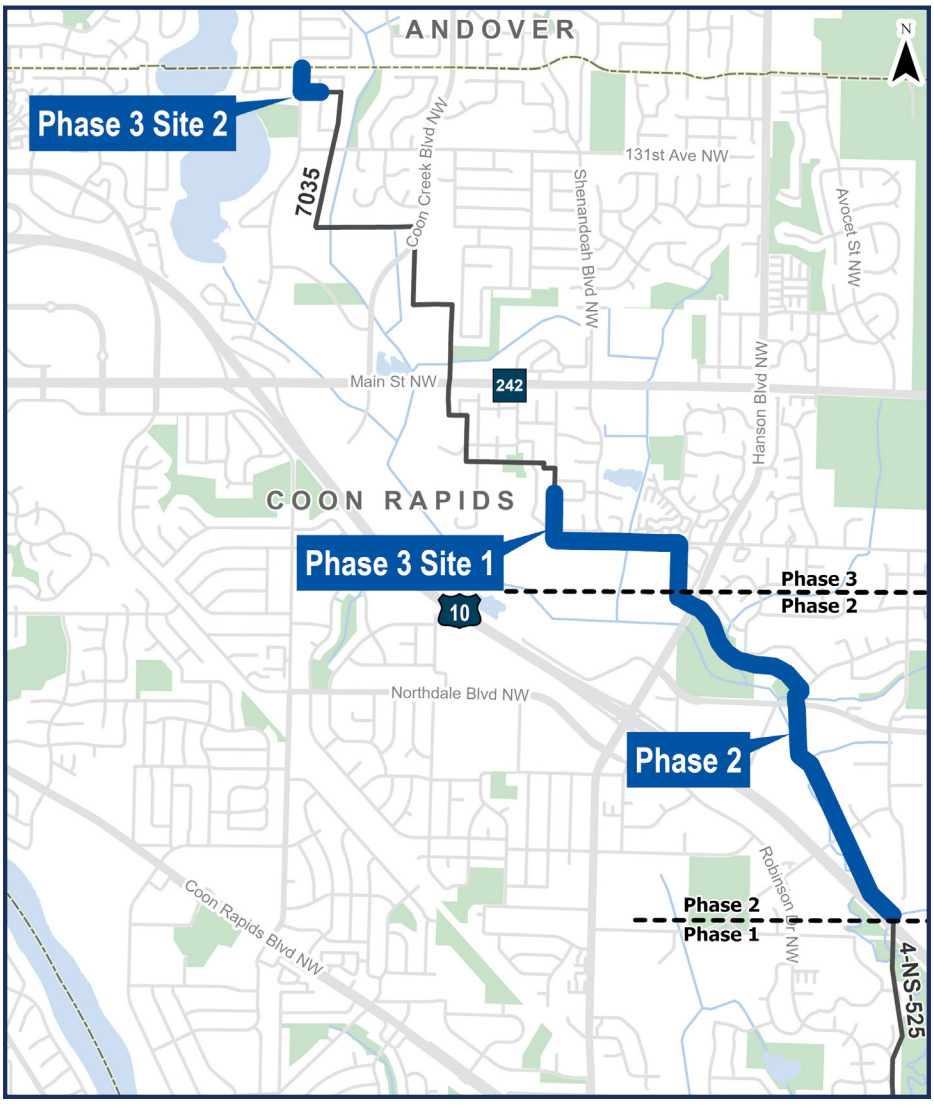
COON RAPIDS

INTERCEPTOR REHABILITATION FACILITY PLAN

AUGUST 2024



MCES Project 808609 | Foth Project 24M086.00

CLEAN WATER FOR FUTURE GENERATIONS

METROPOLITAN COUNCIL

COON RAPIDS

INTERCEPTOR REHABILITATION FACILITY PLAN

Project ID: 24M086.00

Prepared for

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CERTIFICATIONS

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer or duly Registered Architect under the laws of the State of Minnesota.

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MN Registration Number 49089
Date: August 30, 2024

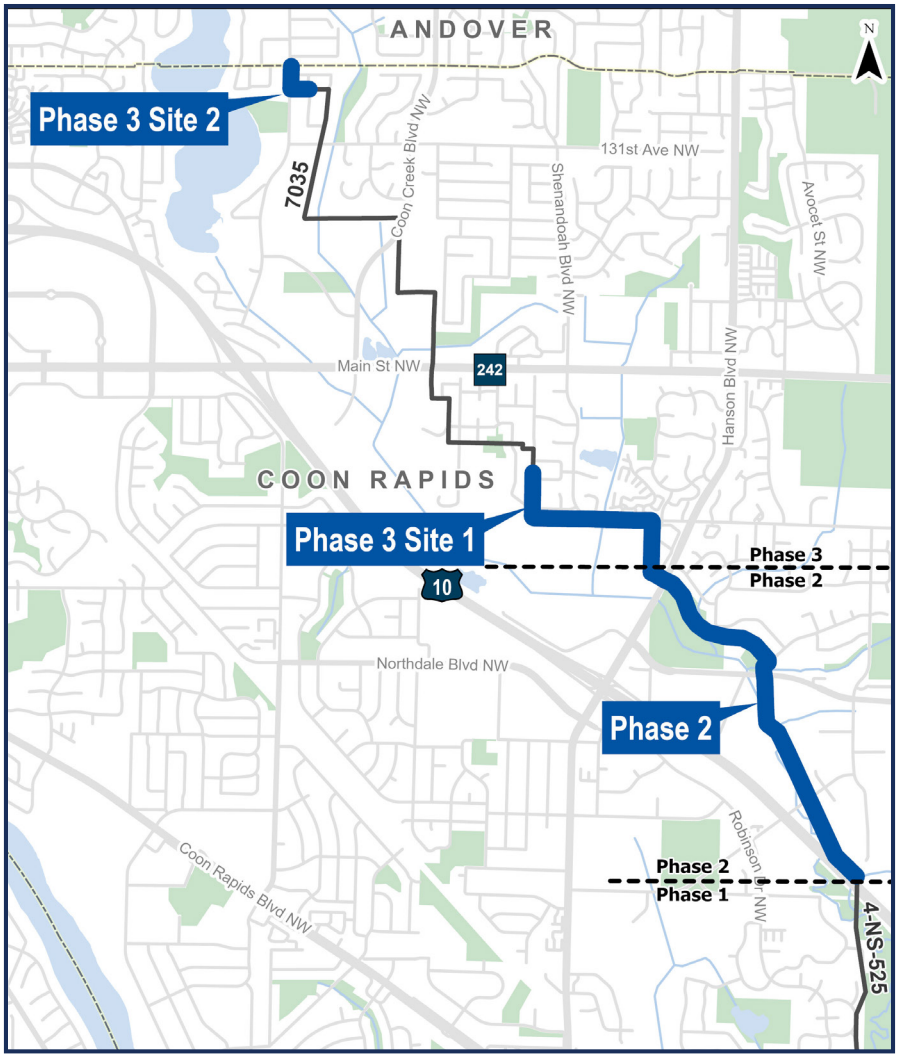
Responsible for all report sections.

EXECUTIVE SUMMARY

The purpose of the Coon Rapids Interceptor Rehabilitation Facility Plan is to develop and evaluate options to address identified problems in the Metropolitan Council Environmental Services (MCES) Coon Rapids Interceptor. This Facility Plan will review the existing conditions, identify problem areas, evaluate alternatives, project future needs, analyze probable construction costs, and review environmental factors involved in the implementation of the improvements.

The Coon Rapids Interceptor system is a combination of MCES Interceptor 4-NS-525 and Interceptor 7035 constructed in 1965 and 1972, respectively on the border of Andover, into Coon Rapids. MCES has incurred maintenance and rehabilitation costs in this area as the interceptor continues to deteriorate. The age and appearance of the existing facilities proves that additional maintenance and rehabilitation costs are to be expected and will accelerate as more deterioration occurs.

The scope of this Facility Plan will focus on Phase 2 (MH 13 to MH 5 20) and Phase 3 (Site 2: Meter Station M218 to MH 32 and Site 1: MH 2 to MH 16). Phase 2 includes the rehabilitation of approximately 7,193-linear feet of 48-inch RCP. Phase 3 includes approximately 405-linear feet of 36-inch RCP, 815-linear feet of 42-inch RCP, and 2,090 linear feet of 48-inch RCP.



The existing interceptor alignment passes through several sensitive areas including city parks, wetlands, along a county trail, and multiple crossings of Coon Creek. These areas are environmentally sensitive, have limited construction space, and limited site access.

Four (4) rehabilitation methods were analyzed for the pipe rehabilitation including Do Nothing, Cured-in-Place Pipe (CIPP) Lining, Sliplining, and Open-Cut Replacement. Analysis included evaluation of environmental impacts, access requirements, impacts to the community, private utility conflicts, cost, and schedule.

Recommendations

Based on the information and data developed in this Facility Plan it is recommended that a project is implemented to rehabilitate portions of the Coon Rapids Interceptor using CIPP lining and CIPMH lining. The anticipated Total Cost of the recommended improvements is $19,620,000.

Phase 2 recommended rehabilitation includes approximately

- CIPP line 7,193 linear feet of 48-inch RCP
- CIPMH line 26 maintenance holes

Phase 3 recommended rehabilitation includes approximately

- CIPP line the Interceptor
  - 405 linear feet of 36-inch RCP
  - 815 linear feet of 42-inch RCP
  - 2,090 linear feet of 48-inch RCP
- CIPMH 13 maintenance holes

The design and construction of Phase 2 and Phase 3 will be on a multi-year schedule which is shown below.

Coon Rapids Interceptor
Design and Construction Schedule

	Phase 2 Schedule	Phase 3 Schedule
Preliminary Design	Spring 2024	Spring 2027
Initiate Land Acquisition	Summer 2024	Fall 2027
Initiate Final Design	Fall 2024	Spring 2028
Complete Final Design	Spring 2025	Spring 2029
Initiate Construction	Fall 2025	Fall 2029
Complete Construction	Fall 2026	Fall 2030

1. INTRODUCTION

1.1 Purpose of the Plan

The purpose of the Coon Rapids Interceptor Rehabilitation Facility Plan is to develop and evaluate options to address identified problems in the Metropolitan Council Environmental Services (MCES) Coon Rapids Interceptor. This Facility Plan will review the existing conditions, identify problem areas, evaluate alternatives, project future needs, analyze probable construction costs, and review environmental factors involved in the implementation of the improvements. The conclusion of the Facility Plan will be a recommendation of the best alternative selected by weighing feasibility, constructibility, environmental impacts, and public input.

1.2 Problem Statement

The Coon Rapids Interceptor system was constructed between 1965 and 1972 in multiple phases using reinforced concrete pipe (RCP), the use of these materials and open cut installation was common practice at that time. The maintenance holes (MHs) were also constructed of reinforced concrete.

Over time the hydrogen sulfide gases generated by the wastewater in the pipe have degraded the concrete pipe walls, exposed the reinforcement, and reduced the strength of the pipe. The maintenance holes have active infiltration, significant mineral deposits, and surface corrosion near the mainline pipe connections.

MCES has incurred maintenance and rehabilitation costs in this area as the interceptor continues to deteriorate. The age and appearance of the existing facilities proves that additional maintenance and rehabilitation costs are to be expected and will accelerate as more deterioration occurs.

1.3 Planning Area

The Coon Rapids Interceptor system is a combination of MCES Interceptor 4-NS-525 and Interceptor 7035. The system includes RCP gravity pipe ranging in size from 36-inches to 48-inches and extends approximately 5.75 miles from Meter Station M218 to Lift Station L34. M218 is located on Crooked Lake Boulevard and 133rd Avenue at the border between Andover and Coon Rapids. From this point the interceptor weaves through the City of Coon Rapids to Lift Station L34 near Coon Rapids Boulevard Extension NW and Vale Street NW. The location maps of the Coon Rapids Interceptor are Figures A1 and A2 in Appendix A. Interceptors 4-NS-525 and 7035 were constructed in Coon Rapids in 1965 and 1972, respectively. Since that time, residential and business development has occurred around the pipe alignment as well as the establishment of several local parks and trails.

In 2018 MCES completed closed circuit television (CCTV) inspection of the interceptor and found multiple sections in poor condition and in need of repair. The rehabilitation of these sections was split into three phases with a multi-year construction plan as shown in the table below.

Coon Rapids Interceptor
Phase Identi cation

Phase	Interceptor	Location	Construction Schedule
Phase 1	4-NS-525	MH 5 20 to MH 50A	2023 – 2024
Phase 2	4-NS-525	MH 13 to MH 5 20	2025 – 2026
Phase 3	7035, 4-NS-525	M218 to MH 32, MH 2 to MH 16	2029 – 2030

Table 1.1: Project Phase Identi cation

Phase 1 construction will be completed in 2024; therefore, the scope of this Facility Plan will focus on Phase 2 (MH 13 to MH 5 20) and Phase 3 (Site 2: Meter Station M218 to MH 32 and Site 1: MH 2 to MH 16). Phase 2 includes the rehabilitation of approximately 7,193 linear feet of 48-inch RCP. Phase 3 includes approximately 405 linear feet of 36-inch RCP, 815 linear feet of 42-inch RCP, and 2,090 linear feet of 48-inch RCP. Figure 1.1 shows the location of Phase 2 and Phase 3.

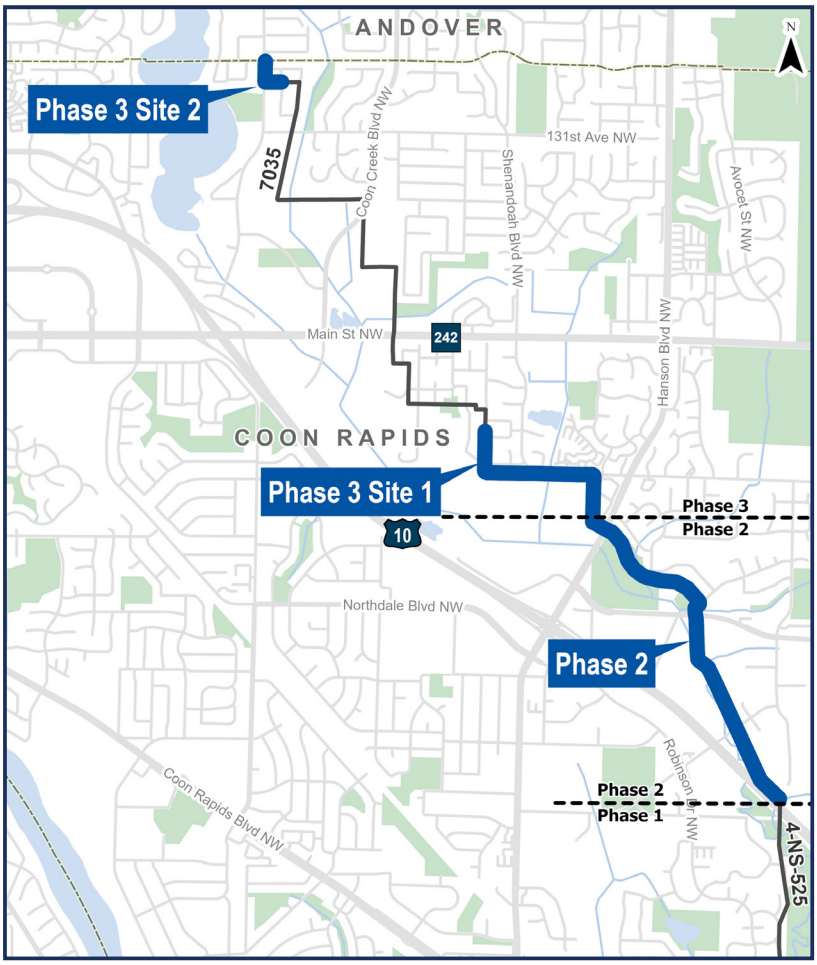


Figure 1.1: Project Location

2. EXISTING CONDITIONS

2.1 Interceptor Pipes

Interceptors 4-NS-525 and 7035 were inspected by MCES using CCTV. MCES contracted National Power Rodding to complete the CCTV inspection following the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) in February 2018. Upon review of the CCTV, MCES assigned ratings to the pipe. The pipe was rated as condition “4 Poor” and “3.5 Poor/Fair” in accordance with the NASSCO PACP rating system. Appendix A Figures A3 and A4 identify the location of these ratings along the interceptor.

