.

27. North Western-Hanna Coal Dock No. 5 – Duluth (SL-DUL-0012) NRHP Eligible

303 37th Ave W (See Map 207 in Appendix A)

The North Western-Hanna Coal Dock No. 5 is eligible for the NRHP under Criterion A, within the areas of industry and transportation relating to iron ore and coal mining. The dock was integral in the M.A. Hanna Company's transportation network, linking the ore deposits in Minnesota to steel plants in the Eastern United States. The dock is also significant in the growth of Duluth as a major shipping port on the Great Lakes. The property includes the earthen dock of approximately 17 acres, concrete seawalls, CN and BNSF railroad spurs, and three contributing buildings. The period of significance is 1910 when the M.A. Hanna Company first began to build the dock until 1962.

Finding: No Adverse Effect. The North Western-Hanna Coal Dock No. 5 will not be physically impacted or altered by NLX Project elements. The NLX Project will install turnouts within the railroad right of way adjacent to the property, and quad gates and flashing lights will be added at Hallet Dock Road, which provides entry to the Dock. Given the industrial hauling and loading, railroad tracks and industrial machinery that operate on the coal dock, the addition of eight daily passenger trains and the gates and lights will not have a visual or auditory effect on the historic characteristics of Coal Dock No. 5.



28. Duluth, Missabe & Iron Range Ore Docks No. 5 and 6 – Duluth (SL-DUL-0014) NRHP Eligible
Near 35th Ave W at waterfront (See Map 207 in Appendix A)

The Duluth, Missabe & Iron Range Ore Docks No. 5 and No. 6 are eligible for the NRHP under Criterion A for association with the historic mining transportation system in Duluth. Built in 1914 and 1918, the ore docks played an important role in the efficient and economical transportation of iron ore from the Mesabi Range to steel factories in the Eastern United States. The ore docks in Duluth, including their approaches, were integral to the success of the transportation system by providing a quick and efficient way to transfer ore from railroad cars to ships. The period of significance is 1914 to 1967.

Finding: No Adverse Effect. The Duluth, Missabe & Iron Range Ore Docks No. 5 and No. 6 will not be physically impacted or altered by NLX Project elements. The NLX track runs at grade in this area, while the Ore Docks and their approaches are on structures over the NLX track. No NLX Project improvements are planned on the track adjacent to the Ore Docks. The addition of eight daily passenger trains will not have a visual or auditory effect on the historic characteristics of Ore Docks No. 5 and No. 6, which were built for, and continue to carry, freight trains loaded with ore products.



29. Duluth, Missabe & Iron Range Railway – Duluth (SL-DUL-2499) NRHP Eligible

I-35 and 34th Ave. W to I 35 and 31st Ave. W (See Maps 207-208 in Appendix A)

The Duluth, Missabe & Iron Range Railway (DM&IR) is eligible for the NRHP under Criterion A for its association with the historic mining transportation system in Duluth. A segment of the DM&IR intersects I-35 at 31st Avenue West, just east of the DM&IR ore docks, and then continues north (between I-35 and the BNSF line). The DM&IR resulted from a 1938 consolidation of two railroads that shipped ore from the Iron Range to shipping points in Duluth: the Duluth Missabe & Northern (DN&N) and the Duluth and Iron Range (D&IR). The DM&IR is now owned by the Canadian National Railway Company, but continues as the largest iron-ore handling railroad in North America.

Finding: No Adverse Effect. There are no NLX Project improvements in this segment parallel to the DM&IR and there will be no impacts on the DM&IR within the APE.



30. Portion of Lake Superior & Mississippi Railroad mainline – Duluth (SL-DUL-2500) NRHP Eligible Under I-35, west of 31st Ave. W (See Maps 207-208 in Appendix A)

A segment of the Lake Superior & Mississippi Railroad (LS&M) main line was determined eligible under Criterion A for transportation. Now owned by the BNSF, the LS&M segment was part of the original LS&M main line, the original railroad line constructed between St. Paul and Duluth in 1870. The LS&M main line corridor intersects I-35 at 31st Avenue West just east of the DM&IR ore docks and then continues north (between I-35 and the NLX track) and parallel to the DM&IR line.

Finding: No Adverse Effect. There are no NLX Project improvements in this segment parallel to the LS&M section and there will be no impacts on the portion of the LS&M line within the APE.



**31. Great Northern Power Co/MN Power & Light Co/MN Power Substation – Duluth (SL-DUL-0191)
NRHP Eligible**

30 W Superior Street (See Map 210 in Appendix A)

The Great Northern Power Co/MN Power & Light Co/MN Power Substation is eligible for the NRHP under Criterion A, for engineering and industry, and Criterion C for architecture. The substation is significant for its association with the Thomson Hydroelectric project, which constructed a dam across the St. Louis River in nearby Thomson, MN, to provide power for Duluth and its shipping industries. The station is also an important component of Minnesota Power, one of the largest electric generating companies in northeastern Minnesota and which provided the electrical power that supported the development of Duluth and the Iron Range. The four-story concrete and brick-faced building is an excellent example of the Italian Renaissance Revival style as applied to an industrial facility. The period of significance is 1905, when the building was constructed, to 1962.

Finding: No Adverse Effect. The Great Northern Power Co/MN Power & Light Co/MN Power Substation will not be physically impacted or altered by NLX Project elements. The Power Substation is located on West Superior Street in an industrial area, approximately 400 feet west of a former railyard site that is proposed for the Duluth Maintenance/Layover facility. Interstate 35 (I-35) forms the west edge of the maintenance/layover facility site, separating the maintenance facility from the Power Substation. Plans for the maintenance facility indicate that the area east across I-35 from the Power Substation will have parking, storage tracks and access roads, with the maintenance facility to the north of the parking area. The Power Substation is already subject to an industrial viewshed, including an interstate highway and railroad lines and the addition of railroad facilities will not result in a visual effect on this property.



32. Duluth Union Depot – Duluth (SL-DUL-0658) NRHP Listed

506 W Michigan Street (See [Map 211](#) in Appendix A)

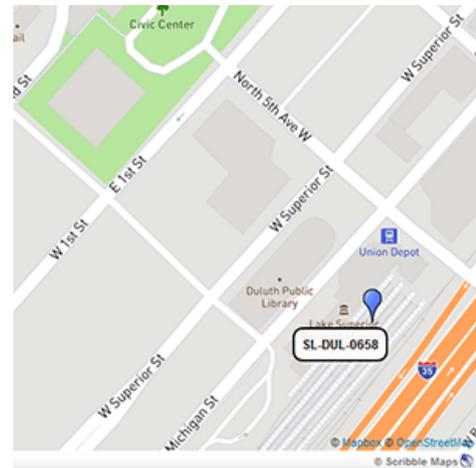
The Duluth Union Depot is eligible for the NRHP under Criterion A for transportation in Duluth, and Criterion C for architecture. Built in 1892, the Depot is an outstanding example of the French Renaissance Revival style of architecture designed by the noted Boston firm of Peabody, Stearns and Furber (Peabody and Stearns). The period of significance is 1892 to 1956.

Finding: No Adverse Effect. The Duluth Depot Great Hall was the only historic property in the NLX Project that exhibited potential to be affected by ground-borne noise and vibration. It was evaluated for ground-borne noise and vibration impacts according to methodology provided in the FRA guidance manual (FRA, 2010) (see Section 4.9.3). Using a conservative assessment of the ground-borne vibration and ground-borne noise in the auditorium, the levels were substantially below the impact criteria, and no ground-borne noise or vibration impact is projected at the Duluth Depot Great Hall.

A National Register evaluation study was conducted on the Duluth Union Depot in 2016 to determine the historic boundaries for the listed property since they were not identified in the original 1971 NRHP listing. The evaluation concluded that the boundaries included only the historic Depot building and did not include the various additions to the building or the reconstructed train shed (which houses the Lake Superior Railroad Museum), or the ca.1977, flat-roofed former Amtrak station at track level that now serves as a ticket counter/waiting area for the recreational North Shore Scenic Railroad. This former Amtrak station will be removed, and its site, adjacent to the Historic Depot but not within the NRHP boundaries, is planned as the site for the NLX station at Duluth.

The construction of the planned NLX station will not result in a visual effect for the Duluth Union Depot. The NLX station site is surrounded by transportation infrastructure of all types. It is located at ground level at the rear of the Duluth Union Depot and adjacent to the reconstructed train shed. North of the NLX station site are the piers supporting the 5th Avenue overpass, while I-35 ramps are located directly east of the site. Chain link and/or decorative fencing may be added near the station but is consistent with the existing railroad uses and views. The upper portions of the NLX station may be visible from the adjacent 5th Avenue overpass, but will be consistent with the existing urban views of the rear of the Depot, adjacent rooftops and roadways. Given the constraints of this site and the below-grade location at the rear of the Duluth Union Depot, there will be no adverse effect from the construction of the NLX station.

In accordance with the PA for this Project, consultation with the MnSHPO will occur when funding is available and plans are developed for the Duluth Station. Due to its location adjacent to the Duluth Union Depot, consultation will occur to confirm that there is no adverse effect resulting from the NLX station construction.

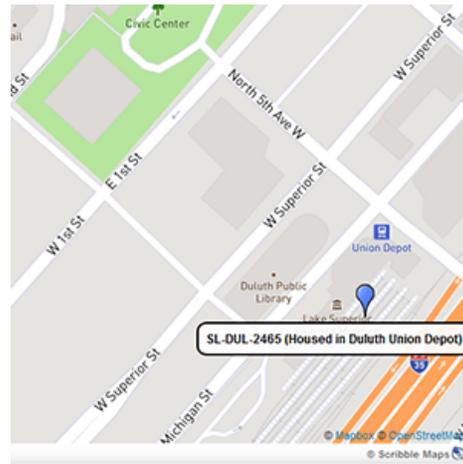


33. William Crooks Locomotive – Duluth (SL-DUL-2465) NRHP Listed

506 W Michigan Street (See Map 211 in Appendix A)

The William Crooks Locomotive is eligible under Criterion A for transportation. It was constructed in 1861 and put into service for the St. Paul and Pacific Railroad in 1862, when it carried its first passengers from St. Paul to St. Anthony (Minneapolis). It was in passenger service until 1897, and then maintained by the Great Northern Railway as a ceremonial and special use locomotive. It has been restored and on display in museums since the 1950s, and was moved to the Lake Superior Railroad Museum in the Duluth Union Depot in 1975. It is one of a few surviving locomotives dating to the Civil War era. The period of significance is 1862 to 1897.

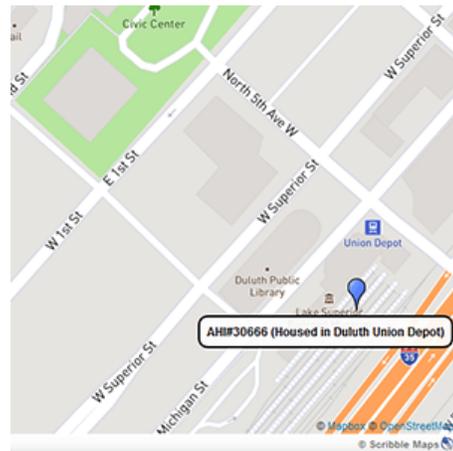
Finding: No Adverse Effect. The William Crooks Locomotive is displayed in the Lake Superior Railroad Museum (Duluth Union Depot) at track level. It will not be physically impacted or altered by NLX Project elements. The NLX Project will not exert any changes on the museum displays or their setting.



34. Soo Line Locomotive #2719 (AHI#30666; moved from Wisconsin) NRHP Listed
506 W Michigan Street (See [Map 211](#) in Appendix A)

The Soo Line Locomotive #2719 was built in 1923 by the American Locomotive Company in Schenectady, New York. It is significant under Criterion C as a representative example of railroad engineering and pulled passenger trains throughout its productive life of 32 years. The period of significance is 1923, the year of construction. It is housed at the Lake Superior Railroad Museum in the Duluth Union Depot.

Finding: No Adverse Effect. The Soo Line Locomotive #2719 is displayed in the Lake Superior Railroad Museum (Duluth Union Depot) at track level. It will not be physically impacted or altered by NLX Project elements. The NLX Project will not exert any changes on the museum displays or their setting.



7. Determination of Effects Summary

The determination of effects presented in this report finds that the NLX Project will have no adverse effects on historic properties from either operations or construction activities. No historic properties will be physically impacted or altered by NLX Project elements.

Three historic railroad lines will be traveled by the NLX Project; however, the continued use of those lines to carry trains and any improvements to those lines will not have an effect on their historic characteristics under Section 106. The improvements and operations planned on St. Paul, Minneapolis and Manitoba/Great Northern Railroad Corridor; the Great Northern and Northern Pacific Railway, Minneapolis Junction to Sauk Rapids Railroad Corridor Overlay Historic District; and the Duluth Short Line Railway “Grassy Point” line are in keeping with each railroad’s historic functions, and will maintain the railroads for continued transportation use. The track upgrades and reconfiguration to the historic railroad segments for the NLX Project do not affect each railroad’s significance under Criterion A for their historic transportation connections in the state, but will reinforce continued use as a rail corridor.