Foth’s review of the CCTV inspection confirms surface corrosion and spalling of the pipe wall material, exposed reinforcement, infiltration and mineral deposits at joints, and lateral connection locations and conditions.

2.2 Maintenance Access Structures

The project includes thirty-nine (39) 48-inch diameter RCP MHs varying in depth from 10-feet to 34-feet. Field inspections were completed on the Phase 2 structures to identify existing interior conditions of the MHs. Most of these structures have active infiltration, significant mineral deposits, and surface corrosion near pipe connections with only minor surface corrosion in the barrel.

It was discovered that several MHs were constructed after the original interceptor construction to provide access and installation of lateral connections. These structures were typically constructed of a concrete block structure around the existing pipe with a precast top slab and riser sections to grade, see Figure 2.1 for a visual depiction. The remainder of the MHs along the interceptor are tee base.

Surface inspections of Phase 3 MHs will be completed during preliminary design. Based on CCTV footage and the condition of the MHs throughout Phases 1 and 2, the condition of the Phase 3 MHs are expected to be fair to poor, requiring rehabilitation.

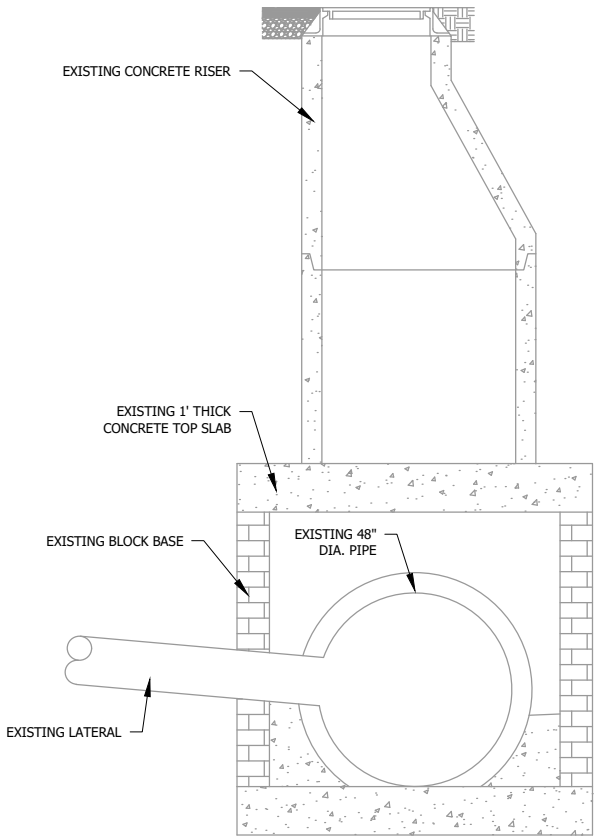


Figure 2.1: Existing Vault Structures

3. ALTERNATIVES ANALYSIS

The existing interceptor alignment passes through several sensitive areas including city parks, wetlands, along a county trail, and multiple crossings of Coon Creek. These areas are environmentally sensitive, have limited construction space, and limited site access. These areas are also known to have high groundwater tables, which could potentially cause both constructibility and environmental concerns during construction.

3.1 Interceptor Rehabilitation

Four (4) rehabilitation methods were analyzed for the pipe rehabilitation. A matrix of the analysis can be found in Appendix A Figure A5. The four methods of Do Nothing, Cured-in-Place Pipe (CIPP) Lining, Sliplining, and Open-Cut Replacement are discussed in further detail below.

3.1.1 Do Nothing

The first interceptor rehabilitation alternative is to do nothing. Doing nothing to rehabilitate this interceptor will result in further corrosion and deterioration of the interceptor pipe, eventually leading to pipe failure. The term 'pipe failure' includes pipe collapse and/or holes in the pipe wall. Both result in wastewater being released into the surrounding environment. A pipe collapse can also create a flow blockage, backups, and overflows. This type of wastewater spill exposes the public and environment to health and safety risks. Therefore, this alternative is not recommended.

3.1.2 Cured-in-Place Pipe Lining

The second method of rehabilitation is Cured-in-Place Pipe (CIPP) lining. CIPP lining is the process of inserting a resin saturated liner into the existing sanitary sewer interceptor, using hydrostatic pressure to inflate the liner against the inside wall of the existing interceptor, and curing the liner with steam to create a new, structurally independent pipe within the existing pipe. The CIPP liner has a smooth interior surface that improves hydraulic conditions and is resistant to hydrogen sulfide and other corrosive chemicals.

CIPP lining allows for trenchless rehabilitation of the deteriorating interceptor by accessing the pipe through the existing MH structures. Surface impacts and disruption to the community are minimized by limited excavation needs to complete construction. CIPP lining can be installed through pipe bends which is important to consider as there are several bends throughout the limits of this work. CIPP liners can be installed at lengths up to 1,500-linear feet.

The limited excavation needed for CIPP lining also minimizes impacts to existing utilities, disruption of roadways, and reduces environmental impacts to the surrounding wetland areas and Coon Creek. However, temporary conveyance of all wastewater flow is required for the installation of CIPP liners. Temporary conveyance pipes at grade are required along the length of the rehabilitation for this process.

3.1.3 Sliplining

The third method of rehabilitation is sliplining. Sliplining rehabilitation installs a new, smaller diameter pipe within the existing sanitary sewer interceptor. Pipe lengths are inserted into the pipe at an excavated jacking pit and pushed into place using hydraulic jacks. The space between the host pipe and smaller sliplining pipe is filled with a light-weight grout to hold the new pipe in place. Sliplining is performed under flow and does not require temporary conveyance.

Sliplining is a trenchless rehabilitation method but does require excavation for jacking pits and receiving pits. The pipe can be pushed over 1,000-linear feet, but bends cannot be navigated. Additional jacking pits would be required to accommodate bends, resulting in more excavation and greater environmental impacts. The smaller pipe within the existing pipe also results in a loss of flow capacity.

3.1.4 Open-Cut Replacement

The fourth method of rehabilitation is open-cut replacement. Open-cut replacement requires excavation to remove and replace the existing sewer pipe with new pipe. Complete replacement of the existing interceptor pipeline will result in significant community and environmental disruption, including the closure of local thoroughfares, diversion of public waterways, impacts to private utilities, and temporary conveyance of all wastewater flow during construction. In addition to these impacts, the project would be more expensive and require more construction time than trenchless methods. Therefore, this alternative is not recommended.

3.2 Maintenance Access Structure Rehabilitation

Four (4) rehabilitation methods were analyzed for maintenance access structure rehabilitation, each pairing with a pipe rehabilitation method discussed in Section 3.1 above. A matrix of the analysis can be found in Appendix A Figure A6. The four methods of Do Nothing, Cured-in-Place Maintenance Hole (CIPMH) Lining, Fiberglass Reinforced Plastic (FRP) Insert, and Open-Cut Replacement are discussed in further detail below.

3.2.1 Do Nothing

The first structure rehabilitation method is to do nothing. Leaving the existing structures without rehabilitation creates the potential for significant failures, spills, and collapses in the future. This alternative is not recommended.

3.2.2 Cured-in-Place Maintenance Hole Lining

The second method of rehabilitation is to install cured-in-place maintenance hole (CIPMH) lining. Similar to CIPP lining, a resin-saturated tube is placed into the MH, inflated with air pressure, and cured with steam, forming a protective structural liner within the MH. Removal of the cone and casting is not required to complete CIPMH lining, greatly reducing excavation impacts.

3.2.3 Fiberglass Reinforced Plastic Insert

The third method of rehabilitation is to install fiberglass reinforced plastic (FRP) inserts. To install a FRP insert, the existing MH casting and cone section are removed. A 42-inch diameter monolithic FRP insert is installed inside of the existing 48-inch diameter MH. The insert is anchored to the wall of the host MH with a series of bolts. The void space between the insert and host MH is filled with light-weight cementitious grout. A new MH casting is installed on top of the FRP insert.

3.2.4 Open-Cut Replacement

The fourth method of rehabilitation is open-cut replacement. As discussed with open-cut replacement of the interceptor pipe, complete replacement of MH structures is environmentally impactful, expensive, and time consuming. Therefore, this alternative is not recommended.

3.2.5 Meter Station M218 Rehabilitation

Meter Station M218 will be rehabilitated as part of the Phase 3 work. The method used to rehabilitate M218 will be evaluated in the design process. Existing structure condition and hydraulic improvements will be determined at that time as well.

3.3 Hydraulic Capacity Analysis

Flow data was analyzed by the Wastewater Planning & Community Program Team within MCES. The team analyzed existing flows, future flows, and ultimate flows. The hydraulic capacity of the system was also analyzed using the Manning's Equation to compare the existing hydraulic capacity with the rehabilitated hydraulic capacity.

3.3.1 Existing Flow Conditions

Existing flows were provided by MCES. The existing metershed flows referenced below are a 3-year average from MCES meter data, an average from 2019 through 2021. The Coon Rapid's flow entering the interceptor through City laterals was calculated based on household and employment numbers reported in the 2020 Census, combined with local sewer line data. See the 2020 Coon Rapids Interceptor Flow Characteristics in Table 3.1 below.

Coon Rapids Interceptor
2020 Interceptor Flow Characteristics

Facility	Average Daily Flow (MGD)	Peak Flow (MGD)
M218	1.34	4.01
7035	1.61	4.67
4-NS-525	3.82	9.54
L34	4.83	11.59

Table 3.1: 2020 Interceptor Flow Characteristics

3.3.2 Future Flow Conditions

Future flows, through 2050, are forecasted growth estimates from MCES Wastewater Planning and Community Programs. It is noted that Coon Rapids is mostly built-out, but Andover, which discharges into Meter Station M218, has the ability to double its developed acreage. Future flows assume that the average daily flow rate from a household will produce 150 gallons per day (GPD) and an employee will produce 20 GPD. The most conservative estimate was used, showing that 600 gallons per acre per day (GPAD) will be produced in this area in 2050. See the 2050 Interceptor Flow Characteristics in Table 3.2 on the following page.

Coon Rapids Interceptor
2050 Interceptor Estimated Flows

Facility	Average Daily Flow (MGD)	Peak Flow (MGD)	Ultimate Average Daily Flow (MGD)	Ultimate Peak Flow (MGD)	Facility Capacity (MGD)
M218	1.65	4.80	3.36	8.74	10.17
7035	1.93	5.41	3.71	9.28	20.75
4-NS-525	4.41	10.58	6.53	14.37	25.78
L34	5.48	12.61	7.82	17.21	15.98[1], 20.16[2]

Table 3.2: 2050 Interceptor Estimated Flows

[1] Firm Capacity at Lift Station L34 per commissioning in 2022.
[2] Peak Capacity at Lift Station L34 per commissioning in 2022.

Foth reviewed the existing hydraulic conditions of the interceptor using the rational method. The system has adequate capacity to meet the 2050 projected flow conditions.

3.3.3 Hydraulic Capacity

To compare the existing hydraulic capacity of the interceptor with the rehabilitated hydraulic capacity of the interceptor the Manning's Equation was used. Calculations were completed using the existing RCP, CIPP, and fiberglass reinforced polymer mortar pipe (FRPMP), the pipe often used when sliplining, with the pipe flowing 20% full, 75% full, and 100% full. Design flow is the 75% full pipe.

The Manning's roughness coefficient, n-value, was assumed at 0.013 for each pipe. The existing RCP is deteriorated while CIPP and FRPMP are corrosion resistant. Research shows that rehabilitated pipes will initially operate at a lower n-value but over time all pipes will trend to the same n-value due to the scum layer build up in the invert. Therefore, regardless of condition, the n-value was assumed at 0.013. An average slope of 0.04% was used for each calculation as both rehabilitation methods will match the existing invert elevations.

CIPP lining and sliplining both reduce the inside diameter of the existing interceptor. It is anticipated the CIPP liner thickness will be between 18-millimeters and 30-millimeters depending on size of pipe, groundwater elevations, depth of the pipe, and various other factors. Therefore, the proposed inner diameter of the CIPP lined pipe was assumed 2-inches smaller than the existing RCP. Sliplining reduces the diameter further. It was assumed a standard pipe size smaller than the existing pipe size will be used.

The tables below show the hydraulic capacity comparison for 36-inch, 42-inch, and 48-inch inside diameter pipe. Table 3.3 contains the 36-inch pipe information for Phase 3 Site 2. Table 3.4 contains the 42-inch pipe information which covers the upstream portion of Phase 3 Site 1. Table 3.5 contains the 48-inch pipe information for the downstream portion of Phase 3 Site 1 and for Phase 2.

Shown below, through the hydraulic capacity analysis, with a constant slope and a constant n-value, both CIPP lining and sliplining reduce the hydraulic capacity of the interceptor. Sliplining has a smaller inside diameter, decreasing capacity more than CIPP lining. While the hydraulic capacity does decrease through both rehabilitation methods, the system will still have sufficient capacity to meet current and future needs.

Existing 36-inch Diameter Hydraulic Capacity Comparison

	Pipe Material	n-value	Inside Diameter	Average Slope (%)	20% Full Flow (gpm)	75% Full Flow (gpm)	100% Full Flow (gpm)
Existing Condition	RCP	0.013	36	0.04	526	5,471	6,000
CIPP Lining	CIPP	0.013	34	0.04	451	4,698	5,152
Sliplining	FRPMP	0.013	30	0.04	323	3,364	3,690

Table 3.3: Existing 36-inch Diameter Hydraulic Capacity Comparison

Existing 42-inch Diameter Hydraulic Capacity Comparison

	Pipe Material	n-value	Inside Diameter	Average Slope (%)	20% Full Flow (gpm)	75% Full Flow (gpm)	100% Full Flow (gpm)
Existing Condition	RCP	0.013	42	0.04	793	8,253	9,050
CIPP Lining	CIPP	0.013	40	0.04	696	7,246	7,946
Sliplining	FRPMP	0.013	36	0.04	526	5,471	6,000

Table 3.4: Existing 42-inch Diameter Hydraulic Capacity Comparison

Existing 48-inch Diameter Hydraulic Capacity Comparison

	Pipe Material	n-value	Inside Diameter	Average Slope (%)	20% Full Flow (gpm)	75% Full Flow (gpm)	100% Full Flow (gpm)
Existing Condition	RCP	0.013	48	0.04	1,132	11,782	12,922
CIPP Lining	CIPP	0.013	46	0.04	1,011	10,518	11,535
Sliplining	FRPMP	0.013	42	0.04	793	8,253	9,050

Table 3.5: Existing 48-inch Diameter Hydraulic Capacity Comparison

3.3.4 Cost Analysis

A cost analysis was completed for CIPP lining, sliplining, and open cut replacement for Phase 2 and Phase 3 work. A cost analysis was not completed for the 'Do Nothing' alternative. Doing nothing will be extremely costly, both monetarily and environmentally, with the need for regular maintenance and the emergency work required when a failure occurs. However, it is impossible to estimate costs for failure along all points of the interceptor.

At this Facility Planning Stage the Total Project Costs include projected construction, engineering, and land acquisition costs. The following tables are an overview of Phase 2 costs, Phase 3 costs, and the total costs for the rehabilitation of the Coon Rapids Interceptor. Detailed cost information can be found in Appendix A Figures A7 through A12.

Phase 2 Cost Estimates

Cost Item	CIPP Lining	Sliplining	Open Cut
Planning Phase (1% of Const. Cost)	$100,840	$161,710	$204,057
Design Phase (10% of Const. Cost)	$1,008,397	$1,617,097	$2,040,566
Construction Cost	$10,083,970	$16,170,968	$20,405,658
Subtotal	$11,193,206	$17,949,774	$22,650,281
Construction Inspection (6% of Const. Cost)	$605,038	$970,258	$1,224,339
Engineering (6% of Const. Cost)	$605,038	$970,258	$1,224,339
Land Acquisition (10% or 25% of Const. Cost)	$1,008,397	$1,617,097	$5,101,415
Total Estimated Project Cost	**$13,411,680**	**$21,507,387**	**$30,200,374**

Table 3.6: Phase 2 Cost Estimates

Phase 3 Cost Estimates

Cost Item	CIPP Lining	Sliplining	Open Cut
Planning Phase (1% of Const. Cost)	$46,686	$69,737	$89,185
Design Phase (10% of Const. Cost)	$466,861	$697,371	$891,853
Construction Cost	$4,668,613	$6,973,714	$8,918,530
Subtotal	$5,182,160	$7,740,822	$9,899,568
Construction Inspection (6% of Const. Cost)	$280,117	$418,423	$535,112
Engineering (6% of Const. Cost)	$280,117	$418,423	$535,112
Land Acquisition (10% or 25% of Const. Cost)	$466,861	$697,371	$2,229,633
Total Estimated Project Cost	**$6,209,255**	**$9,275,039**	**$13,199,425**

Table 3.7: Phase 3 Cost Estimates

Coon Rapids Interceptor
Estimated Total Project Costs

	CIPP Lining	Sliplining	Open Cut
Phase 2 Project Total	$13,411,680	$21,507,387	$30,200,374
Phase 3 Project Total	$6,209,255	$9,275,039	$13,199,425
Total Estimated Project Cost	**$19,620,935**	**$30,782,426**	**$43,399,799**

Table 3.8: Phase 2 and Phase 3 Cost Estimates Comparisons

3.4 Construction Recommendation

3.4.1 Interceptor Rehabilitation

Due to the age and condition of the interceptor it is recommended the pipe is rehabilitated using CIPP lining. The reduction of environmental impacts, reduced access requirements, minimal impacts to the community, shorter schedule, and lower costs were all drivers in the recommendation of this trenchless technology.

3.4.2 Maintenance Access Structure Rehabilitation

The rehabilitation recommendation for the maintenance access structures is CIPMH lining. This minimizes impacts to sensitive areas while providing corrosion resistant structures and removing inflow and infiltration from the sanitary sewer system. CIPMH also integrates seamlessly with the CIPP lining pipe rehabilitation.

4. TEMPORARY CONVEYANCE

To complete CIPP lining and CIPMH lining, wastewater flow must be removed from the sanitary system within the limits of the work. Pumps are placed in an upstream MH and the flow is pumped downstream of the rehabilitation limits by piping at grade. To limit traffic impacts, the piping is typically buried immediately below the roadway surface and removed upon completion of the work.

4.1 Design Requirements

The temporary conveyance system is designed as a two-pipe redundant system to prevent spills and emergencies while in operation. Redundant equipment such as pumps, power sources, and conveyance piping will be on site and ready to use as need arises. Each pipe will be sized to carry 1.5 times the peak daily flow or one-half of the maximum system design capacity. Therefore, when both pipes are in use, the system must be capable of conveying the maximum system design capacity.

Average and peak flows for each temporary conveyance system will be determined in the design phase. The temporary conveyance pipes will be pressure tested and able to withstand the thrust forces generated by the flow and internal pressures of the system. Frost protection will be used in winter months and the system will be designed to minimize the release of foul air by minimizing turbulence and covering the discharge location.

The contractor will be responsible for locating utilities and verifying elevations at locations where the temporary conveyance piping is buried during construction. Known utility conflicts are discussed below in Section 5 and will be field located during design and construction.

The contractor will also be required to have 24-hour pump watch personnel. A list of phone numbers will be available to call in the event of a spill or an emergency. The redundant power source will automatically activate in the event of power loss from the primary source and shall have enough capacity to run the system until power returns or the primary source is back online.

These requirements are put in place to ensure seamless transition of flow from the interceptor to the temporary conveyance. This will help reduce spill potential, environmental impacts, construction time, and negative perception from the community.

4.2 Alternative Alignments

Temporary conveyance alignments were determined and drawn by analyzing the pumping and hydraulic capabilities, impacts to the environment, impacts to the public, duration of the project, and cost of the project. These were then compared and weighed between the numerous alternative alignments.

As a temporary conveyance route increases in length and more bends are installed, the hydraulic capacity of the temporary pipes and pumps reduces. However, splitting the work into two phases will require additional excavation and a longer construction timeframe. As the duration of the project increases so does the project costs and the impacts to the public. Therefore, the need to install bends in the pipe alignment and the length of the route was weighed against the need for splitting the project into two phases.

Temporary conveyance routes were also determined by using as much City, County, and MnDOT right-of-way as possible. This will further reduce construction costs by eliminating the need for additional temporary construction easements.

Four (4) temporary conveyance alternates were analyzed for Phase 2 work. Temporary Conveyance routes can be found in Appendix A Figures A13 to A16. Alternative 1 and Alternative 4 propose one phase of work while Alternative 2 and Alternative 3 will require a North Phase and South Phase of work.

Alternative 1 is the recommended temporary conveyance route for Phase 2 work. This alternative allows for work to be completed in one phase and keeps the majority of the route within City, County, and MnDOT right-of-way.

Specific temporary conveyance routes will be further analyzed during design for Phase 3 work. It is anticipated the temporary conveyance routes for both Site 1 and Site 2 will closely follow the existing interceptor alignment.

4.3 Lateral Conveyance

Several lateral connections will require temporary conveyance during construction. Laterals vary in size from 6-inch diameter to 24-inch diameter and are located at MH structures as well as direct interceptor connections. Lateral conveyance routes and access will be evaluated further during the design phase. Communication with impacted communities will also occur during the design phase.

5. REGULATORY COMPLIANCE

To complete this work, coordination with multiple agencies is essential to determine permitting requirements, environmental concerns, local stakeholder presence, and private utility locations.

5.1 Permitting Agencies

Coordination and permitting is expected for the Coon Rapids Interceptor Rehabilitation project. The list in Table 5.1 on the following page currently encompasses all known permits for Phase 2 and Phase 3 that may be necessary. These will be reviewed and updated during the design process.

Coon Rapids Interceptor
Permitting Needs

Agency	Permit	Phase 2	Phase 3
Minnesota Pollution Control Agency (MPCA)	Approval of Facility Plan for Minnesota Public Facilities Authority Loan Eligibility	X	X
	Environmental Information Worksheet (EIW) Approval	X	X
	Approval of Construction Plans and Specifications for PFA Loan Eligibility	X	X
	National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Stormwater Permit for Construction Activity	X	X
Minnesota Department of Natural Resources (MDNR)	Utility Crossing License	X	X
	Water Appropriation Permit	If required	If required
	Endangered Species Permit	If required	If required
Minnesota Department of Transportation (MnDOT)	Right-of-Way Permit	X	N/A
Minnesota Department of Health (MDH)	Temporary Water Well Permit	If required	If required
City of Coon Rapids	Grading and Development Permit	X	X
	Right-of-Way Permit	X	X
City of Andover	Right-of-Way Permit	N/A	X
Anoka County	Right-of-Way Permit	X	If required
	Access Permit	X	If required
Coon Creek Watershed District	Wetland Determination	X	X
	Grading and Development Permit	X	X
MCES	Special Discharge Permit	X	X
US Army Corps of Engineers	Section 404 Permit	X	X

Table 5.1: Permitting Needs

5.2 Environmental Evaluation

The Environmental Information Worksheet (EIW) process will review the proposed project with respect to the potential effects on site-specific environmental conditions and cultural resources. The process will identify areas that require special consideration during the design phase as well as the construction phases of the project.

This information is utilized to better understand the specific environmental concerns present through this specific project area. A copy of the EIW is included in Appendix B.

5.2.1 Wetlands

The route for the interceptor rehabilitation and the temporary conveyance will extend through or adjacent to wetlands area. National Wetland Inventory Maps for Phase 2 and Phase 3 are included in Appendix B.

The wetland types and locations will be investigated in more detail during the design phase and treated with special consideration during the construction phase. Work in the wetland areas will require permits from the appropriate regulatory agencies including Coon Creek Water District and U.S. Army Corps of Engineers.

5.2.2 Protection of Land and Water Quality

The proposed project will increase protection of the land and water quality in the project area through rehabilitation of the existing deteriorating pipeline. Rehabilitating the existing RCP interceptor will reduce the potential for accidental spills from corrosion induced pipe failure.

The construction phases of this project will also require an NPDES permit with a detailed erosion control plan to protect the land and water quality during construction.

5.2.3 Impacts to Neighbors and Public Lands

The construction phase of the project will have a direct and noticeable impact on neighbors and public lands. It is intended for construction to occur primarily on MCES permanent easement; however, materials, equipment, and construction personnel will utilize existing roadway and trails in the project area.

There will also be temporary disruption to roadway and trail users while temporary conveyance is installed and removed, at inversion locations during inversions, and at individual MHs during lining. These impacts will be short in duration and will not create a lasting impact to neighbors or public lands.

5.3 Historical and Cultural Review

A desktop historical and cultural review was conducted for Phase 2 and Phase 3. Files from the Minnesota State Historic Preservation Office (SHPO) and the Office of the State Archaeologist (OSA) were used to determine if any previously recorded historical or archaeological sites are in or surrounding the Phase 2 and Phase 3 project areas. The cultural reviews found no previously recorded cultural resources or archaeological sites that overlap with the project areas.

In addition to the desktop research, a literature review and preliminary reconnaissance of Phase 2 was completed from the publicly accessible right-of-way. Due to the poorly drained, marshy soils and the past development in the area there is low potential for intact cultural resources throughout the project area. No further archaeological survey is recommended for the Phase 2 area.

The Phase 2 work has gone through a 45-day Cultural Resource Review by the twelve (12) federally recognized tribes that reside in Minnesota. The Minnesota Indian Affairs Council (MIAC) and SHPO have concluded no on-site testing or monitoring will be necessary for the project.

Pursuant to the Minnesota Field Archaeology Act, the OSA, SHPO and MIAC will be consulted about the project during the design phases. Tribes will also be consulted pursuant to the Minnesota Tribal Nations Consultation Policy.

5.4 Local Stakeholders

Conversations with local stakeholders such as municipalities and private utility companies have commenced to help determine surrounding projects, upcoming projects, and utilities in the area. These conversations will continue throughout design and construction to help avoid conflicts and to capitalize on the ability to enter into construction agreements beneficial to both parties.

5.4.1 Municipalities

The project will fall within the city limits of both Coon Rapids and Andover. Information regarding Phase 2 and Phase 3 proposed work has been shared with both municipalities.

Phase 1 of this interceptor rehabilitation was also within the City of Coon Rapids. MCES and Coon Rapids entered into a cooperative construction agreement for the work of Phase 1. Coon Rapids and MCES have been communicating about the upcoming Phase 2 and 3 work and the City has expressed interest for entering into a cooperative construction agreement for this work as well.

MCES has also been communicating with the City of Andover regarding the Phase 3 Site 2 work that falls within the city limits. Andover has expressed interest in a cooperative construction agreement.

MCES will continue to communicate with both communities as design of both interceptor rehabilitation phases progress.

5.5 Private Utilities

Due to the trenchless nature of CIPP lining and CIPMH rehabilitation, the impact to existing utilities will be greatly reduced. Public utilities may be impacted by the temporary conveyance at locations where the system is buried, such as at driveways and street crossings.

Private utility information was compiled from Gopher State One Call (GSOC) design tickets as well as City, County, and MnDOT information. Responses to the design locate were received from Anoka County, CenterPoint Energy, Coon Rapids, and Connexus Energy.

Coon Rapids Interceptor
Rehabilitation Utility Impacts

Owner	Utility Type	Impact	Further Coordination
Anoka County	Traffic	No impact	No
CenterPoint Energy	Gas	8” steel main paralleling Northdale 4” PE main along 121st Street	Required
City of Coon Rapids	Water Sewer Storm	Protect existing water utility Coordinate lateral impacts Protect storm system	Required
Connexus Energy	Electric	Local electric services are within project limits	Required

Table 5.2: Utility Impacts

Table 5.2 identifies coordination with utility companies that will be required during the design phase of both Phase 2 and Phase 3 projects. Coordination with CenterPoint Energy will be required to address the gas main crossing proposed at Northdale Blvd including separation and protection requirements.

A GSOC utility locate will be performed during the design phase to further identify any utility impacts. During the construction phase, the contractor will be required to complete GSOC locates for any excavation.

6. LAND ACQUISITION

The project work for Phase 2 and Phase 3 is within existing MCES permanent easement, City of Coon Rapids property and right-of-way, as well as City of Andover, Anoka County, and MnDOT right-of-way. Access to the site will be by local roadways, existing MCES permanent easement, temporary construction easements, temporary access easements, and permitted access.