This determination of effects report has been prepared at the preliminary engineering stage of project design to indicate commitments under Section 106 for project planning and engineering as discussions continue with BNSF and MnDOT seeks funding for final design and construction. Plans for many Project improvements, including station and facilities plans, construction staging areas, or fencing alignments have not been specifically developed and await funding and agreements with BNSF before final design can be undertaken, or consultation to confirm avoidance of adverse effects, can occur.

Consultation with MnSHPO, WisSHPO and other consulting parties will continue in accordance with the Programmatic Agreement (PA) per Stipulation VII (C), which states that FRA may determine that there is no adverse effect on historic properties when conditions agreed upon by the SHPO are imposed, such as subsequent review of plans to ensure consistency with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR 68) to avoid adverse effects.

When funding is available for final design and construction, FRA will continue to consult with MnSHPO to avoid, minimize or mitigate any potential adverse effect from new construction when plans are developed for the Target Field Station (located within the Minneapolis Warehouse District) and at the Duluth Station (adjacent to the National Register-listed Duluth Union Depot).

When funding is available for final design and construction, FRA will consult with MnSHPO to avoid any indirect construction impacts to the Cedar Potato Warehouse and the Kerrick Cheese Factory and Creamery, due to their locations near crossing improvements. MnDOT and FRA will include provisions so that fencing is appropriately placed to avoid impacts to the Cedar Potato Warehouse, along the Sandstone Quarry/NLX track in Sandstone, near the Askov Depot, and near the Kerrick Cheese Factory. Potential locations for fencing have been identified in the NLX Project Proposed Infrastructure Improvements (April 25, 2017).

Both fencing locations and construction staging areas are subject to future discussion with BNSF and cannot be confirmed until the Project receives additional funding and agreements developed with BNSF for final design. Consultation with MnSHPO and other interested parties, including BNSF, will occur to

confirm that these measures will be carried out to avoid potential adverse effects. These commitments are documented in this submission to the MnSHPO (see Table 2) and also documented along with other environmental commitments in the NLX Tier 2 EA FONSI.

Table 2. Future Consultation on Historic Properties

Property Name and MnSHPO Inventory No.	Reason for Future Consultation	Timing of Future Consultation
Minneapolis Warehouse Historic District (listed) HE-MPC-0441	Consultation to avoid Adverse Effect from station construction within historic district	When funding is available for final design and construction
Duluth Union Depot (listed) SL-DUL-0658	Consultation to avoid Adverse Effect from station construction adjacent to historic Union Depot	When funding is available for final design and construction
Cedar Potato Warehouse (eligible) AN-OKG-005	Consultation to avoid Adverse Effect from construction staging or fencing	When funding is available for final design and construction
Kerrick Cheese Factory & Creamery (eligible) PN-KEC-002	Consultation to avoid Adverse Effect from construction staging or fencing	When funding is available for final design and construction
Kettle River Sandstone Company Quarry (listed) PN-SSC-008	Consultation to avoid Adverse Effect from fencing adjacent to track	When funding is available for final design and construction
Askov Great Northern Passenger Depot (eligible) PN-ASC-005	Consultation to avoid Adverse Effect from fencing adjacent to track	When funding is available for final design and construction

Next Steps

This determination of effects report was prepared in accordance with the Section 106 process, as well as the measures established in the Programmatic Agreement (PA) (Stipulations VII-VIII) developed for this NLX Project. Recognizing that the NLX Project would include tiered environmental documents and that final design will depend on funding, the PA was signed in 2013 with a 10-year timeframe. The PA will continue to provide direction on Section 106 activities as needed for the NLX Project, including a recognition that consultation with MnSHPO and WisSHPO, other consulting parties and the public will continue as needed in accordance with 36 CFR 800.6 and the PA (Stipulation VII) as the Project proceeds when funding and final design and construction are undertaken.

In addition to guidance provided by the PA as this Project proceeds, FRA delegated authority to MnDOT CRU to aid FRA in many aspects of the Section 106 process. Should future NLX Project changes be identified, MnDOT CRU, on behalf of FRA, will determine if APEs for architecture, historic or archaeological properties require revision, and whether additional survey is required, as provided in the PA, and initiate consultation. Although no historic properties have been identified in Wisconsin, updated survey work will be undertaken there as necessary to update existing surveys and any areas not previously evaluated.

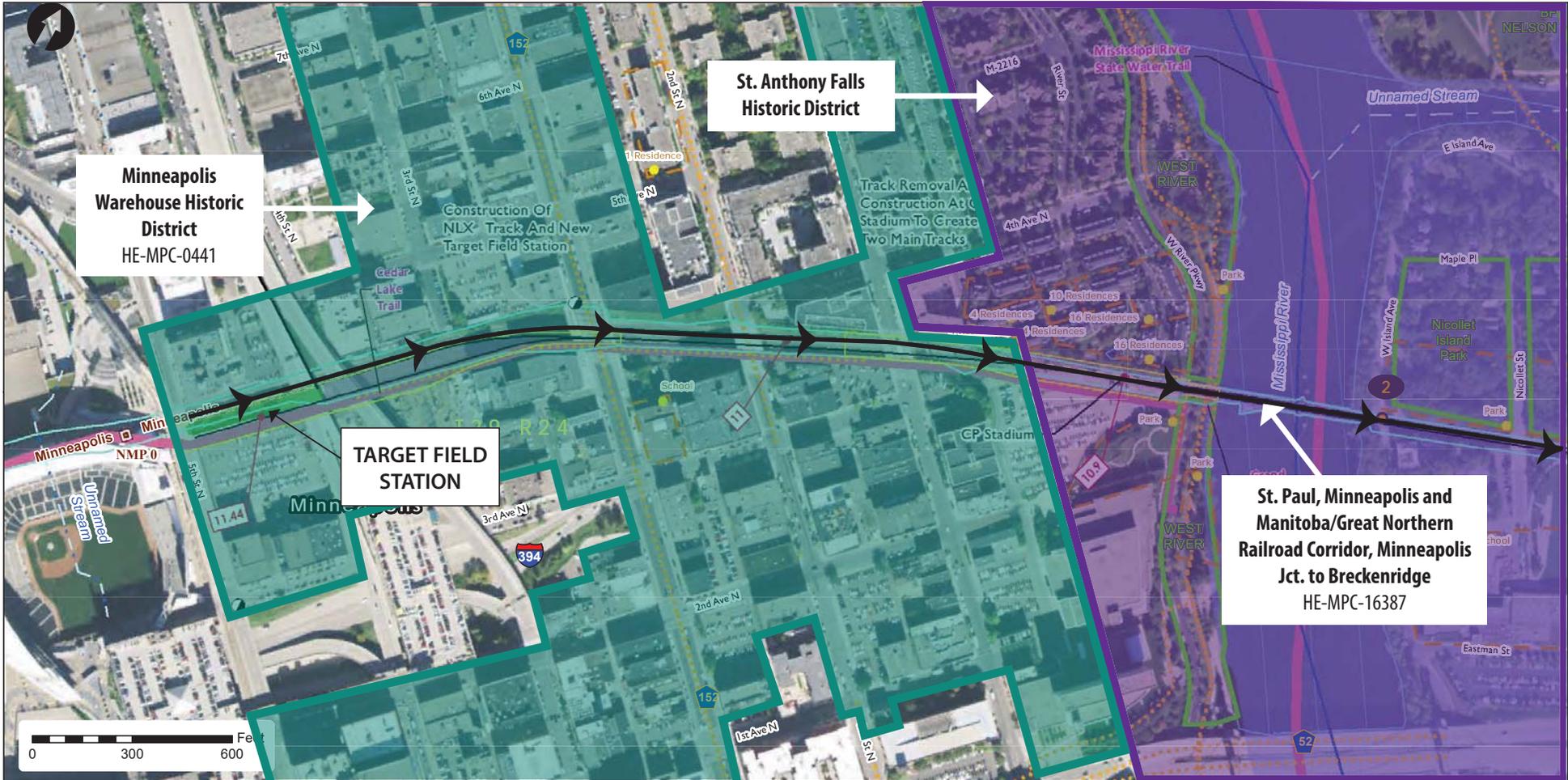
The documentation of commitments in this report and in the NLX Tier 2 EA FONSI, as well as the PA established for this Project, will provide guidance for consultation when additional funding is available for final design and construction on the NLX Project.

8. References used for Determination of Effects

- **Northern Lights Express Tier 2 Project Level Environmental Assessment:**
www.mndot.gov/nlx
- **NLX Tier 2 EA detailed figures**
http://www.dot.state.mn.us/nlx/documents/ea/appendices/NLX_EA_Appendix_D_Detailed_Figures_April2017.pdf
- **NLX Tier 2 EA crossing improvements list**
http://www.dot.state.mn.us/nlx/documents/ea/appendices/NLX_EA_Appendix_E_Build_Alternative_Design_April2017.pdf
- **NLX Proposed Infrastructure Improvements Target Field Station to Duluth Union Depot (working draft 4/25/2017)** Quandel Consultants, LLC
- **Phase I and II Architectural History Survey for the Northern Lights Express Project** (The 106 Group, 2013a):
<http://www.dot.state.mn.us/nlx/documents.html> (under “Other documents”)
- **Phase IA Archaeology Survey for the Northern Lights Express Project** (The 106 Group, 2013b)
- **Phase I Archaeological Investigations for the NLX High Speed Rail Project** (Commonwealth Heritage Group, 2017)
- **Duluth Union Depot National Register of Historic Places Re-Evaluation** (Summit Envirosolutions, 2016):
<http://www.dot.state.mn.us/nlx/documents/duluth-depot-reevaluation.pdf>

APPENDIX A

Map Set Showing Locations of Historic Properties and Project Improvements



Minneapolis Warehouse Historic District
HE-MPC-0441

St. Anthony Falls Historic District

TARGET FIELD STATION

St. Paul, Minneapolis and Manitoba/Great Northern Railroad Corridor, Minneapolis Jct. to Breckenridge
HE-MPC-16387

<ul style="list-style-type: none"> Northern Lights Express New Track Mile Post <p>Platform Station</p> <ul style="list-style-type: none"> Planned Approximate Station or Facility Location 	<ul style="list-style-type: none"> Wetlands MN Public Water Watercourse Stream 100 year Floodplain 	<ul style="list-style-type: none"> Construction Limits Water Trails Local Trails Trails (4f) 	<ul style="list-style-type: none"> Railroad Right-of-Way National Register of Historic Places Site Noise Reference Point Noise Receptor Clusters <p>Noise Impacts</p> <ul style="list-style-type: none"> No Impact - Both Maintenance Facilities Moderate Impact - Both Maintenance Facilities
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Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