6.1 Permanent Easement Needs

MCES has an existing 30-foot-wide permanent easement centered over the interceptor. The need for additional permanent easement is not anticipated.

6.2 Temporary Easement Needs

Temporary easements are necessary to complete Phase 2 and Phase 3 work. Easements will be needed to access the interceptor for rehabilitation, provide staging areas to the contractor, and allow for temporary conveyance installation and access. The anticipated easement needs for Phase 2 are listed in Table 6.1 on the following page. Temporary easement needs on individual properties will be evaluated further during design for access and construction impacts.

Phase 2 Easements

Easement Type	PID	Owner
Temporary Construction Easement **Access Easement**	10-31-24-42-0004	CMC1 Meadows of Coon Rapids, LLC
Access Easement	11-31-24-33-0013	Margaret Place LTD Partnership
Access Easement	14-31-24-22-0013	Medtronic Inc
Access Easement	14-31-24-21-0003	Medtronic Inc
Access Easement	14-31-24-24-0012	Estes Express Lines
Access Easement	14-31-24-31-0012	ERG-CP Xeon Owner LLC
Access Easement	14-31-24-22-0005	Amsterdam Properties LLC

Table 6.1: Phase 2 Easements

The anticipated easement needs for Phase 3 are listed in Table 6.2 below. There are currently no anticipated easement needs for Site 2 work. Temporary easement needs on individual properties will be evaluated further during design based on actual access and construction impacts.

Phase 3 Easements

Easement Type	PID	Owner
Temporary Construction Easement **Access Easement**	10-31-24-31-0004	Northstar Improvements LLC
Access Easement	10-31-24-31-0007	Northstar Improvements LLC
Temporary Construction Easement **Access Easement**	10-31-24-42-0004	CMC1 Meadows of Coon Rapids LLC

Table 6.2: Phase 3 Easements

7. RECOMMENDATION

Based on the information and data developed in this Facility Plan it is recommended that a project is implemented to rehabilitate portions of the Coon Rapids Interceptor using CIPP lining and CIPMH lining. The reduction of environmental impacts, reduced access requirements, minimal impacts to the community, shorter schedule, and lower costs were all drivers in the recommendation of this trenchless technology. The anticipated Total Cost of the recommended improvements is $19,620,000.

Phase 2 recommended rehabilitation includes approximately

- CIPP line 7,193 linear feet of 48-inch RCP
- CIPMH line 26 maintenance holes

Phase 3 recommended rehabilitation includes approximately

- CIPP line the Interceptor
  - 405 linear feet of 36-inch RCP
  - 815 linear feet of 42-inch RCP
  - 2,090 linear feet of 48-inch RCP
- CIPMH 13 maintenance holes

8. SCHEDULE

The Coon Rapids Interceptor Rehabilitation Project is planned as a 5-year capital improvement project with the Facility Plan scheduled to be implemented in accordance with the following timeline:

- **Public Hearing:** November 19, 2024
- **Facility Plan submitted to MPCA:** March 7, 2025

The design and construction of Phase 2 and Phase 3 will be on a multi-year schedule which is shown in Table 8.1 below.

Coon Rapids Interceptor
Design and Construction Schedule

	Phase 2 Schedule	Phase 3 Schedule
Preliminary Design	Spring 2024	Spring 2027
Initiate Land Acquisition	Summer 2024	Fall 2027
Initiate Final Design	Fall 2024	Spring 2028
Complete Final Design	Spring 2025	Spring 2029
Initiate Construction	Fall 2025	Fall 2029
Complete Construction	Fall 2026	Fall 2030