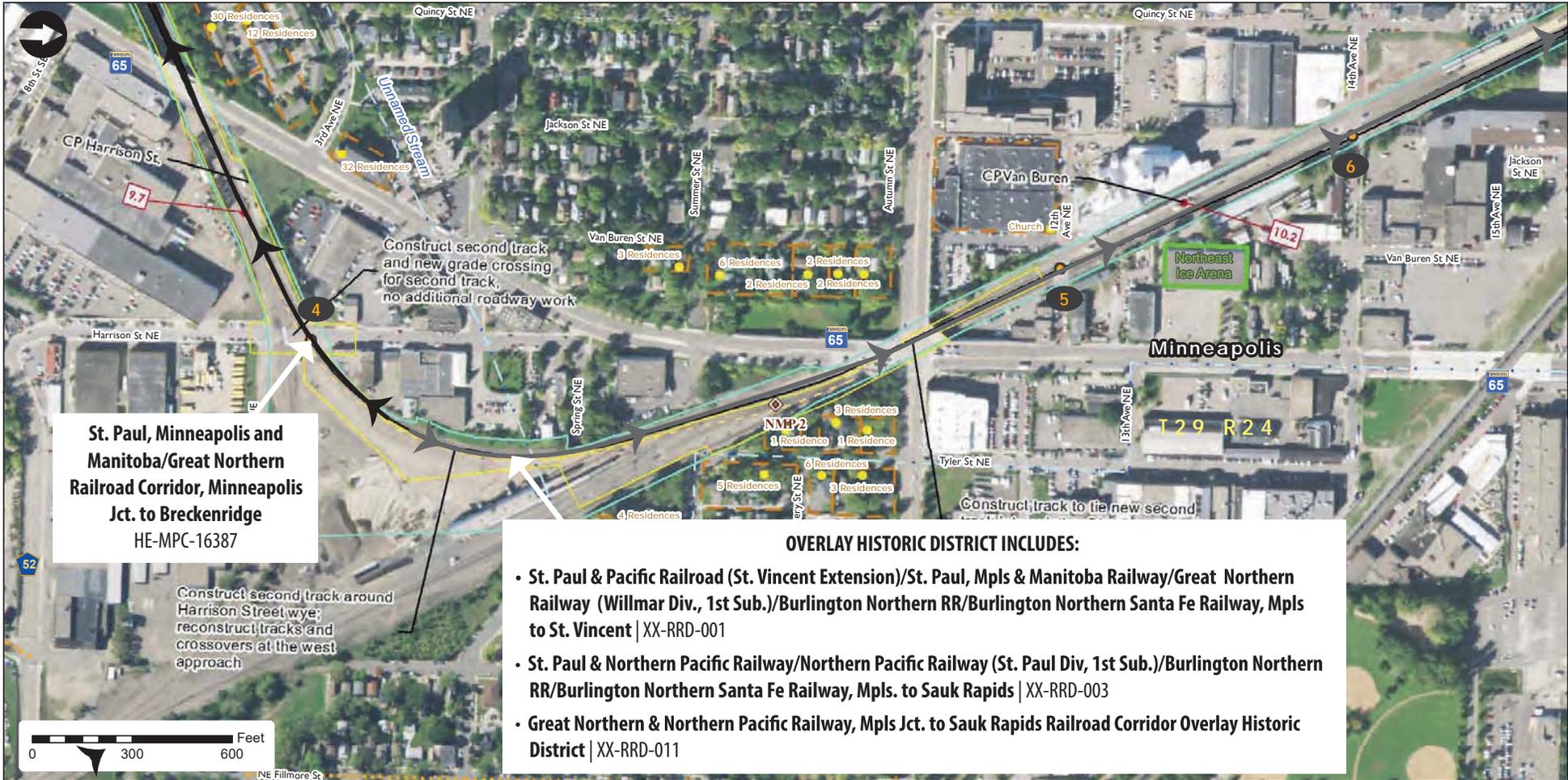


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PAGE:	1 of 211

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St. Paul, Minneapolis and Manitoba/Great Northern Railroad Corridor, Minneapolis Jct. to Breckenridge
HE-MPC-16387

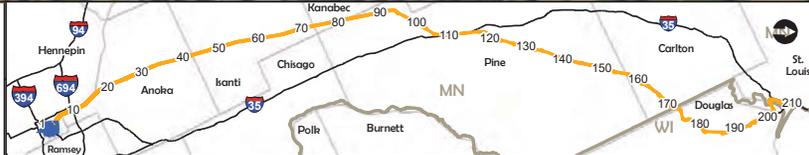
Construct second track and new grade crossing for second track, no additional roadway work

Construct second track around Harrison Street wye; reconstruct tracks and crossovers at the west approach

Construct track to tie new second

- OVERLAY HISTORIC DISTRICT INCLUDES:**
- St. Paul & Pacific Railroad (St. Vincent Extension)/St. Paul, Mpls & Manitoba Railway/Great Northern Railway (Willmar Div., 1st Sub.)/Burlington Northern RR/Burlington Northern Santa Fe Railway, Mpls to St. Vincent | XX-RRD-001
 - St. Paul & Northern Pacific Railway/Northern Pacific Railway (St. Paul Div, 1st Sub.)/Burlington Northern RR/Burlington Northern Santa Fe Railway, Mpls. to Sauk Rapids | XX-RRD-003
 - Great Northern & Northern Pacific Railway, Mpls Jct. to Sauk Rapids Railroad Corridor Overlay Historic District | XX-RRD-011

- | | | | | |
|---------------------------|------------|-----------------------|---|--|
| — Northern Lights Express | ▭ Wetlands | ▭ Construction Limits | ▭ Railroad Right-of-Way | ● At Grade Crossings (see At Grade Index for additional information) |
| — New Track | — Stream | ● Local Trails | ◆ Noise Reference Point | ▭ Parks (4f) |
| ● Mile Post | | | ▭ Noise Receptor Clusters | ▭ State |
| | | | ● No Impact - Both Maintenance Facilities | ▭ County |
| | | | | ▭ City / Township Boundary |



Tier 2 Detailed Environment Maps
Tier 2 Project Level EA



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COUNTY:	Hennepin
Aerials: 2015 NAIP Original 11x17 L	
PAGE:	3 of 211

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Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

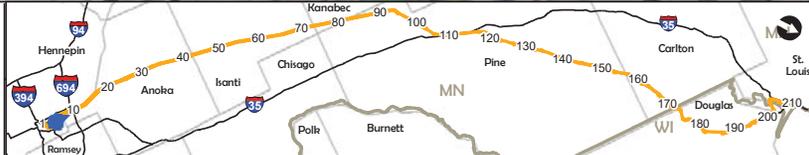
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NLX SEGMENT 2 SUBDIVISION: Midway



Overlay Historic District Continued
 XX-RRD-001
 XX-RRD-003
 XX-RRD-011

— Northern Lights Express	Wetlands	Construction Limits	Railroad Right-of-Way	At Grade Crossings (see At Grade Index for additional information)
● Mile Post	Stream	Local Trails	Noise Reference Point	State
		Trails (4f)	Noise Receptor Clusters	County
			Noise Impacts	City / Township Boundary
			● No Impact - Both Maintenance Facilities	



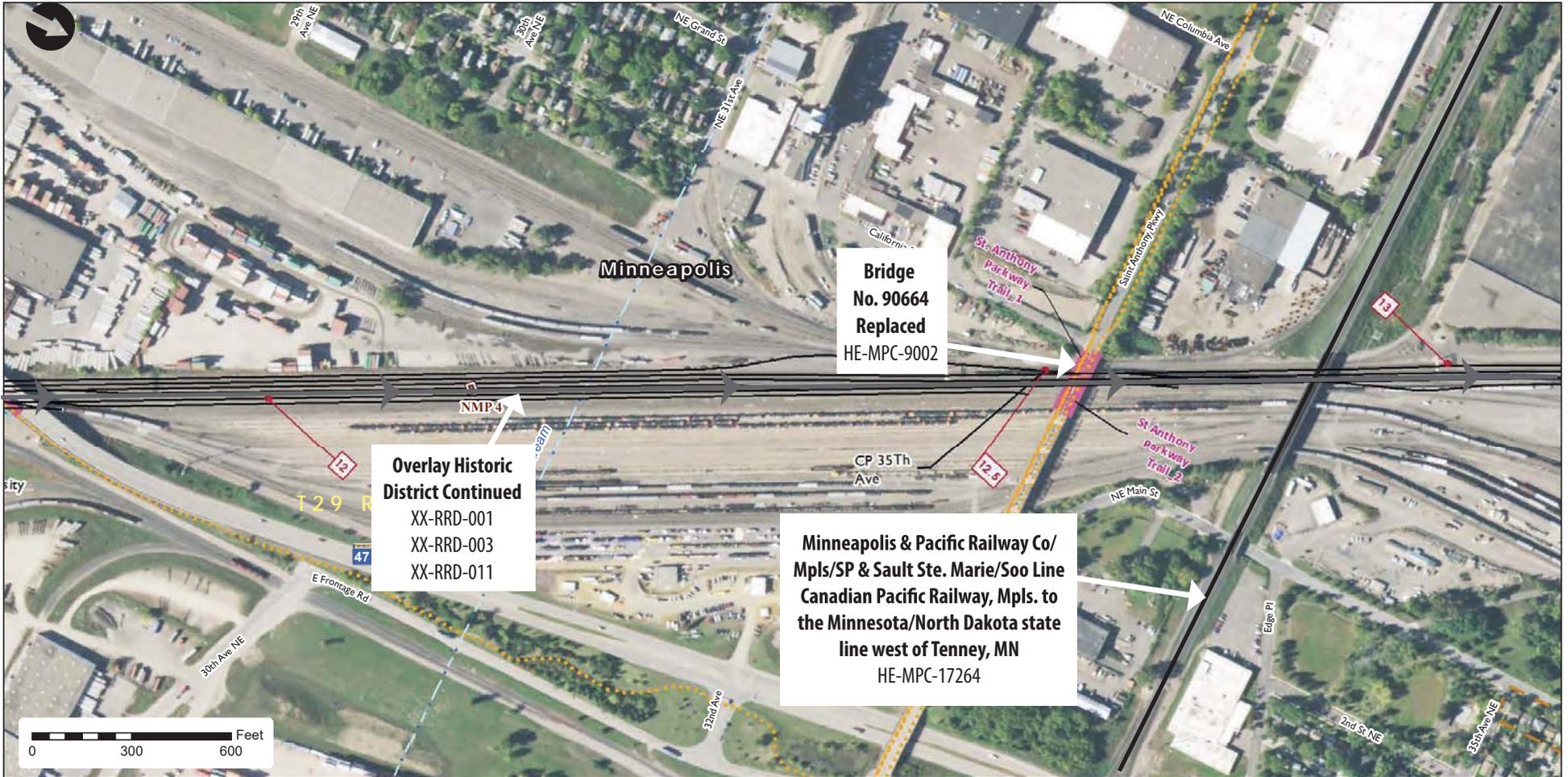
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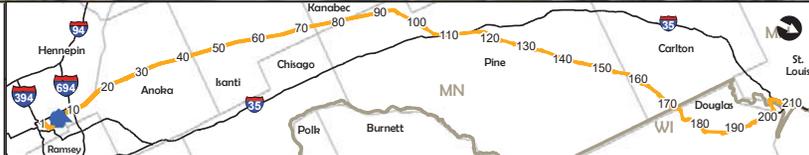
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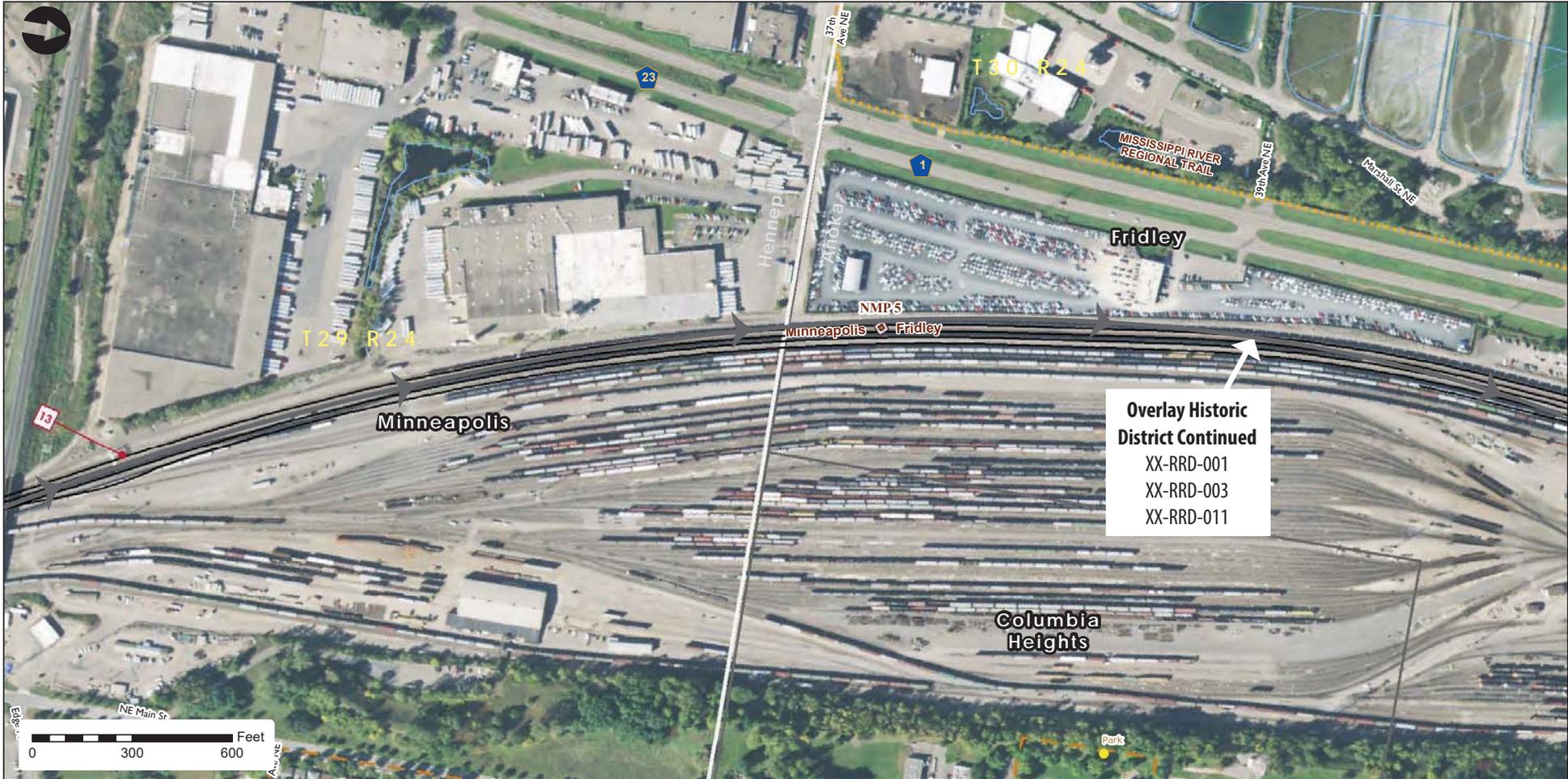