Table 8.1: Design and Construction Schedule

APPENDIX A

Facility Plan Figures

List of Figures

Figure A1

Phase 2 and Phase 3 Interceptor Location Meter Station M218 to MH 5 20

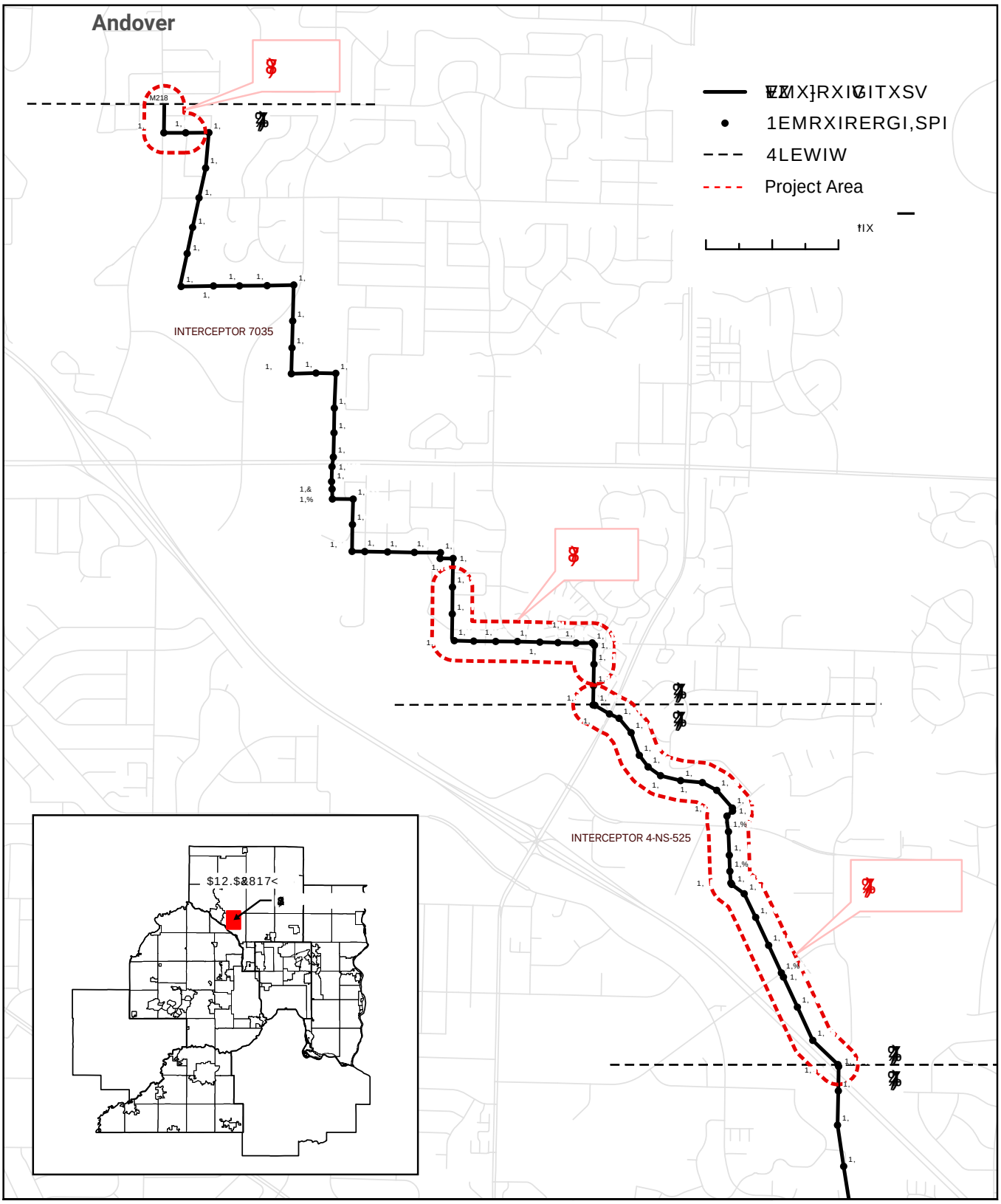


Figure A2

Phase 1 Interceptor Location MH 5 20 to Lift Station L34

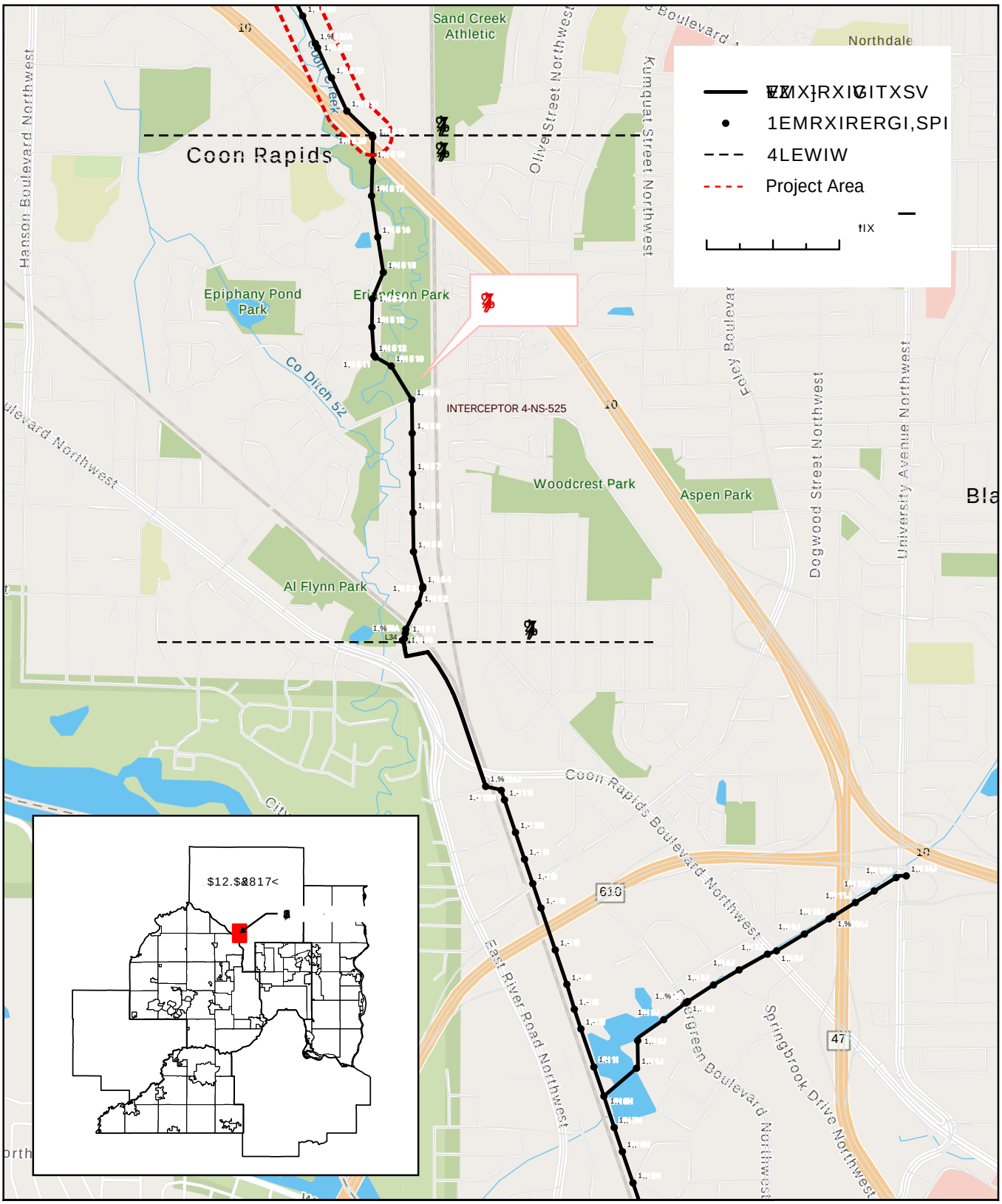


Figure A3

Phase 2 Interceptor Condition Rating

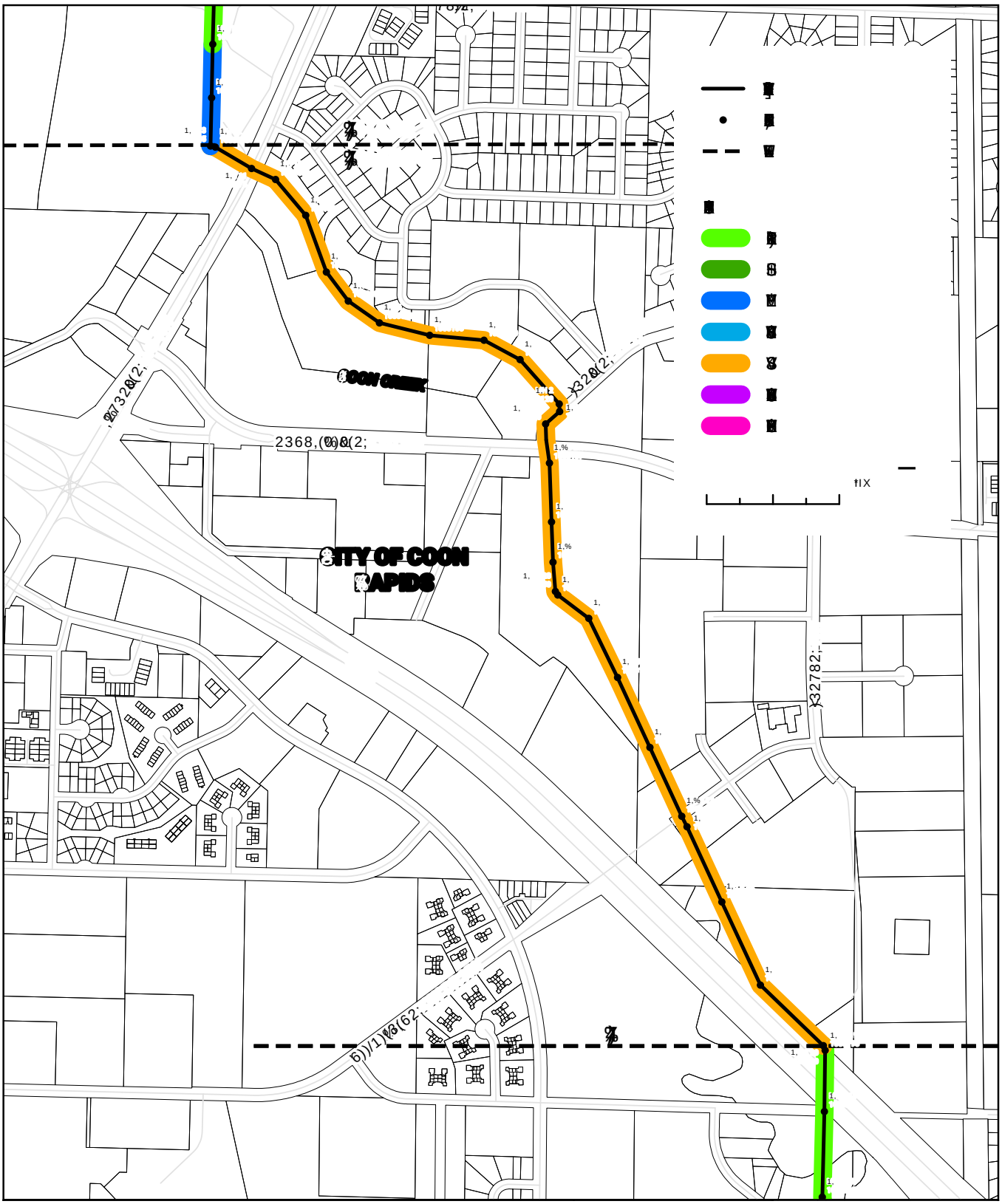


Figure A4

Phase 3 Interceptor Condition Rating

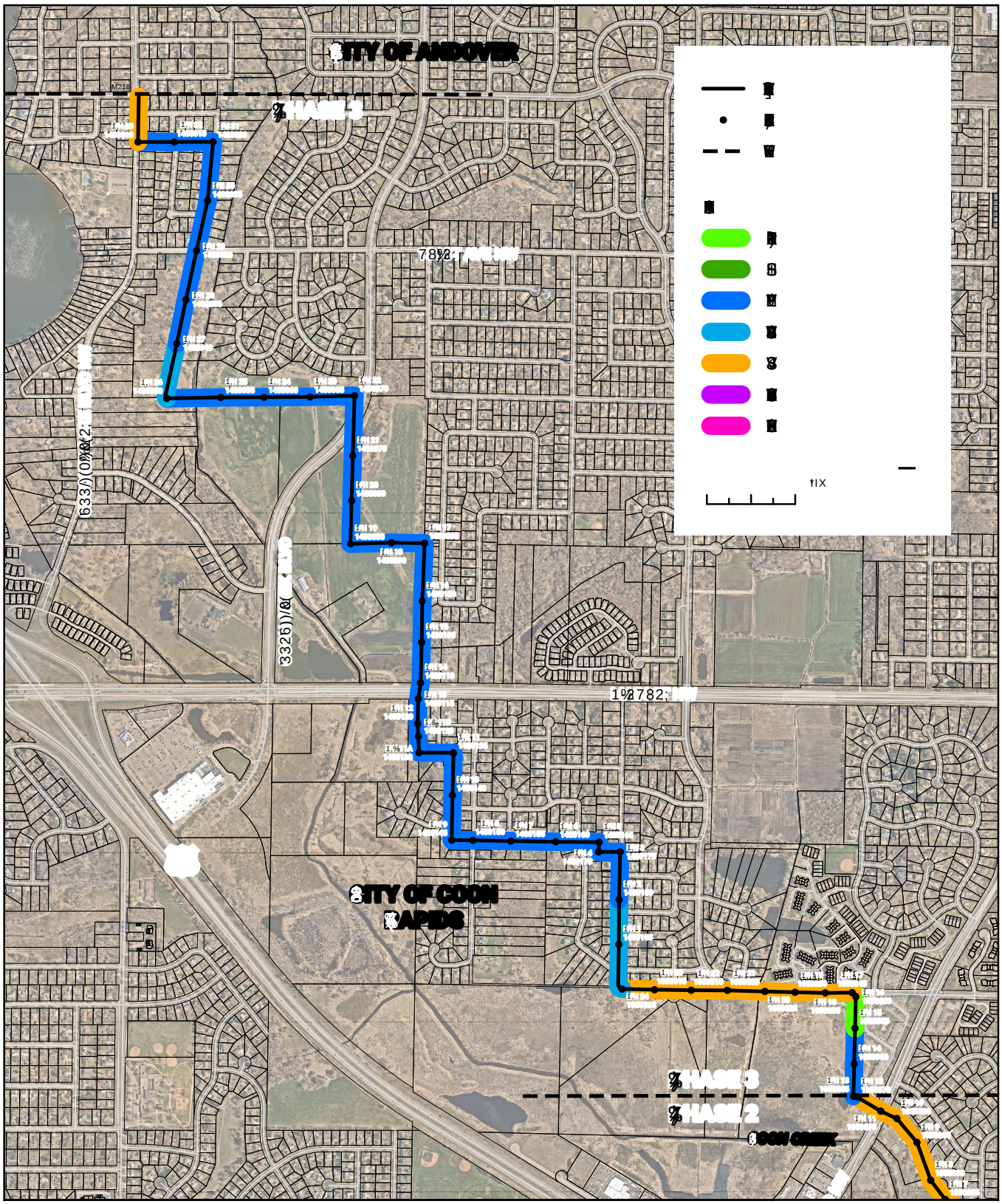


Figure A5

Interceptor Rehabilitation Matrix

Issue	Do Nothing	CIPP Lining	Sliplining	Open Cut Replacement
Environmental Impact	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required including environmental	**Pros:** Impacts minimized to minor excavation at temporary pumping location **Cons:** Surface impacts along temporary conveyance route	**Pros:** Impacts minimized to sliplining access pit locations **Cons:** Sliplining pits require larger excavation to pipe invert Dewatering required at all pits Large number of pits required due to pipe alignment	**Pros:** **Cons:** Significant impacts to wetlands and Coon Creek flood plain
Community Impact	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required	**Pros:** Minor roadway closures for installation of temporary conveyance **Cons:** Temporary closures of trails	**Pros:** Limited roadway closures **Cons:** Temporary closures of trails	**Pros:** **Cons:** Significant impacts including roadway closures and long term closures of trails
Capacity Needs	Meets future needs	Meets future needs	Meets future needs	Meets future needs Allows for upsizing if desired
Permitting Requirements	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required	**Pros:** Minimized excavation reduces permitting needs **Cons:** Permitting required along temporary conveyance route	**Pros:** **Cons:** Greater wetland and flood plain impacts require additional permitting	**Pros:** **Cons:** Greater wetland and flood plain impacts require additional permitting Permitting required along temporary conveyance route
Temporary Conveyance	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required	**Pros:** **Cons:** Required	**Pros:** Not required **Cons:**	**Pros:** **Cons:** Required
Site Access/Property Acquisition	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required	**Pros:** Mainline work in permanent easement **Cons:** Temporary easements needed for conveyance	**Pros:** Mainline work in permanent easement **Cons:** Easements needed for sliplining pit locations	**Pros:** Mainline work in permanent easement **Cons:** Significant easements needed for replacement Temporary easements needed for conveyance
Schedule	N/A	Similar to Sliplining	Similar to CIPP Lining	Significant
Phase 2 and 3 Construction Cost Total	N/A	$18,429,653	$29,866,056	$42,074,162
Conclusion	Not Recommended	Recommended	Not Recommended	Not Recommended

Figure A6

Maintenance Structure Rehabilitation Matrix

Issue	Do Nothing	CIPMH Lining	FRP Insert	Open Cut Replacement
Environmental Impact	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required including environmental	**Pros:** Work performed in existing structure Minor impact due to limited excavation footprint **Cons:**	**Pros:** Work performed in existing structure Minor impact due to limited excavation footprint **Cons:**	**Pros:** **Cons:** Significant impacts to wetlands and Coon Creek flood plain
Community Impact	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required	**Pros:** Work performed in existing structure **Cons:**	**Pros:** Work performed in existing structure **Cons:**	**Pros:** **Cons:** Significant impacts including roadway closures and long term closures of trails
Maintenance Access	N/A	Reduces diameter by 1-inch	Reduces diameter by 6-inches	Maintains diameter
Permitting Requirements	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required	**Pros:** Minimized excavation reduces permitting needs **Cons:**	**Pros:** Minimized excavation reduces permitting needs **Cons:**	**Pros:** **Cons:** Greater wetland and flood plain impacts require additional permitting Permitting required along temporary conveyance route
Temporary Conveyance	**Pros:** Not required **Cons:**	**Pros:** **Cons:** Required	**Pros:** **Cons:** Local, not entire system	**Pros:** **Cons:** Required
Site Access/Property Acquisition	**Pros:** No impact now **Cons:** Significant future impacts if emergency repair is required	**Pros:** Access via permanent easement **Cons:** Temporary easements needed for conveyance	**Pros:** Access via permanent easement **Cons:** Easements needed for sliplining pit locations	**Pros:** **Cons:** Significant easements needed for replacement Temporary easements needed for conveyance
Schedule	N/A	Similar to Sliplining	Similar to CIPP Lining	Significant
Construction Cost	N/A	$22,000/EA	$25,000/EA	$15,000/EA
Conclusion	Not Recommended	Recommended	Not Recommended	Not Recommended

Figure A7

Phase 2 Cost Estimate CIPP Lining

Cost Item		Total Cost
Design Phase		
Planning Phase (1% of Total Construction Cost)		$86,805
Design Phase (10% of Total Construction Cost)		$868,053
Design Subtotal		$954,858
Construction Phase		
7193 LF of 48” Gravity Sewer CIPP Lining	$700/LF	$5,035,100
CIPMH Rehabilitation of 27 MHs	$22,000/EA	$594,000
Temporary Conveyance (30% of Rehabilitation)		$1,688,730
	Subtotal	$7,317,830
Contingency (30% of Subtotal)		$2,195,349
Inflation to Time of Construction (6%)		$570,791
Total Construction Cost		$10,083,970
Construction Administration Phase		
Construction Inspection (6% of Total Construction Cost)		$605,038
Engineering (6% of Total Construction Cost)		$605,038
Land Acquisition (10% of Total Construction Cost)		$1,008,397
Total Construction Administration Cost		$2,218,473
Total Construction Cost		$12,302,443
Total Estimated Project Cost		$13,411,680

Figure A8

Phase 2 Cost Estimate Sliplining

Cost Item		Total Cost
Design Phase		
Planning Phase (1% of Total Construction Cost)		$161,710
Design Phase (10% of Total Construction Cost)		$1,617,097
Design Subtotal		$1,778,806
Construction Phase		
7193 LF of 48” Gravity Sewer Sliplining with 42” FRPMP	$700/LF	$5,035,100
Sliplining insertion pit with new 48" MH, 9	$350,000/EA	$3,150,000
Sliplining receiving pit with new 48” MH, 10	$300,000/EA	$3,000,000
Fiberglass Insert Rehabilitation of 8 MHs	$25,000/EA	$200,000
Dewatering		$350,000
	Subtotal	$11,735,100
Contingency (30% of Subtotal)		$3,520,530
Inflation to Time of Construction (6%)		$915,338
Total Construction Cost		$16,170,968
Construction Administration Phase		
Construction Inspection (6% of Total Construction Cost)		$970,258
Engineering (6% of Total Construction Cost)		$970,258
Land Acquisition (10% of Total Construction Cost)		$1,617,097
Total Construction Administration Cost		$3,557,613
Total Construction Cost		$19,728,581
Total Estimated Project Cost		$21,507,387

Figure A9

Phase 2 Cost Estimate Open Cut Replacement

Cost Item		Total Cost
Design Phase		
Planning Phase (1% of Total Construction Cost)		$204,057
Design Phase (10% of Total Construction Cost)		$2,040,566
Design Subtotal		$2,244,622
Construction Phase		
Remove 7193 LF of 48" Gravity Sewer	$100/LF	$719,300
Remove 48” Sanitary Sewer MH, 27	$5,000/EA	$135,000
Install 7193 LF of 48” Gravity Sewer	$1200/LF	$8,631,600
Install 48” Sanitary Sewer MH, 27	$15,000/EA	$405,000
Dewatering		$1,500,000
Temporary Conveyance (30% of Replacement)		$3,417,270
	Subtotal	$14,808,170
Contingency (30% of Subtotal)		$4,442,451
Inflation to Time of Construction (6%)		$1,155,037
Total Construction Cost		$20,405,658
Construction Administration Phase		
Construction Inspection (6% of Total Construction Cost)		$1,224,339
Engineering (6% of Total Construction Cost)		$1,224,339
Land Acquisition (25% of Total Construction Cost)		$5,101,415
Total Construction Administration Cost		$7,550,094
Total Construction Cost		$27,955,752
Total Estimated Project Cost		$30,200,374

Figure A10

Phase 3 Cost Estimate CIPP Lining

Cost Item		Total Cost
Design Phase		
Planning Phase (1% of Total Construction Cost)		$46,686
Design Phase (10% of Total Construction Cost)		$466,861
Design Subtotal		$513,547
Construction Phase		
405 LF of 36” Gravity Sewer CIPP Lining	$450/LF	$182,250
815 LF of 42” Gravity Sewer CIPP Lining	$500/LF	$427,875
2090 LF of 48” Gravity Sewer CIPP Lining	$550/LF	$1,254,000
CIPMH Rehabilitation of 11 MHs	$22,000/EA	$242,000
Meter Station M218 Improvements		$500,000
Temporary Conveyance: 30% of Rehabilitation		$781,838
	Subtotal	$3,387,963
Contingency (30% of Subtotal)		$1,016,389
Inflation to Time of Construction (6%)		$264,261
Total Construction Cost		$4,668,613
Construction Administration Phase		
Construction Inspection (6% of Total Construction Cost)		$280,117
Engineering (6% of Total Construction Cost)		$280,117
Land Acquisition (10% of Total Construction Cost)		$466,861
Total Construction Administration Cost		$1,027,095
Total Construction Cost		$5,695,708
Total Estimated Project Cost		$6,209,255

Figure A11

Phase 3 Cost Estimate Sliplining

Cost Item		Total Cost
Design Phase		
Planning Phase (1% of Total Construction Cost)		$69,737
Design Phase (10% of Total Construction Cost)		$697,371
Design Subtotal		$767,108
Construction Phase		
405 LF of 36” Gravity Sewer Sliplining with 30” FRPMP	$600/LF	$243,000
815 LF of 42” Gravity Sewer Sliplining with 36” FRPMP	$650/LF	$529,750
2090 LF of 48” Gravity Sewer Sliplining with 42” FRPMP	$700/LF	$1,463,000
Sliplining insertion pit with new 48" MH, 3	$350,000/EA	$1,050,000
Sliplining receiving pit with new 48” MH, 3	$300,000/EA	$900,000
Fiberglass Insert Rehabilitation of 7 MHs	$25,000/EA	$175,000
Meter Station M218 Improvements		$500,000
Dewatering		$200,000
	Subtotal	$5,060,750
Contingency (30% of Subtotal)		$1,518,225
Inflation to Time of Construction (6%)		$394,739
Total Construction Cost		$6,973,714
Construction Administration Phase		
Construction Inspection (6% of Total Construction Cost)		$418,423
Engineering (6% of Total Construction Cost)		$418,423
Land Acquisition (10% of Total Construction Cost)		$697,371
Total Construction Administration Cost		$1,534,217
Total Construction Cost		$8,507,931
Total Estimated Project Cost		$9,275,039

Figure A12

Phase 3 Cost Estimate Open Cut Replacement

Cost Item		Total Cost
Design Phase		
Planning Phase (1% of Total Construction Cost)		$89,185
Design Phase (10% of Total Construction Cost)		$891,853
Design Subtotal		$981,038
Construction Phase		
Remove 405 LF of 36” Gravity Sewer	$65/LF	$26,325
Remove 815 LF of 42” Gravity Sewer	$80/LF	$65,200
Remove 2090 LF of 48" Gravity Sewer	$100/LF	$209,000
Remove 48” Sanitary Sewer MH, 12	$5,000/EA	$60,000
Install 405 LF of 36” Gravity Sewer	$800/LF	$324,000
Install 815 LF of 42” Gravity Sewer	$1000/LF	$815,000
Install 2090 LF of 48” Gravity Sewer	$1100/LF	$2,299,000
Install 48” Sanitary Sewer MH, 12	$15,000/EA	$180,000
Meter Station M218 Improvements		$500,000
Dewatering		$500,000
Temporary Conveyance (30% of Replacement)		$1,493,558
	Subtotal	$6,472,083
Contingency (30% of Subtotal)		$1,941,625
Inflation to Time of Construction (6%)		$504,822
Total Construction Cost		$8,918,530
Construction Administration Phase		
Construction Inspection (6% of Total Construction Cost)		$535,112
Engineering (6% of Total Construction Cost)		$535,112
Land Acquisition (25% of Total Construction Cost)		$2,229,633
Total Construction Administration Cost		$3,299,857
Total Construction Cost		$12,218,387
Total Estimated Project Cost		$13,199,425

Figure A13

Phase 2 Temporary Conveyance ALTERNATE 1

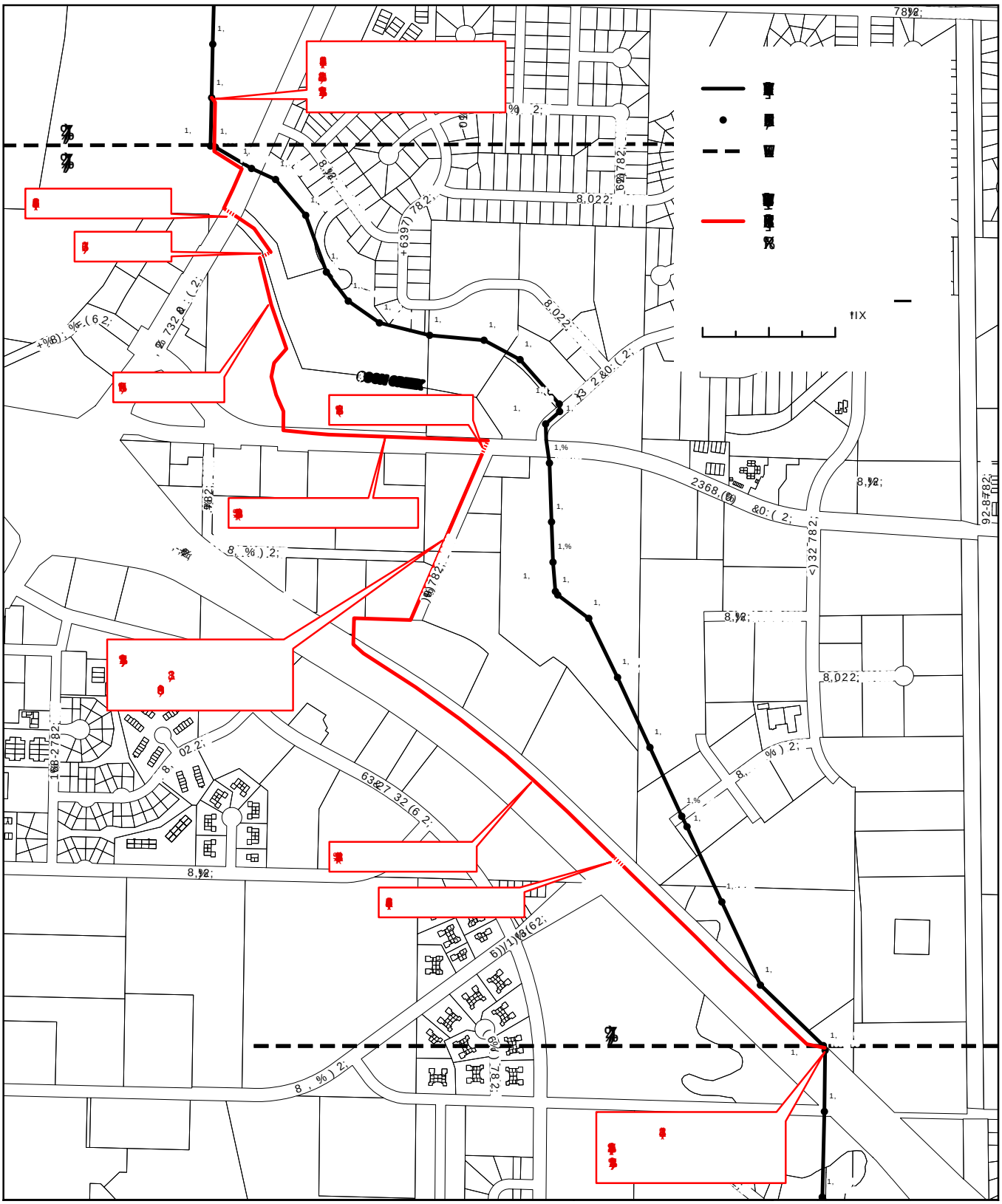


Figure A14

Phase 2 Temporary Conveyance ALTERNATE 2

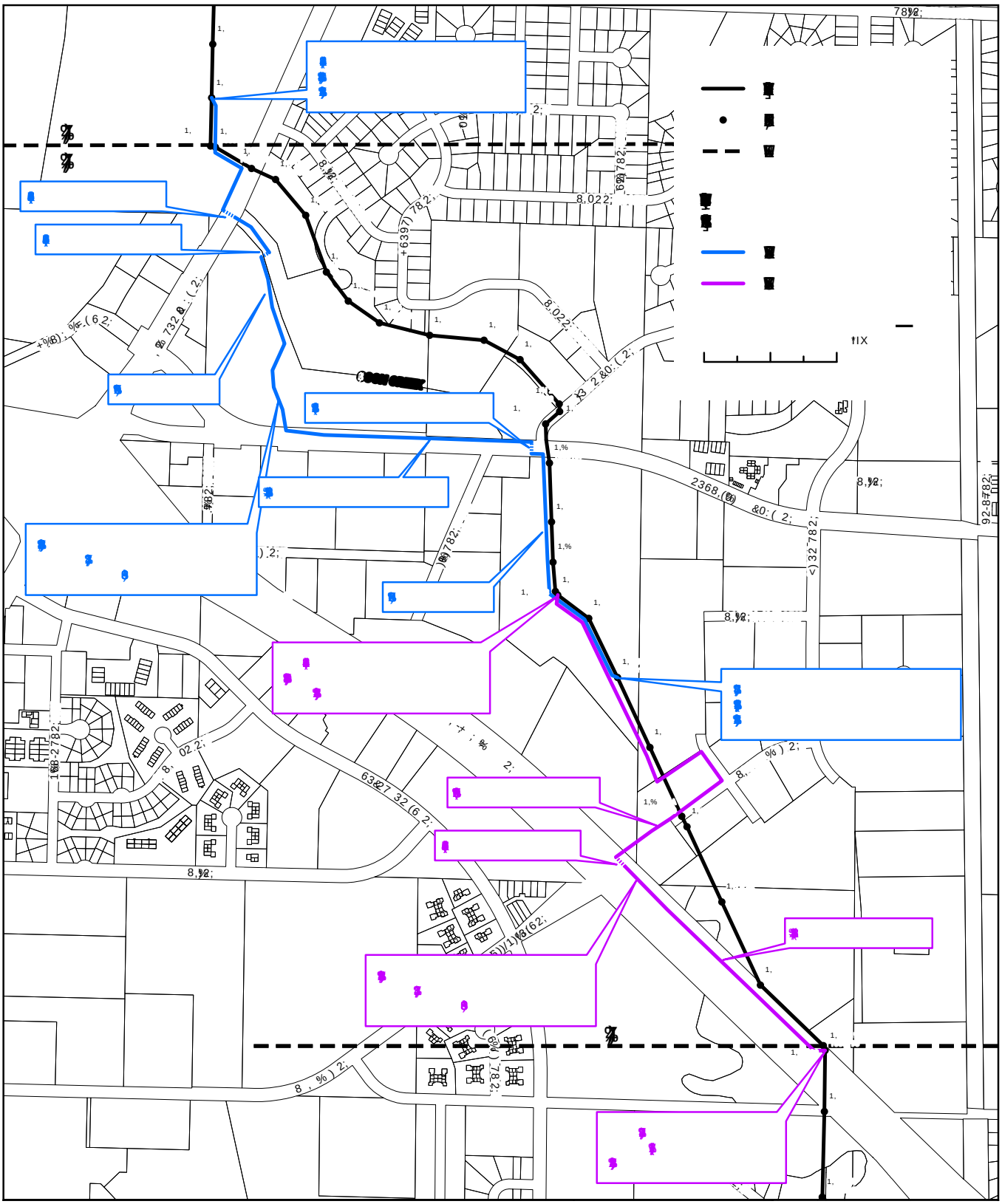


Figure A15

Phase 2 Temporary Conveyance ALTERNATE 3

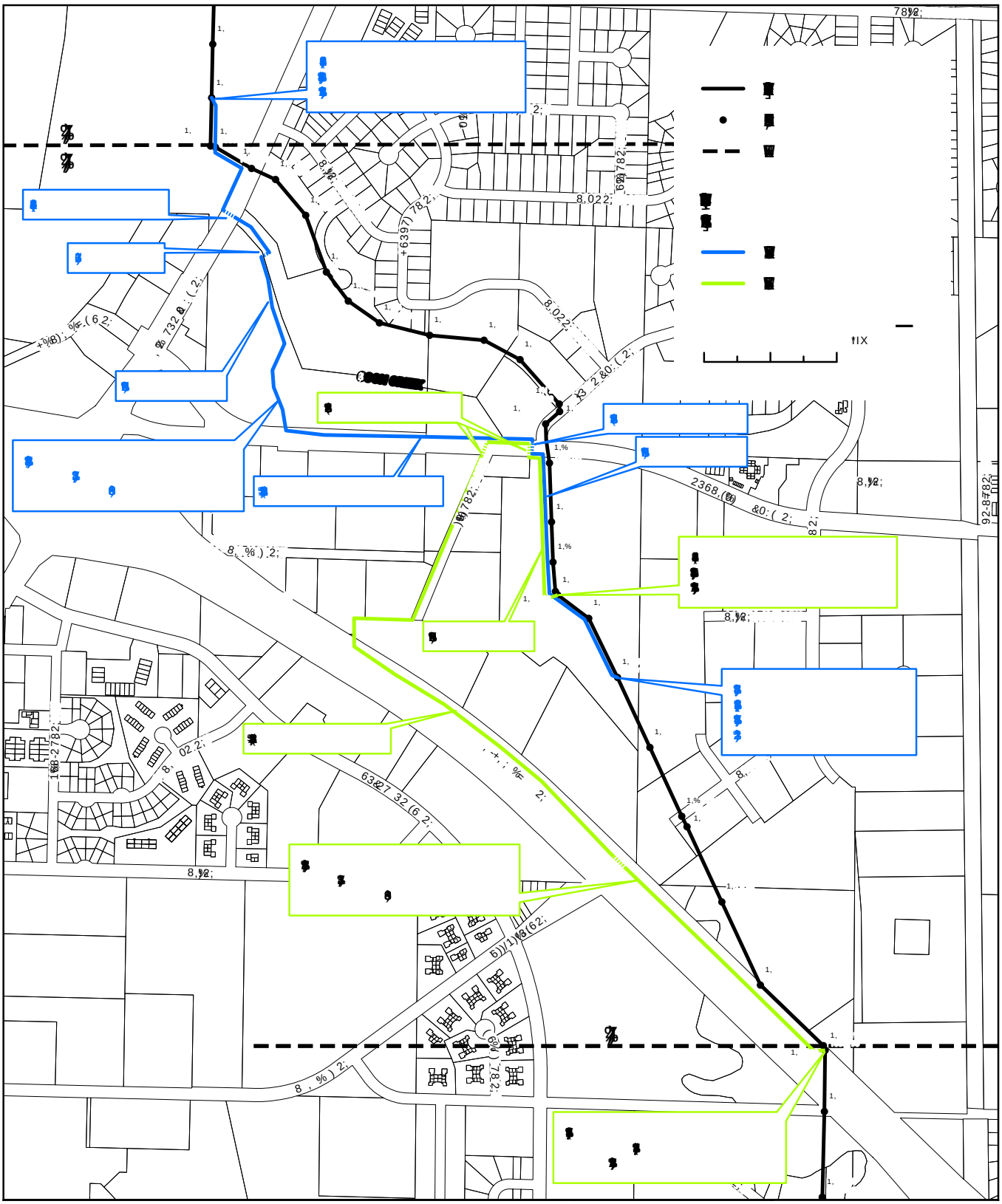
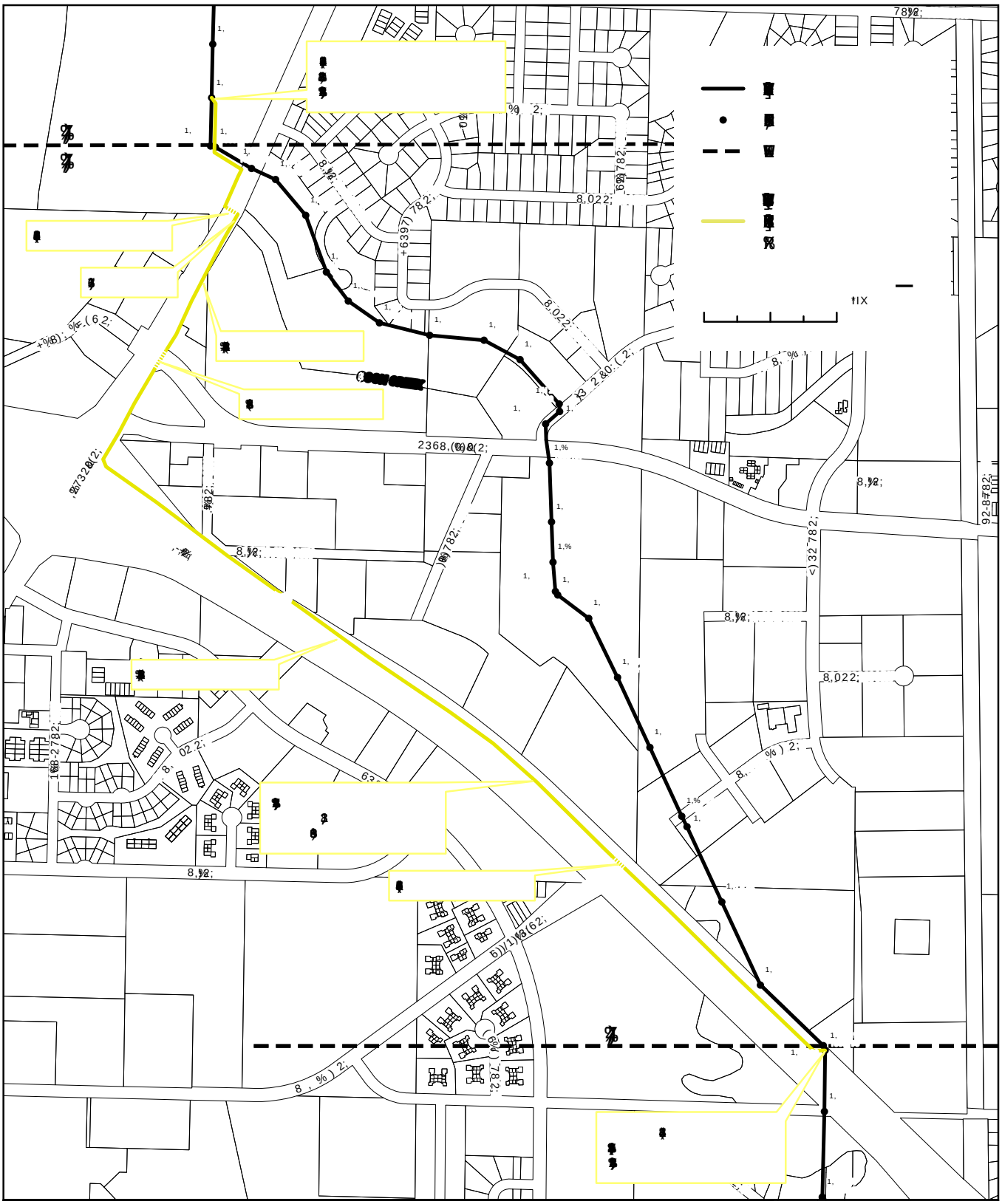


Figure A16

Phase 2 Temporary Conveyance ALTERNATE 4



APPENDIX B

Environmental Information Worksheet (EIW)

List of Figures

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

Environmental Information Worksheet (EIW) form

Clean Water State Revolving Fund Program

Minnesota Rule Chapter 7077.0272, subp. 2.a.F.
Minnesota Rule Chapter 7077.0277, subp. 3.E.