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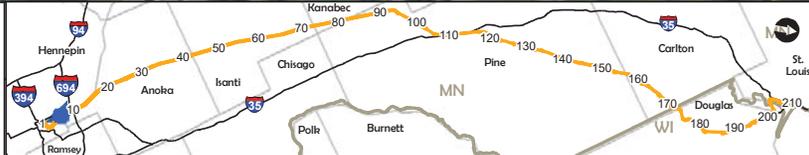
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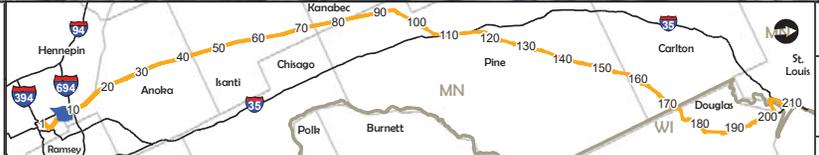
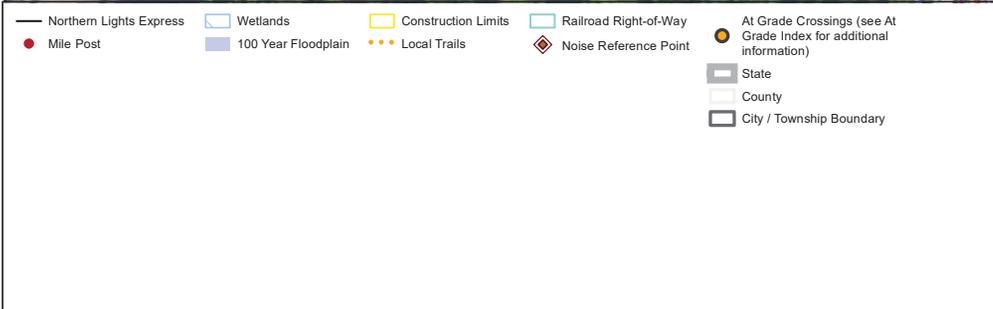
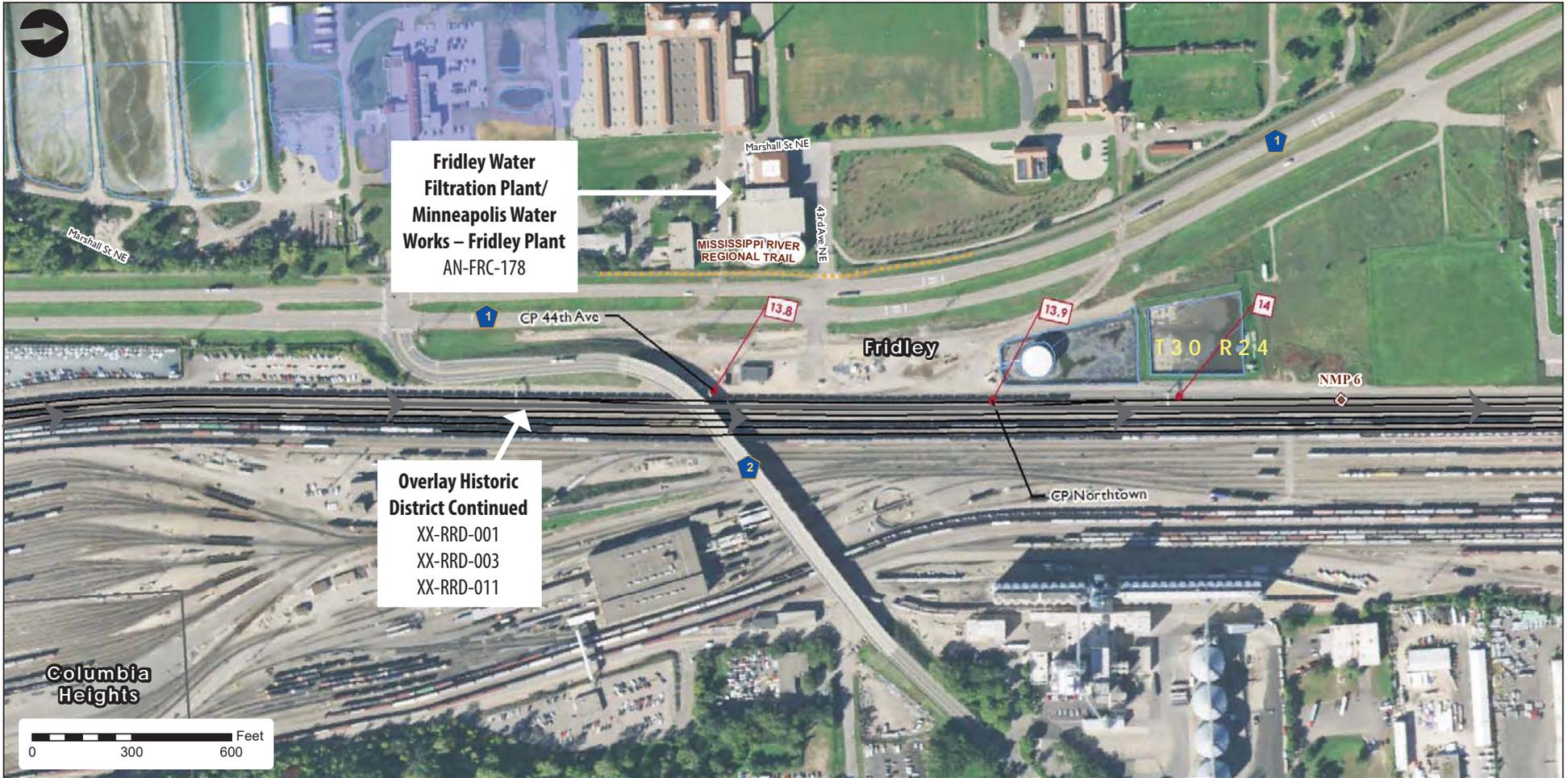


Tier 2 Detailed Environment Maps
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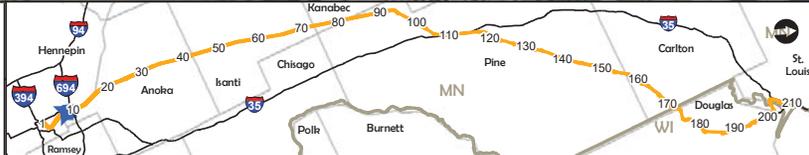
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— Northern Lights Express Wetlands Construction Limits Railroad Right-of-Way
 ● Mile Post Local Trails Noise Reference Point

● At Grade Crossings (see At Grade Index for additional information)
 State
 County
 City / Township Boundary



Tier 2 Detailed Environment Maps
 Tier 2 Project Level EA

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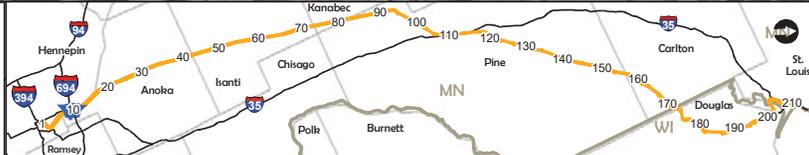
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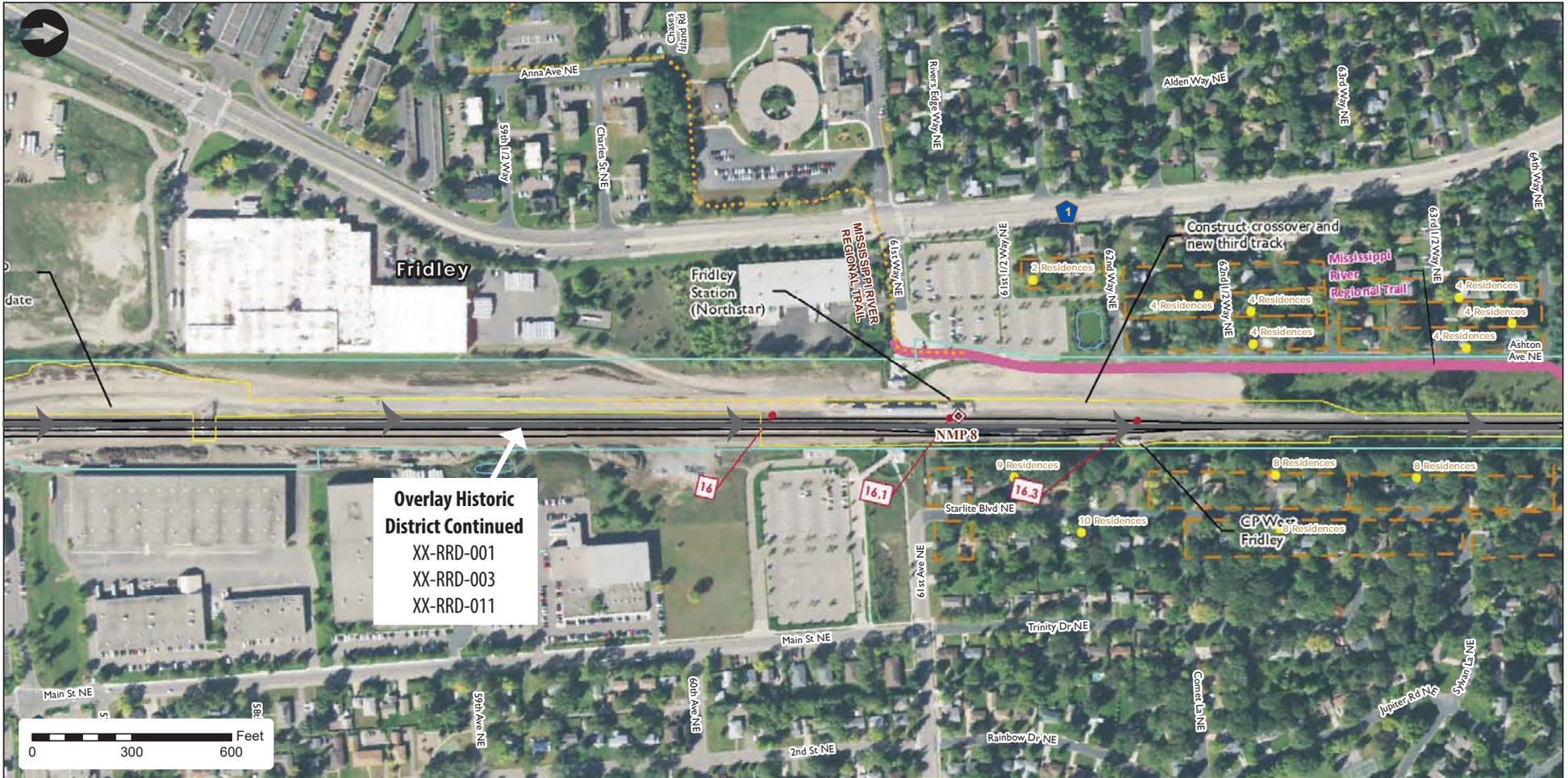
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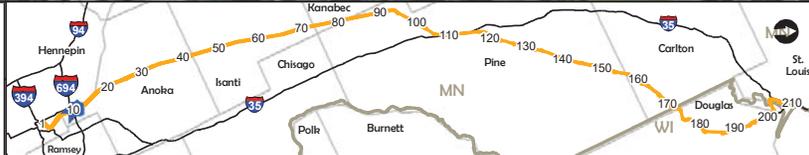
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Overlay Historic District Continued
 XX-RRD-001
 XX-RRD-003
 XX-RRD-011

- Northern Lights Express
- New Track
- Mile Post
- ▭ Wetlands
- ▭ Construction Limits
- Local Trails
- ▭ Noise Receptor Clusters
- ▭ Noise Impacts
- No Impact - Both Maintenance Facilities
- ◆ Noise Reference Point
- ▭ At Grade Crossings (see At Grade Index for additional information)
- ▭ State
- ▭ County
- ▭ City / Township Boundary