Doc Type: Wastewater Point Source

Eligible applicants seeking funds for clean water (stormwater and wastewater) projects through the Clean Water State Revolving Fund (commonly referred to as the CWSRF Program) are required by Minn. R. ch. 7077.0272, subp. 2.a. F. and Minn. R. ch. 7077.0277, subp. 3.E., to complete an Environmental Information Worksheet (EIW). This information will be used to assess environmental impacts, if any, caused by the project.

Questions: Contact Review Engineer or Bill Dunn at 651-757-2324 or bill.dunn@state.mn.us.

1. Project title: Coon Rapids Interceptor Rehabilitation

2. Proposer: Metropolitan Council Environmental Services (MCES)

Contact person: Dan Chouinard, P.E.

Title: Principal Engineer

Address: 3565 Kennebec Drive

Eagan, MN 55122

Phone: 651-602-4564

Fax: Daniel.Chouinard@metc.state.mn.us

3. Project location: County: Anoka City/Twp: Coon Rapids

_____ 1/4 _____ 1/4 Section: 14,10,4 Township: 31 Range: 24

Tables, Figures, and Appendices attached to the EIW

List of Figures

List of Tables

4. Description:

a. Provide a project summary of 50 words or less.

The project includes the rehabilitation of approximately 10,500 linear feet of reinforced concrete gravity sanitary sewer pipe. The rehabilitation of the pipe and maintenance holes is necessary to prevent pipe failure that could pose a threat to public health and safety and the environment. It will reduce infiltration/inflow into Metropolitan Council Environmental Services (MCES) interceptors and improve system integrity and reliability.

b. Give a complete description of the proposed project and related new construction. Attach additional sheets as necessary. Emphasize construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes. Include modifications to existing equipment or industrial processes and significant demolition, removal or remodeling of existing structures. Indicate the timing and duration of construction activities.

Metropolitan Council Environmental Services (MCES) places priority on the most severely deteriorated segments in the collection system. Based on review of closed-circuit televising (CCTV) and standards set by the National Association of Sewer Service Companies (NASSCO), MCES has rated portions of the Coon Rapids Interceptor to be condition 3.5 and 4. Condition 3.5 segments are showing signs of deterioration and condition 4 segments are likely to need attention within 5 years.

This project includes the rehabilitation of approximately 10,800 linear feet of reinforced concrete gravity sanitary sewer pipe that has been rated condition 3.5 with a majority of the pipe rated condition 4. The pipe ranges in size from 36-inch diameter to 48-inch diameter. The service area includes the City of Andover and the City of Coon Rapids. The project work includes the rehabilitation of sections of the 4-NS-525 and 7035 interceptors and the connected maintenance holes.

See the United States Geological Map (USGS) 7.5-minute topography map with a 1:24,000 scale located in EIW Figure B1 in Appendix B. This map shows a zoomed-out view of the project with the project area noted as well as a visual depiction of the surrounding communities and land use. For a closer look at the project area, specific phases and sites, and a county map inset, see EIW Figure B2 in Appendix B.

Coon Rapids Interceptor Rehabilitation

Rehabilitation of Interceptor

The portions of Interceptor 4-NS-525 and 7035 within the project area, referred to as the Coon Rapids Interceptor Rehabilitation Project, will be rehabilitated using Cured-In-Place Pipe (CIPP) Lining. The pipe to be lined ranges in size from 36-inch diameter to 48-inch diameter. Due to the age and condition of the interceptor it is recommended the pipe is rehabilitated using CIPP lining. The reduction of environmental impacts, reduced access requirements, minimal impacts to the community, shorter construction schedule, and lower costs were all drivers in the recommendation of this trenchless technology. Temporary conveyance piping will be needed to convey wastewater while the interceptor is being repaired. This piping is placed on the ground and typically along roads and through other government owned properties.

Rehabilitation of Maintenance Holes

The rehabilitation recommendation for the maintenance holes (MHs) is Cured-in-Place Manhole (CIPMH) Lining. This minimizes impacts to sensitive areas while providing corrosion resistant structures and removing inflow and infiltration from the sanitary sewer system. Temporary piping for the wastewater will also be required for the MH rehabilitation.

Phase 2 – Interceptor 4-NS-525

Phase 2 includes the rehabilitation of approximately 7,193 linear feet of 48-inch reinforced concrete pipe (RCP) and 27 48-inch diameter maintenance holes (MHs). The project extends from MH 14 to MH 5 20 in Coon Rapids. It starts near 121 Avenue NW and Hanson Boulevard and extends southeast along Coon Creek to Highway 10. This pipe was constructed in 1965 and is rated a Condition 4. The construction for this phase of the project is anticipated to start in the Fall of 2025 and end in the Fall of 2026.

Phase 3 – Interceptors 4-NS-525 and 7035

Phase 3 includes rehabilitation of 11 48-inch diameter maintenance holes with approximately 405 linear feet of 36-inch RCP, 815 linear feet of 42-inch RCP, and 2,090 linear feet of 48-inch RCP. The project is located in two areas and split into 2 phases, referred to as Site 1and Site 2. Site 1 is located on Crooked Lake Boulevard and 133rd Avenue at the border between Andover and Coon Rapids. Site 2 is located on 121st Avenue NW in Coon Rapids. This portion of the interceptor was constructed in 1972 and is rated condition 4 with small portions rated a 3.5. The construction is planned to start in the Fall of 2029 and end in the Fall of 2030.

c. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The purpose of the project is to rehabilitate the existing sanitary sewer interceptor. Without rehabilitation the inflow and infiltration will worsen, hydrogen sulfide (H_2S) gas will cause more corrosion, and eventually the pipe will fail. A pipe failure would release untreated wastewater into environmentally sensitive areas and city neighborhoods.

The project is being completed by MCES. The project is needed to provide reliable wastewater conveyance that meets existing and anticipated regulations. The benefited communities are the City of Andover and the City of Coon Rapids.

d. Are future stages of this development including development on any outlots planned or likely to happen? • Yes • No

If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

N/A

e. Is this project a subsequent stage of an earlier project? • Yes • No

If yes, briefly describe the past development, timeline and any past environmental review.

Phase 1 of the rehabilitation of Interceptor 4-NS-525 was completed in 2024. This project used CIPP lining to rehabilitate portions of the interceptor that had a Condition Rating of 5, located on the same interceptor south of Site 2 and Site 3. Environmental permitting was completed with the Coon Creek Watershed District, Minnesota Department of Natural Resources, Minnesota Pollution Control Agency and the U.S Army Corps of Engineers.

5. Project magnitude data

Total Project Area (acres) N/A or Length (miles) 2 miles
Number of Residential Units: Unattached N/A Attached N/A maximum units per building N/A
Commercial/Industrial/Institutional Building Area (gross floor space): total square feet N/A
Indicate area of specific uses (in square feet): N/A

Office	N/A	Manufacturing	N/A
Retail	N//A	Other Industrial	N/A
Warehouse	NA	Institutional	N/A
Light Industrial	N/A	Agricultural	N/A
Other Commercial (specify)	N/A		

Building height N/A If over 2 stories, compare to heights of nearby buildings N/A

6. Permits and approvals required. List all known local, state and federal permits, approvals and financial assistance for the project. Include modifications of any existing permits, governmental review of plans, and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure.

The following table, Table 1, covers permits and approvals often required for the type of projects covered by this EIW. Each permit will not be needed for each phase. Specific permits for each phase with be further clarified during that design phase.

Table 1: Anticipated Permits

Unit of Government	Type of Application	Status
Minnesota Pollution Control Agency (MPCA)	xApproval of Facility Plan for Minnesota Public Facilities Authority Loan Eligibility xEnvironmental Information Worksheet (EIW) Approval xApproval of Construction Plans and Specifications for PFA Loan Eligibility xNational Pollutant Discharge Elimination System (NPDES) Permit for Construction Erosion and Sediment Control xConstruction Stormwater Permit	To be submitted
Minnesota Department of Natural Resources (MDNR)	xUtility Crossing License xWater Appropriation Permit xEndangered Species Permit	To be submitted, if required
Minnesota Department of Transportation (MnDOT)	xRight of way Permit	To be submitted
Minnesota Department of Health (MDH)	xTemporary Water Well Permit	To be submitted, if required
City of Coon Rapids	xCooperative Agreement xGrading and Development Permit xRight-of-Way Permit	To be submitted
City of Andover	xCooperative Agreement xRight-of-Way Permit	To be submitted
Anoka County	xRight-of-Way Permit xAccess Permit	To be submitted
Coon Creek Watershed District	xWetland Determination xGrading and Development Permit	To be submitted
Metropolitan Council Environmental Services (MCES)	xSpecial Discharge Permit x	To be submitted
US Army Corps of Engineers (USACE)	xSection 404 Permit	To be submitted

7. Land use. Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.

The Coon Rapid Interceptor passes through residential areas, city parks, city right-of-way, county right-of-way, Minnesota Department of Transportation (MnDOT) right-of-way, and along city and county trails. Residential and commercial development may occur in areas surrounding the project but the future land use in the areas adjacent to the interceptor will remain consistent with existing land use.

The National Pipeline Management System Pipeline Map was used to identify locations of gas transmission pipelines and hazardous liquid pipelines. These pipes are not located within the project area.

*The Minnesota Pollution Control Agency (MPCA) "What's in My Neighborhood" database was used to identify environmental hazards near the project. All sites within 1500-feet of the interceptor and the anticipated temporary conveyance routes were included for reference. Numerous locations showing construction stormwater, petroleum remediation leak sites, hazardous waste generators, above ground tanks, below ground tanks, and hazardous waste sites were noted. Individual sites with activity and status are listed in Table 2 below and depicted v*isually *on EIW Figure B3 in Appendix B.*

This interceptor will be rehabilitated using trenchless technology which greatly reduces impacts to adjacent properties and the need for excavation. Upon review of the MPCA "What's in My Neighborhood" there is no anticipated conflicts with soil contamination or groundwater contamination near the project work or near the areas of anticipated excavation. However, if soil contamination is encountered the contamination will be dealt with in a manner consistent with MPCA guidelines. If groundwater contamination is encountered the water will be pumped to an MCES Metropolitan Wastewater Treatment Plant and treated prior to release.

Table 2: Hazardous Site Inventory

ID	MPCA_ID	NAME	ADDRESS	ACTIVITY	STATUS
1	SA0007068	Crooked Lake Schl Abandoned Absorptn Pnd	-	Site Assessment	Active
2	C00048841	Crooked Lake Park Improvements	Crooked Lake Beach Park	Construction Stormwater	Active
3	C00063893	Pheasant Hollow	12031 Partridge Street NW	Construction Stormwater	Active
4	C00045348	City Project 17-4	-	Construction Stormwater	Active
5	C00032378	Coon Rapids Project 11-2	Address Unknown	Construction Stormwater	Inactive
6	TS0012316	Fastrip Markets	12095 Hanson Blvd	Underground Tanks	Active
7	LS0007468	Brooks Food Store #48	12095 Hanson Blvd	Petroleum Remediation, Leak Site	Active
	LS0009036	Brooks Food Store #48	12095 Hanson Blvd	Petroleum Remediation, Leak Site	Active
8	C00055402	SP 002-678-025	-	Construction Stormwater	Active
9	MNR000071217	North Suburban Chiropractic	12045 Hanson Blvd NW	Hazardous Waste, Very small quantity generator	Active
10	C00057387	New Creations Coon Rapids	1805 Gateway Drive	Construction Stormwater	Active
11	C00053256	Lions Coon Creek Park Redevelopment	1664 119th Ave NW	Construction Stormwater	Active
12	MNR000034264	Anoka County Community Action	11740 Xeon Blvd NW	Hazardous Waste, Very small quantity generator	Active
13	C00062964	Eagle Street Tech Center	11670 Eagle Street Northwest	Construction Stormwater	Active
14	MNRNE3CZX	Medtronic PRL	11520 Yellow Pine St NW	Industrial Stormwater	Active
15	00300232	Medtronic PRL	11520 Yellow Pine St NW	Air Quality	Active
	MND981090194	Medtronic PRL	11520 Yellow Pine St NW	Hazardous Waste, Small quantity generator	Active
	C00010444	Medtronic PRL	11520 Yellow Pine St NW	Construction Stormwater	Inactive
	A00016840	Medtronic PRL	11520 Yellow Pine St NW	Industrial Stormwater	Inactive
	MNRNE34R3	Medtronic PRL	11520 Yellow Pine St NW	Industrial Stormwater	Inactive