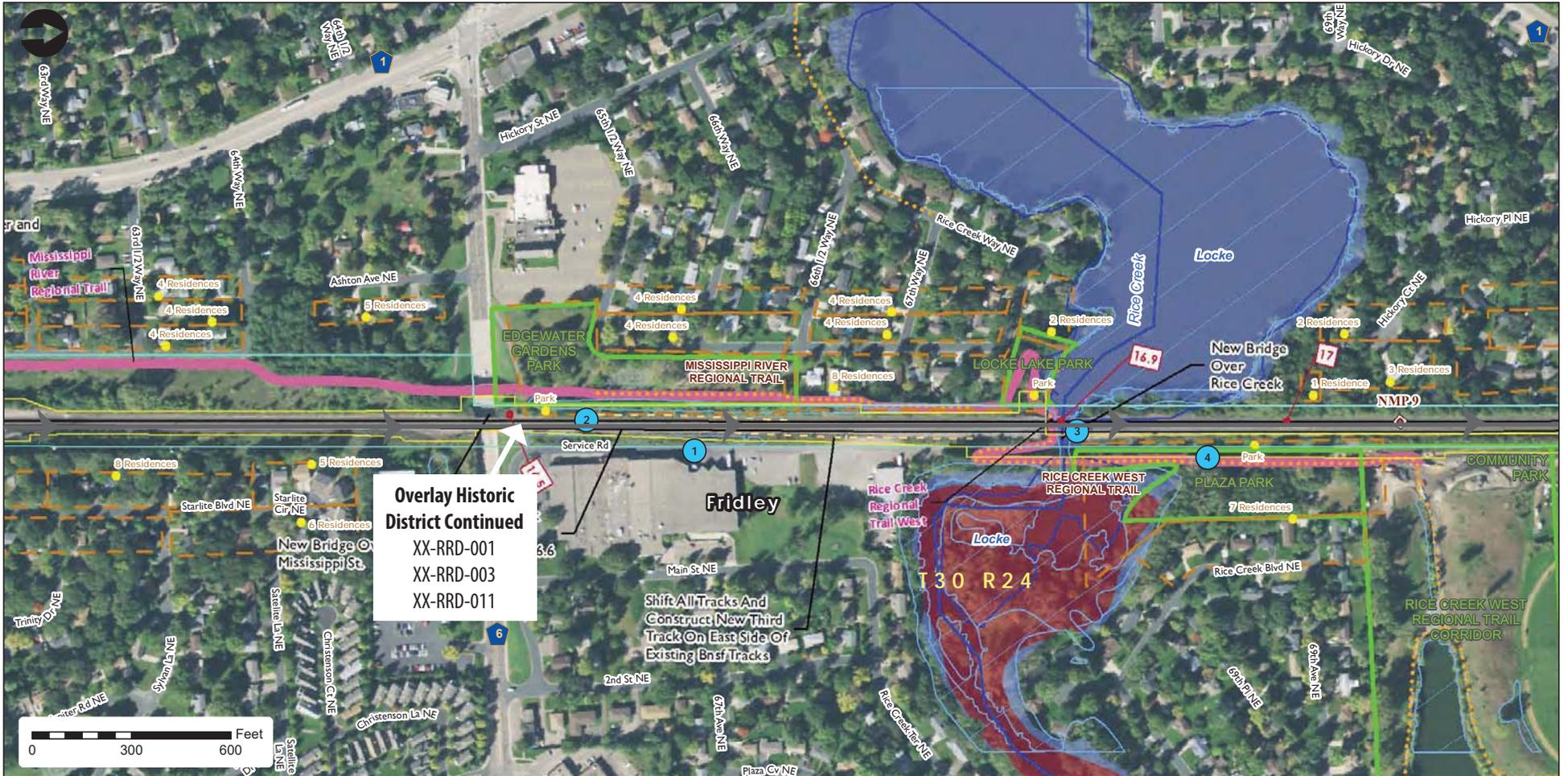
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Overlay Historic District Continued
 XX-RRD-001
 XX-RRD-003
 XX-RRD-011

- Northern Lights Express
- New Track
- Mile Post
- Wetlands
- ① Impacted Wetland Number
- MN Public Water Watercourse
- MN Public Waters
- Stream
- Floodway
- 100 Year Floodplain
- Construction Limits
- Local Trails
- Trails (4f)
- Railroad Right-of-Way
- ◆ Noise Reference Point
- Noise Receptor Clusters
- Noise Impacts
- No Impact - Both Maintenance Facilities
- At Grade Crossings (see At Grade Index for additional information)
- Parks (4f)
- State
- County
- City / Township Boundary



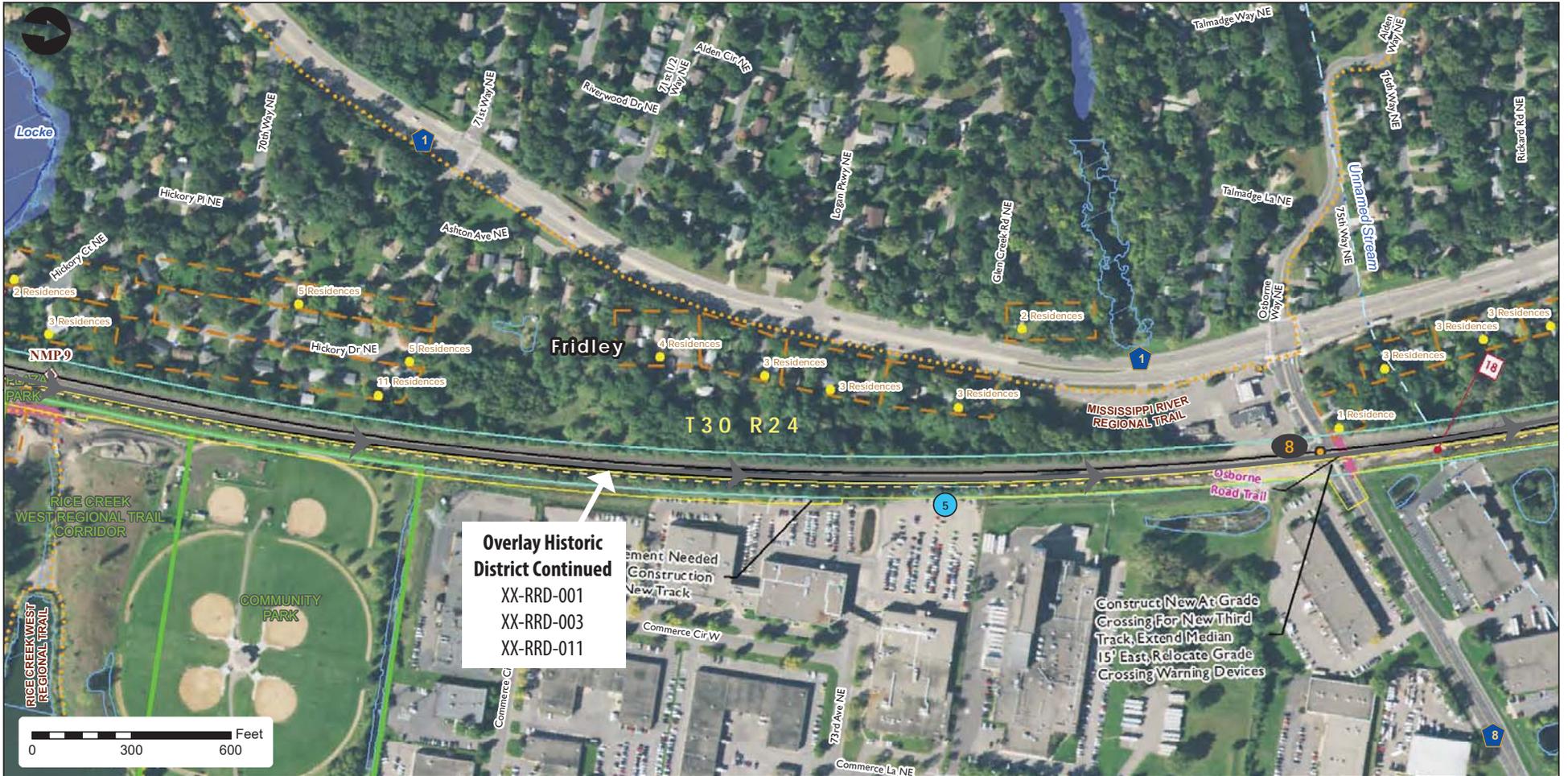
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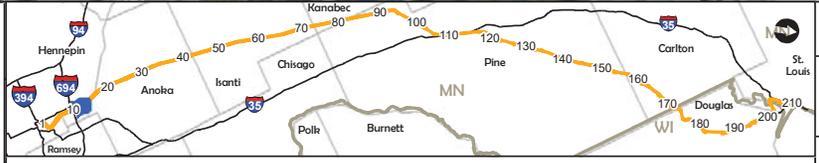
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Overlay Historic District Continued
 XX-RRD-001
 XX-RRD-003
 XX-RRD-011

Construct New At Grade Crossing For New Third Track, Extend Median 15' East, Relocate Grade Crossing Warning Devices

- Northern Lights Express
- New Track
- Mile Post
- Wetlands
- ① Impacted Wetland Number
- MN Public Waters
- Stream
- 100 Year Floodplain
- Construction Limits
- Local Trails
- Trails (4f)
- Railroad Right-of-Way
- Noise Reference Point
- Noise Receptor Clusters
- Noise Impacts
- No Impact - Both Maintenance Facilities
- At Grade Crossings (see At Grade Index for additional information)
- Parks (4f)
- State
- County
- City / Township Boundary

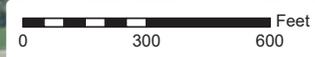


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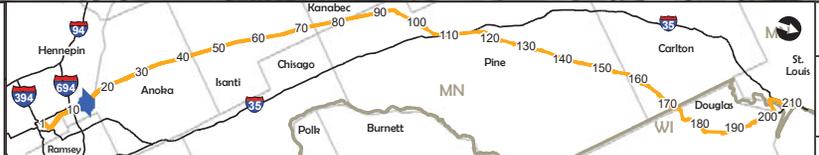
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- Northern Lights Express
- New Track
- Mile Post
- Wetlands
- MN Public Water Watercourse
- Stream
- Construction Limits
- Local Trails
- Railroad Right-of-Way
- ◆ Noise Reference Point
- Noise Receptor Clusters
- Noise Impacts
- No Impact - Both Maintenance Facilities
- At Grade Crossings (see At Grade Index for additional information)
- State
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Tier 2 Detailed Environment Maps
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Overlay Historic District Continued
 XX-RRD-001
 XX-RRD-003
 XX-RRD-011

Construct New At-Grade Crossing For New Third Track, Rebuild Roadway Approaches, Extend Median 20 East, And Relocate Grade Crossing Warning Devices

- Northern Lights Express
- New Track
- Mile Post
- Wetlands
- ① Impacted Wetland Number
- MN Public Water Watercourse
- MN Public Waters
- Stream
- Construction Limits
- Trails (4f)
- Railroad Right-of-Way
- ◆ Noise Reference Point
- Noise Receptor Clusters
- Noise Impacts
- No Impact - Both Maintenance Facilities
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- Parks (4f)
- State
- County
- City / Township Boundary



Tier 2 Detailed Environment Maps
 Tier 2 Project Level EA

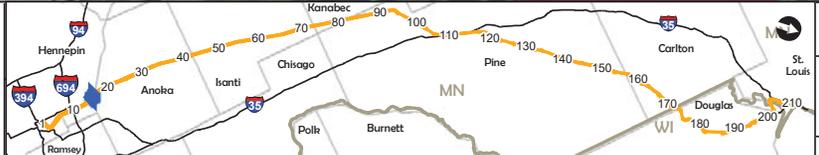
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— Northern Lights Express	Wetlands	Construction Limits	Railroad Right-of-Way	At Grade Crossings (see At Grade Index for additional information)
— New Track	① Impacted Wetland Number	— MN Public Water Watercourse	◆ Noise Reference Point	State
● Mile Post	— Stream	— Floodway	— Noise Receptor Clusters	County
	— 100 Year Floodplain		● No Impact - Both Maintenance Facilities	City / Township Boundary

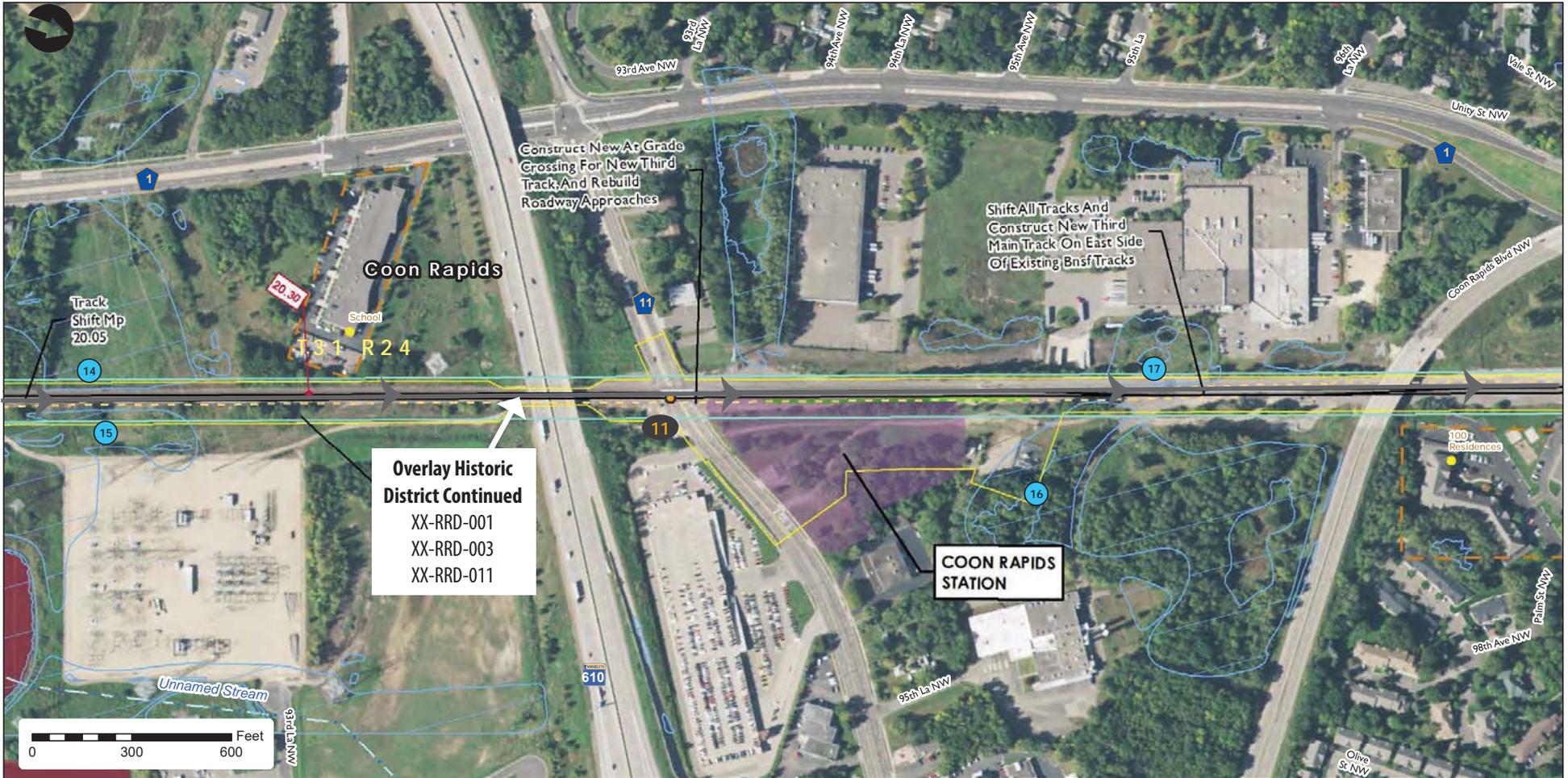


Tier 2 Detailed Environment Maps
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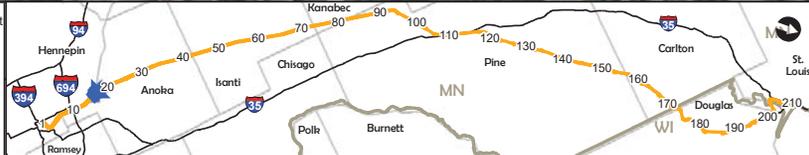
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<ul style="list-style-type: none"> — Northern Lights Express — New Track ● Mile Post <p>Platform Station</p> <ul style="list-style-type: none"> Planned Future Approximate Station or Facility Location 	<ul style="list-style-type: none"> Wetlands ① Impacted Wetland Number Stream Floodway 100 Year Floodplain 	<ul style="list-style-type: none"> Construction Limits Noise Receptor Clusters <p>Noise Impacts</p> <ul style="list-style-type: none"> No Impact - Both Maintenance Facilities 	<ul style="list-style-type: none"> At Grade Crossings (see At Grade Index for additional information) State County City / Township Boundary
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Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

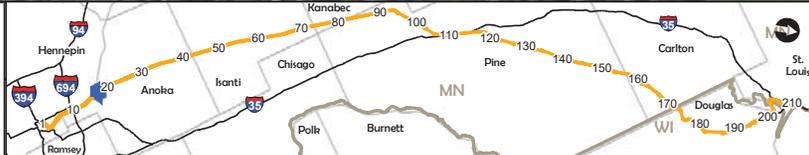
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Tier 2 Detailed Environment Maps
 Tier 2 Project Level EA

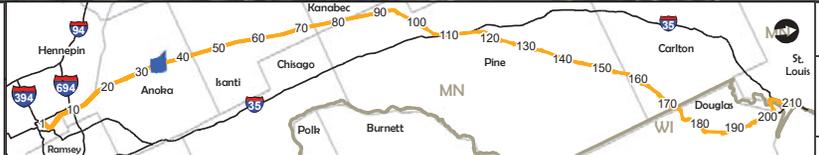
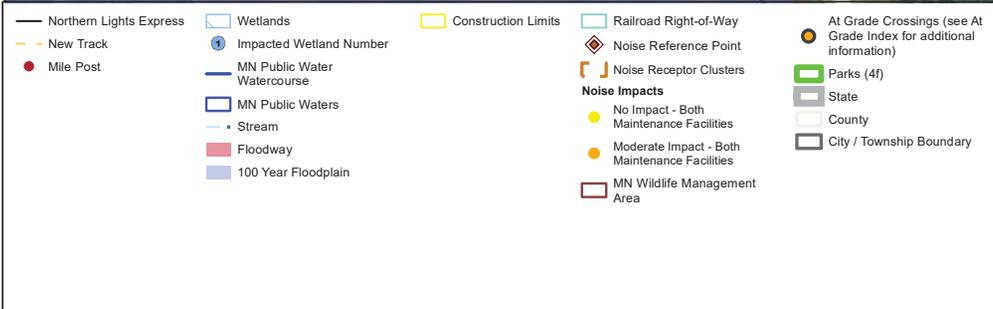
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STATE:	Minnesota
COUNTY:	Anoka
Aerials: 2015 NAIP Original 11x17 L	
PAGE:	18 of 211

NLX SEGMENT 3 SUBDIVISION: Hinckley, Staples

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Cedar Potato Warehouse
AN-OKG-005



Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

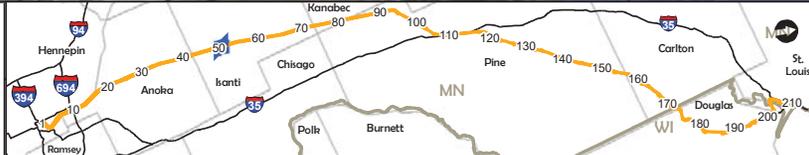
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PAGE:	34 of 211

NLX SEGMENT: 4 SUBDIVISION: HINCKLEY

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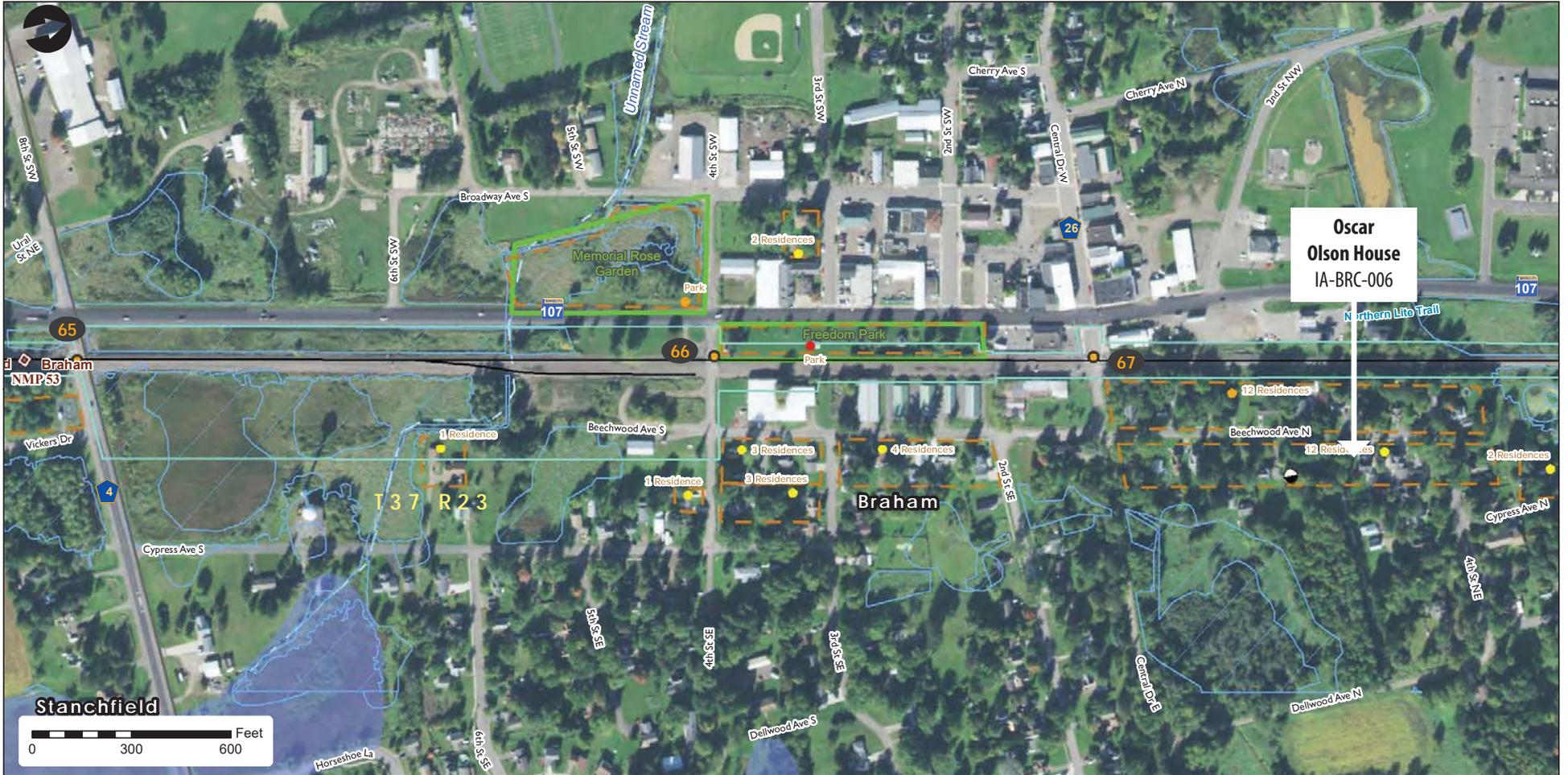


Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

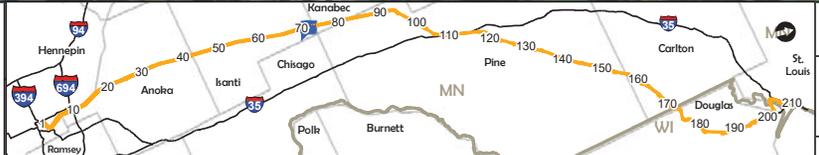
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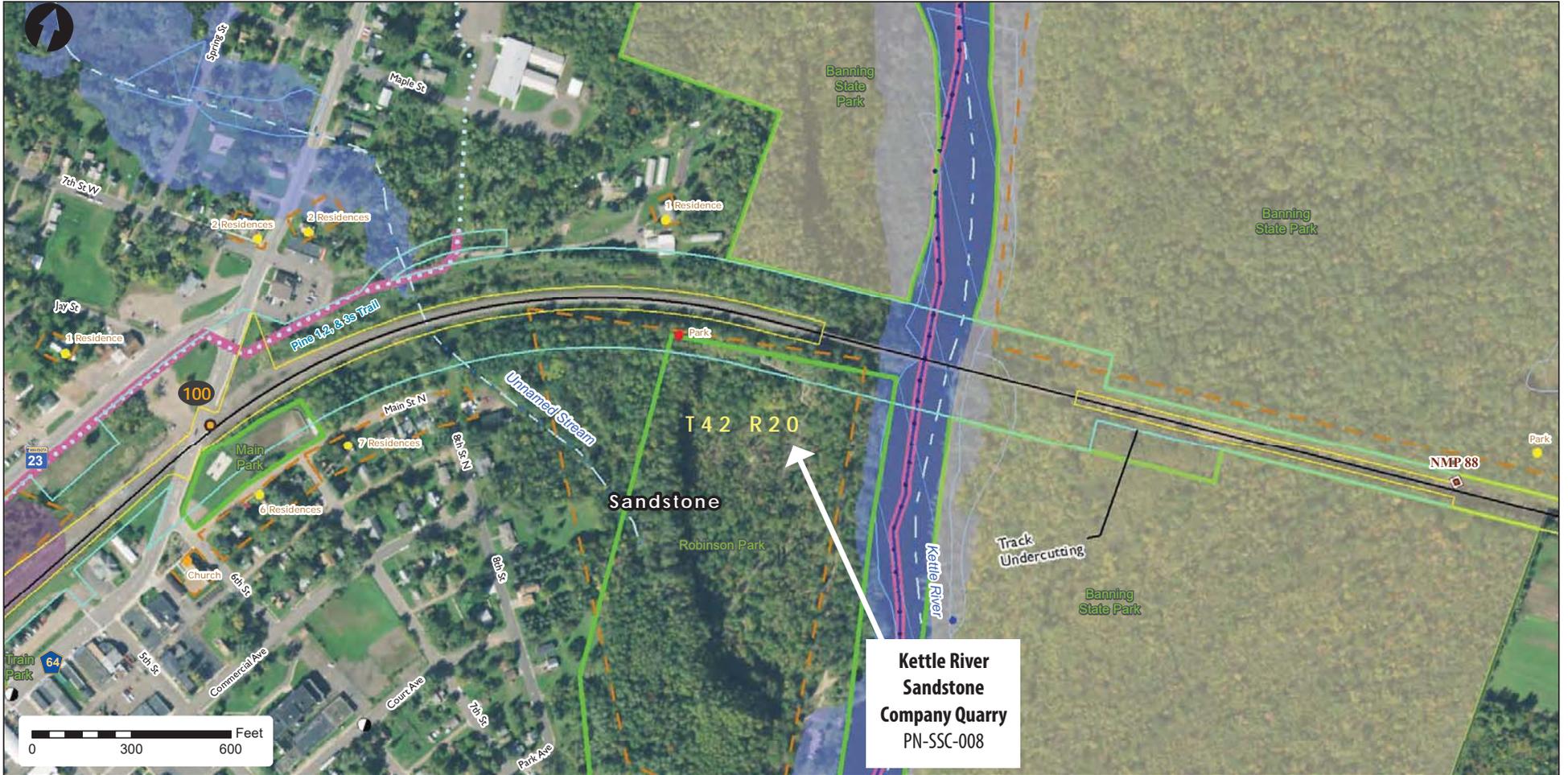


Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

DATE: 4/10/2017
STATE: Minnesota
COUNTY: Isanti
Aerials: 2015 NAIP Original 11x17 L
PAGE: 72 of 211

NLX SEGMENT: 6 SUBDIVISION: Hinckley

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- Northern Lights Express
- Approximate Station or Facility Location
- Wetlands
- MN Public Water Watercourse
- Stream
- 100 Year Floodplain
- Construction Limits
- Water Trails
- Snowmobile Trails
- Trails (4f)
- Karst Feature Inventory Points
 - Spring
- Railroad Right-of-Way
- National Register of Historic Places Site
- Noise Reference Point
- Noise Receptor Clusters
- Noise Impacts
 - No Impact - Both Maintenance Facilities
 - Moderate Impact - Both Maintenance Facilities
 - Severe Impact - Both Maintenance Facilities
 - MN State Park
- At Grade Crossings (see At Grade Index for additional information)
- Parks (4f)
- State
- County
- City / Township Boundary



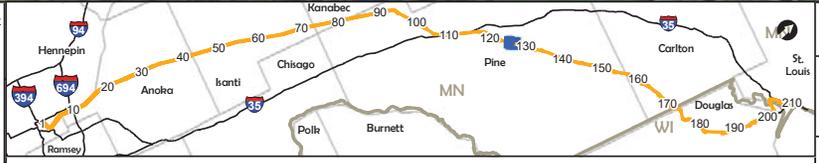
Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

DATE: 4/10/2017
STATE: Minnesota
COUNTY: Pine
Aerials: 2015 NAIP Original 11x17 L
PAGE: 119 of 211

NLX SEGMENT: 17 SUBDIVISION: Hincley



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Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

DATE:	4/10/2017
STATE:	Minnesota
COUNTY:	Pine
Aerials: 2015 NAIP Original 11x17 L	
PAGE:	126 of 211

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NLX SEGMENT: 17 SUBDIVISION: Hinckley



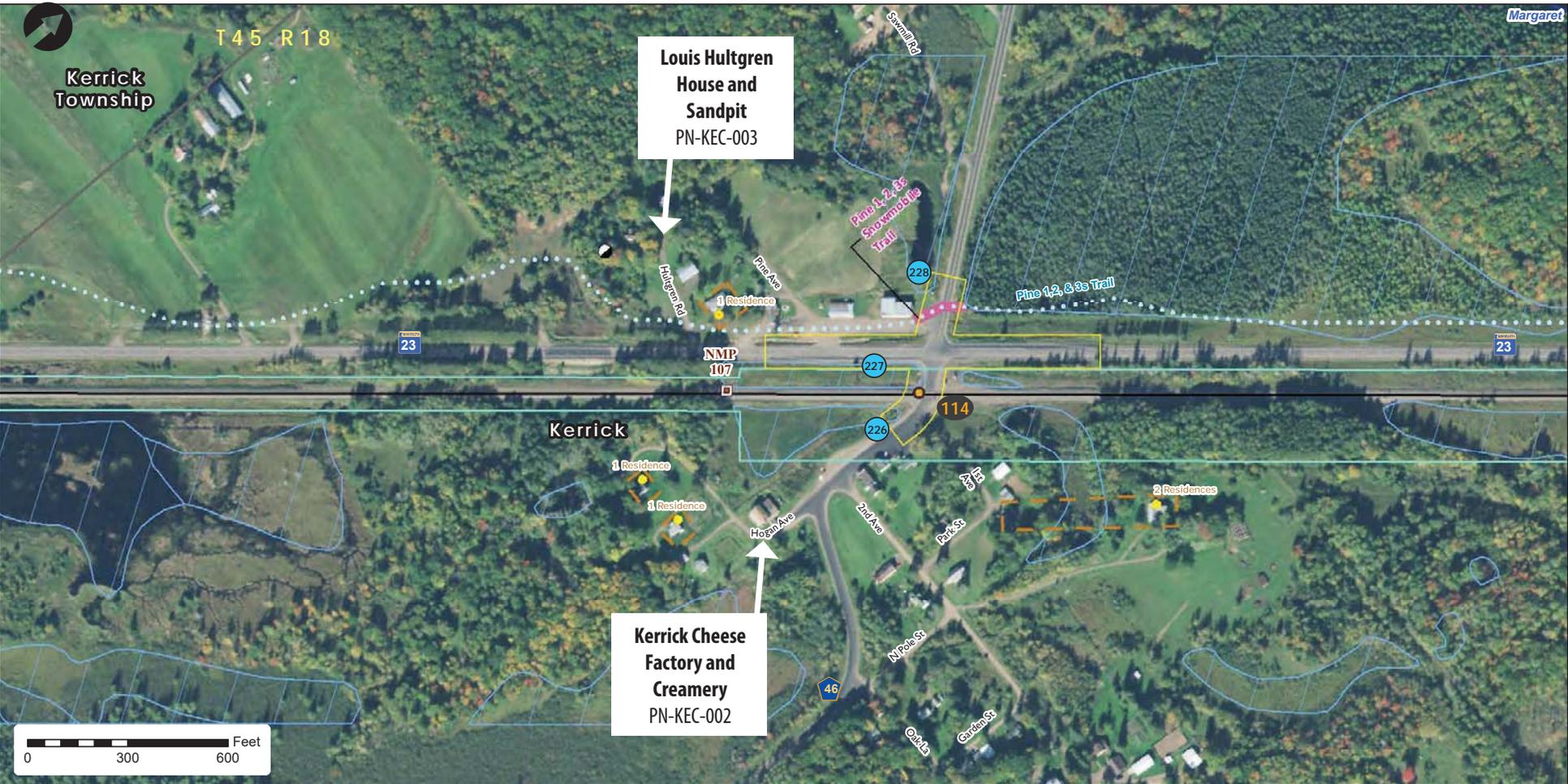
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Kerrick Township

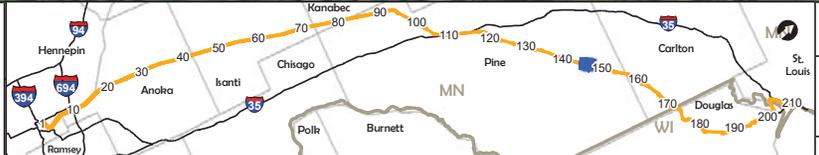
Margaret

Louis Hultgren House and Sandpit
PN-KEC-003

Kerrick Cheese Factory and Creamery
PN-KEC-002



- Northern Lights Express
- Wetlands
- Construction Limits
- Railroad Right-of-Way
- Impacted Wetland Number
- Snowmobile Trails
- MN Public Waters
- Trails (4f)
- National Register of Historic Places Site
- Noise Reference Point
- Noise Receptor Clusters
- At Grade Crossings (see At Grade Index for additional information)
- State
- County
- City / Township Boundary
- Noise Impacts**
- No Impact - Both Maintenance Facilities
- No Impact Duluth Maintenance Facility/
- Moderate Impact Sandstone Maintenance Facility



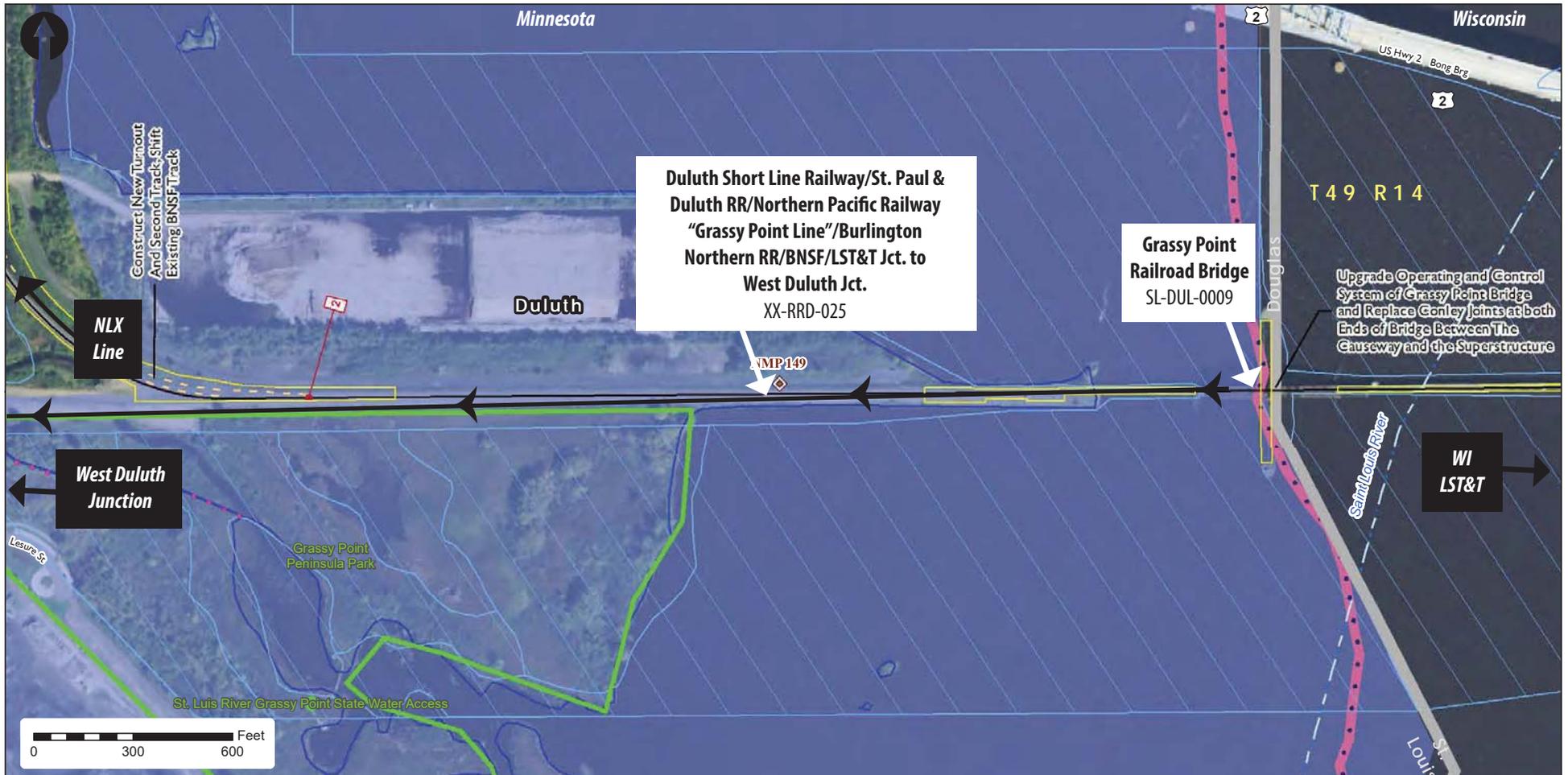
Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

DATE:	4/10/2017
STATE:	Minnesota
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PAGE:	146 of 211

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NLX SEGMENT: 17 SUBDIVISION: Hinckley

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Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

DATE: 4/10/2017
STATE: Minnesota \ Wisconsin
COUNTY: Douglas \ St. Louis
Aerials: 2015 NAIP Original 11x17 L
PAGE: 204 of 211

NLX SEGMENT: 19 SUBDIVISION: Lakes



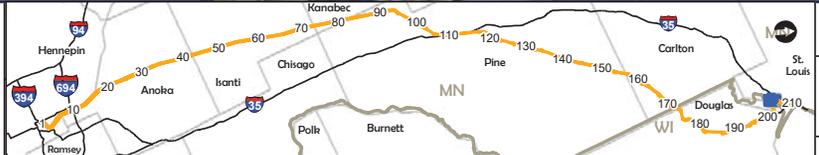
**Duluth Short Line Continued
XX-RRD-025**

Reconstruct Grade Crossing For Two Shifted Tracks And One New Track

Construct New Turnout And Second Track, Shift Existing BNSF Track



- Northern Lights Express
- New Track
- Mile Post
- Designated Trout Stream
- Wetlands
- ① Impacted Wetland Number
- MN Public Water Watercourse
- MN Public Waters
- Stream
- 100 year Floodplain
- Construction Limits
- Railroad Right-of-Way
- ◆ Noise Reference Point
- At Grade Crossings (see At Grade Index for additional information)
- Parks (4f)
- State
- County
- City / Township Boundary



Tier 2 Detailed Environment Maps
Tier 2 Project Level EA



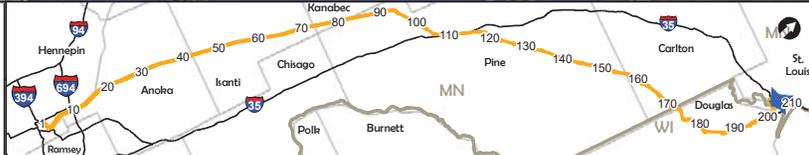
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COUNTY:	St. Louis
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PAGE:	205 of 211

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NLX SEGMENT: 19 SUBDIVISION: Lakes



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Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

DATE:	4/10/2017
STATE:	Minnesota
COUNTY:	St. Louis
Aerials:	2015 NAIP Original 11x17 L
PAGE:	207 of 211

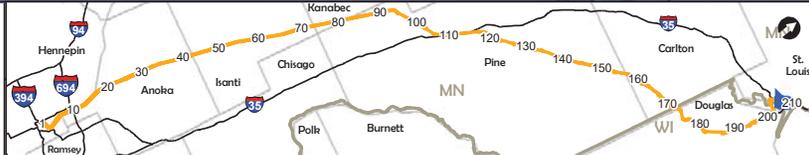
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NLX SEGMENT: 19 SUBDIVISION: Lakes

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<ul style="list-style-type: none"> — Northern Lights Express • Designated Trout Stream 	<ul style="list-style-type: none"> Wetlands MN Public Water Watercourse MN Public Waters Stream 100 year Floodplain 	<ul style="list-style-type: none"> Construction Limits Railroad Right-of-Way Noise Reference Point 	<ul style="list-style-type: none"> At Grade Crossings (see At Grade Index for additional information) State County City / Township Boundary
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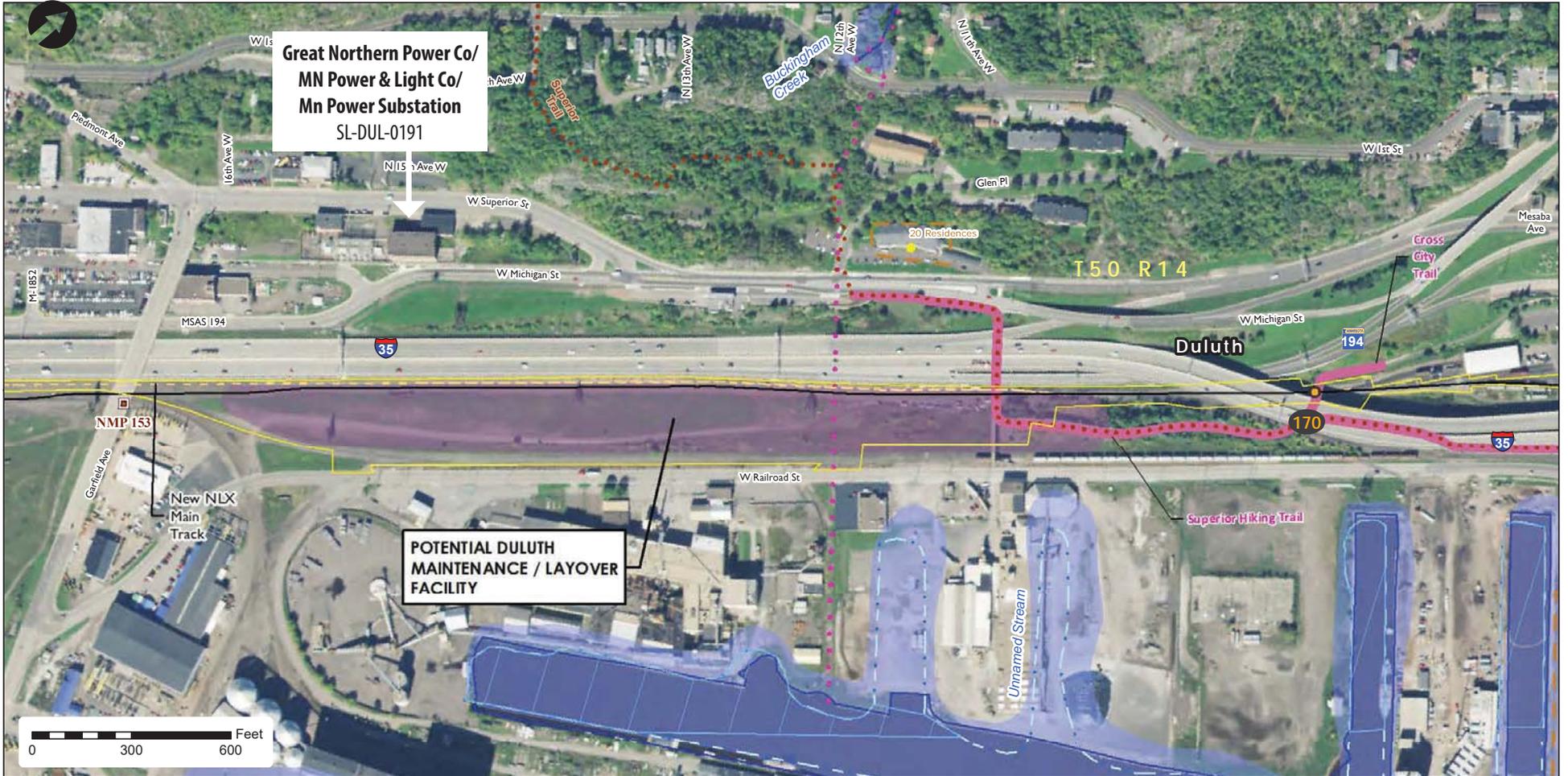


Tier 2 Detailed Environment Maps
 Tier 2 Project Level EA

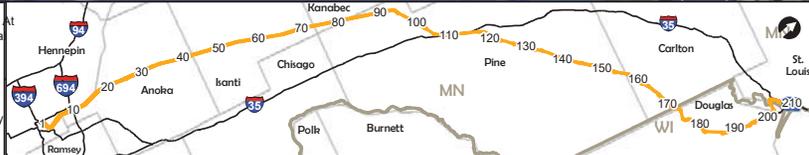
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COUNTY: St. Louis
Aerials: 2015 NAIP Original 11x17 L
PAGE: 208 of 211

NLX SEGMENT: 19 SUBDIVISION: Lakes

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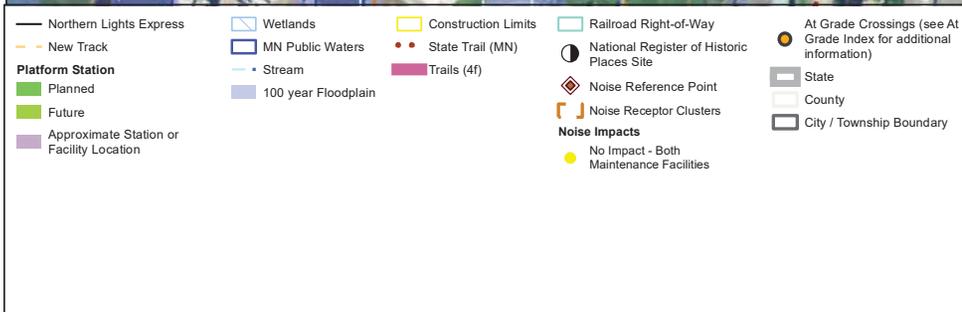
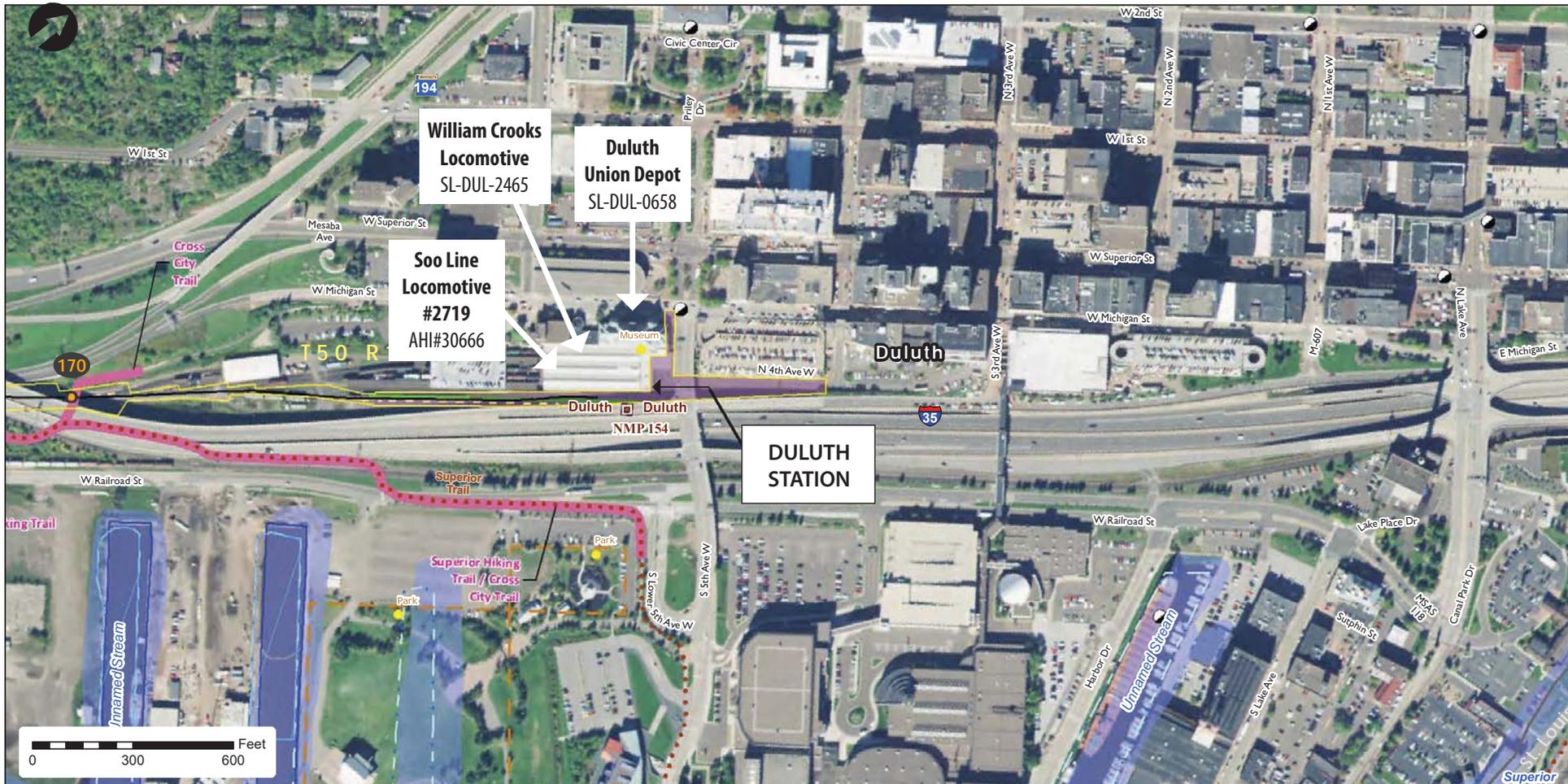


Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

DATE:	4/10/2017
STATE:	Minnesota
COUNTY:	St. Louis
Aerials:	2015 NAIP Original 11x17 L
PAGE:	210 of 211

NLX SEGMENT: 19 SUBDIVISION: Duluth, Lakes

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Tier 2 Detailed Environment Maps
Tier 2 Project Level EA

DATE:	4/10/2017
STATE:	Minnesota
COUNTY:	St. Louis
Aerials:	2015 NAIP Original 11x17 L
PAGE:	211 of 211

NLX SEGMENT: 19 SUBDIVISION: Duluth