ID	MPCA_ID	NAME	ADDRESS	ACTIVITY	STATUS
16	A00022637	Park Precision Machining Inc	11551 Eagle St NW Ste 1	Industrial Stormwater	Inactive
	MNRNE336L	Park Precision Machining Inc	11551 Eagle St NW Ste 1	Industrial Stormwater	Active
17	MNRNE36F6	Reliance Machining Inc	11522 Eagle St NW Ste 2	Industrial Stormwater	Inactive
18	MNRNE38MZ	Reliance Machining Inc	11521 Eagle St NW Ste 2	Industrial Stormwater	Active
	A00021789	Reliance Machining Inc	11521 Eagle St NW Ste 2	Industrial Stormwater	Inactive
19	C00016878	Medronic Inc Parking Lot EXP	11520 Yellow Pine St NW	Construction Stormwater	Inactive
	TS0012994	Medronic Inc Parking Lot EXP	11520 Yellow Pine St NW	Aboveground Tanks	Active
	TS0012994	Medronic Inc Parking Lot EXP	11520 Yellow Pine St NW	Underground Tanks	Active
	C00020404	Medtronic PRL Expansion & Renovation	11520 Yellow Pine St NW	Construction Stormwater	Inactive
20	062651294	Woods Unlimited	11421 Yellow Pine St NW	Industrial Stormwater	Inactive
21	MNS000116509	Spiral Manufacturing Co Inc	11419 Yellow Pine St NW	Hazardous Waste	Active
22	00300091	Modeen Company	1285 114th Ave NW Ste 140	Air Quality	Inactive
	MND154444350	Modeen Company	1286 114th Ave NW Ste 140	Hazardous Waste - One time generator	Active
23	MND064785231	Metric Tool & Stamping Inc	1300 114th Ave NW	Hazardous Waste, Minimal quantity generator	Active
24	C00005275	Creek Meadows Improvements	-	Construction Stormwater	Inactive
25	VP25580	USF Holland Trucking Terminal	11220 Xeon St NW	Voluntary Investigation Cleanup	Inactive
26	MNR000107532	USF Holland Inc	11220 Xeon St NW	Hazardous Waste - Small quantity generator	Active
	LS0017573	USF Holland Inc	11220 Xeon St NW	Petroleum Remediation - Leak Site	Inactive
	MNR053B5M	USF Holland Inc	11220 Xeon St NW	Industrial Stormwater	Inactive
	MNR0535F7	USF Holland Inc	11220 Xeon St NW	Industrial Stormwater	Inactive
27	TS0020593	USF Holland	11220 Xeon St NW	Underground Tanks	Active
28	MNRNE34RL	NorthMarg - Coon Rapids	11225 Xeon St NW	Industrial Stormwater	Inactive
29	C00053901	Xeon Industrial	-	Construction Stormwater	Active
30	C00033717	Project 11-28 City Vehicle Parking Garage	11155 Robinson Dr	Construction Stormwater	Inactive
31	C00027313	SP 0215-67 (TH 10) - Coon Rapids	-	Construction Stormwater	Inactive
32	A00021683	Plateworks Plus	11501 Eagle St NW	Industrial Stormwater	Inactive
	BF0001445	Plateworks Plus	11501 Eagle St NW	Petroleum Brownfield and Voluntary Investigation and Cleanup	Active
	MNS000117259	Plateworks Plus	11501 Eagle St NW	Hazardous Waste - Very small quantity generator	Active

ID	MPCA_ID	NAME	ADDRESS	ACTIVITY	STATUS
33	MNR000077123	BTW Inc	11551 Eagle St NW Ste 3	Hazardous Waste - Minimal Quantity Generator	Active
	MNRNE33JQ	BTW Inc	11551 Eagle St NW Ste 3	Industrial Stormwater	Inactive
	MNRNE38R6	BTW Inc	11551 Eagle St NW Ste 3	Industrial Stormwater	Inactive
	MNRNE3BRQ	BTW Inc	11551 Eagle St NW Ste 3	Industrial Stormwater	Inactive
	MNRNE3CR4	BTW Inc	11551 Eagle St NW Ste 3	Industrial Stormwater	Active
34	MNR000020552	Healthpartners Coon Rapids Medical	11475 Robinson Dr NW	Hazardous Waste, Very small quantity generator	Active
35	00300230	Caliber Collision - Coon Rapids 3309	11585 Robinson Drive	Air Quality	Inactive
	BF0001376	Caliber Collision - Coon Rapids 3309	11585 Robinson Drive	Brownfield Voluntary Investigation and Cleanup	Inactive
	MNR000061937	Caliber Collision - Coon Rapids 3309	11585 Robinson Drive	Hazardous Waste - Very small quantity generator	Active
36	C00031765	United Educators Credit Union	11599 Robinson Dr. NW	Construction Stormwater	Active
	LS0015537	Phillips 66 #24273	11599 Robinson Dr NW	Petroleum Remediation - Leak Site	Inactive
	TS0004605	Phillips 66 #24273	11599 Robinson Dr NW	Underground Tanks	Active
	MND985745991	Phillips Petroleum Co 55 24273	11591 Robinson Dr NW	Hazardous Waste - Minimal Quantity Generator	Active
37	C00012895	Keller Williams - Marshfield Ponds	1760 116th Ave NW	Construction Stormwater	Inactive
38	006212443	Steinwall, Inc. - CR1	1759 116th Ave NW	Industrial Stormwater	Inactive
	MND006480966	Steinwall, Inc. - CR1	1759 116th Ave NW	Hazardous Waste - Very small quantity generator	Active
	MNRNE37TR	Steinwall, Inc. - CR1	1759 116th Ave NW	Industrial Stormwater	Inactive
	MNRNE39BD	Steinwall, Inc. - CR1	1759 116th Ave NW	Industrial Stormwater	Active
39	MNR000026450	Metro Moulded Parts Inc	11610 Jay St NW	Hazardous Waste - Very small quantity generator	Active
40	MND981527567	Mr Bs	1818 117th Ave NW	Hazardous Waste	Inactive
41	00300188	Coon Rapids Collision	11630 Jay St NW	Air Quality	Active
	LS0009722	Coon Rapids Collision	11631 Jay St NW	Petroleum Remediation - Leak Site	Inactive
	MND981200900	Coon Rapids Collision	11632 Jay St NW	Hazardous Waste - Very small quantity generator	Inactive
	MND981960693	Coon Rapids Collision	11633 Jay St NW	Hazardous Waste - Very small quantity generator	Active
42	TS0000119	Nedegaard Construction/j&b Properties	1804 Northdale Blvd	Underground Tanks	Inactive
43	LS0006696	Nedegaard Construction	11814 Northdale Blvd	Petroleum Remediation - Leak Site	Inactive
44	C00047930	Rapids Honda	1950 Gateway Dr	Construction Stormwater	Active
	C00049074	Rapids Honda	1951 Gateway Dr	Construction Stormwater	Active
	TS0130808	Rapids Honda	1952 Gateway Dr	Aboveground Tanks	Active
45	C00037657	McDonalds	-	Construction Stormwater	Inactive
46	C00032516	Holiday 3514	1855 Gateway Drive NW	Construction Stormwater	Inactive
	TS0125593	Holiday 3514	1855 Gateway Drive NW	Underground Tanks	Active
47	C00061932	Shine Car Wash	1829 Northdale Blvd NW	Construction Stormwater	Active

ID	MPCA_ID	NAME	ADDRESS	ACTIVITY	STATUS
48	BF0001760	Coon Rapids BP	1829 Northdale Blvd NW	Petroleum Brownfield	Active
	LS0014636	Coon Rapids BP	1829 Northdale Blvd NW	Petroleum Remediation - Leak Site	Inactive
	LS0021471	Coon Rapids BP	1829 Northdale Blvd NW	Petroleum Remediation - Leak Site	Inactive
	MND985724236	Coon Rapids BP	1829 Northdale Blvd NW	Hazardous Waste - Minimal quantity generator	Active
	TS0010301	Coon Rapids BP	1829 Northdale Blvd NW	Underground Tanks	Inactive
49	C00066853	Take 5 Oil Change Coon Rapids	11851 Hanson Blvd NW	Construction Stormwater	Active

8. Cover types. Estimate the acreage of the site with each of the following cover types before and after development:

	Before	After		Before	After
Types 1-8 wetlands	No Change	No Change	Lawn/landscaping	No Change	No Change
Wooded/forest	No Change	No Change	Impervious Surfaces	No Change	No Change
Brush/grassland	No Change	No Change	Other (describe)	No Change	No Change
Cropland	No Change	No Change			
			Total	No Change	No Change

9. Fish, wildlife, and ecologically sensitive resources.

a. Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts.

Wildlife Management Areas

As shown in EIW Figure B4, EIW Figure B5 and EIW Figure B6 in Appendix B the area being studied is not a wildlife management area. The area is residential, commercial, industrial, wetlands, *and wooded uplands. Wildlife that exists throughout the project area are those that have adapted to an urban area with adjacent wetlands and woods. These species likely include rabbit, fox, coyote, white-tailed deer, birds, mice, a variety of insects, frogs, turtles and fish.*

The majority of the project work will be trenchless, however, there will be minimal excavation at various maintenance structures. Any project disturbances will be restored to existing natural conditions as much as possible so overall change to area habitat will be temporary and negligible. The project is not expected to result in a decline in wildlife abundance or species diversity.

Wetlands

There are a number of wetlands in proximity to the proposed project. Inventoried Wetlands in proximity to each project phase, from the National Wetlands Inventory, are shown in EIW Figure B7, EIW Figure B8, and EIW Figure B9 in Appendix B.

Wetlands will be accounted for by incorporating spill containment and sediment runoff protection during construction. In addition, site disturbance from construction activities will be minimized to the extent possible. Where impact is avoidable, care will be taken to restore the site in a manner that is compatible with the ecosystem. This restoration will be coordinated with the watershed districts.

The lining and rehabilitation of the interceptor should serve to provide protection to wetlands by reducing infiltration and exfiltration and avoiding future sewer failures that would result in untreated wastewater discharges.

Regionally Significant Ecological Area

There is a Regionally Significant Ecological Area identified in Phase 2 of the project. This area is shown in EIW Figure B10. Regionally Significant Ecological Area Figures for Phase 3 are shown in EIW Figure B11 and EIW Figure B12. The Regionally Significant Ecological Area in Phase 2 is located along Coon Creek, south of Northdale Boulevard NW and north of Creek Meadow Drive NW. Minimal excavation is expected in this area and access will be by existing road and existing trail to reduce impacts to the surrounding vegetation. However, where impact in this area is unavoidable, care will be taken to restore the site in a manner that is compatible with the ecosystem.

b. Are any state (endangered or threatened) species, rare plant communities or other sensitive ecological resources such as native prairie habitat, colonial waterbird nesting colonies or regionally rare plant communities on or near the site?
• Yes • No

If yes, describe the resource and how it would be affected by the project. Indicate if a site survey of the resources has been conducted and describe the results. If the Minnesota Department of Natural Resources (DNR) Natural Heritage and Nongame Research program has been contacted give the correspondence reference number: N/A

Describe measures to minimize or avoid adverse impacts.

State-Listed Threatened and Endangered Species

The Blanding's Turtle has been identified near Phase 2, shown in EIW Figure B13. The project construction documents will identify this species as being in the area and the potential of encountering it during construction. The specifications, at a minimum, will include a turtle fact sheet and what to do if the turtle is found. As seen in EIW Figure B14 and EIW Figure B15 there were no threatened or endangered species found near the Phase 3 project sites.

An in-depth field survey is being conducted for Phase 2 to determine if there are any threatened or endangered flora or fauna in the project area. A field survey will be conducted for Phase 3 when design is closer.

Natural Plant Communities

As shown in EIW Figure B16, EIW Figure B17, and EIW Figure B18 there are no Natural Plant Communities in the project area.

10. Physical impacts on water resources. Will the project involve the physical or hydrologic alteration (dredging, filling, stream diversion, outfall structure, diking, and impoundment) of any surface waters such as a lake, pond, wetland, stream or drainage ditch? • Yes • No

If yes, identify water resource affected. Describe alternatives considered and proposed mitigation measures to minimize impacts. Give the DNR Protected Waters Inventory (PWI) number(s) if the water resources affected are on the PWI.

There is one known Minnesota Department of Natural Resources (DNR) Public Water located throughout a portion of Phase 2 of the project site. See EIW Figure B19 in Appendix B for the location. There are no know DNR Public Waters located in Phase 3, shown in EIW Figure B20 and EIW Figure B21 in Appendix B. While Coon Creek is in the project area of Phase 2 there will be no physical or hydrologic alterations made.

11. Water use. Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)? • Yes • No

If yes, as applicable, give location and purpose of any new wells; public supply affected, changes to be made, and water quantities to be used; the source, duration, quantity and purpose of any appropriations; and unique well numbers and DNR appropriation permit numbers, if known. Identify any existing and new wells on the site map. If there are no wells known on site, explain methodology used to determine.

The Minnesota Department of Health (MDH) Minnesota Well Index was used to identify numerous private wells in the project area. Locations of these well are shown in EIW Figure B22 and EIW Figure B23 in Appendix B and listed in the Table below.

Minimal dewatering is anticipated for the project however dewatering rates are not expected to exceed ten thousand gallons per day. If that threshold is exceeded a DNR General Permit for Temporary Water Appropriations will be acquired. When dewatering is performed, the pumped water would be discharged to the storm sewer or to the sanitary sewer for subsequent treatment at the Metropolitan Wastewater Treatment Plant, if deemed necessary. No impacts to the surrounding wells are expected.

Table 3: Existing Well Information

Well ID	Well Depth (ft)	Depth to Groundwater (ft)	Well Address
111124	188	13	12248 Partridge Street NW, Coon Rapids, MN 55448
426252	200	5	12260 Partridge Street NW, Coon Rapids, MN 55448
114373	164	3	12228 Partridge Street NW, Coon Rapids, MN 55448
114330	228	5	1760 116th Ave NW, Coon Rapids, MN 55448
606356	16	N/A	11365 Robinson Drive NW, Coon Rapids, MN 55448
420187	201	10	2771 133rd Lane NW, Andover, MN 55304
457920	80	10	2755 133rd Lane NW, Andover, MN 55304

Well ID	Well Depth (ft)	Depth to Groundwater (ft)	Well Address
722247	100	14	2739 133rd Lane NW, Andover, MN 55304
131212	180	20	2827 133rd Ave NW, Andover, MN 55304
197562	90	11	2746 133rd Lane NW, Andover, MN 55304
208717	246	15	2787 132nd Lane NW, Andover, MN 55448
406327	160	20	13233 Eidelweiss Street NW, Coon Rapids, MN 55448
147116	136	19	13231 Eidelweiss Street NW, Coon Rapids, MN 55448
404543	185	23	13224 Crooked Lake Blvd NW, Coon Rapids, MN 55448
166889	150	32	13229 Eidelweiss Street NW, Coon Rapids, MN 55448
184476	155	N/A	2836 132nd Ave NW, Coon Rapids, MN 55448
406344	168	20	13216 Crooked Lake Blvd NW, Coon Rapids, MN 55448
159333	96	28	13208 Crooked Lake Blvd NW, Coon Rapids, MN 55448

12. **Water-related land use management districts.** Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district? • Yes • No
If yes, identify the district and discuss project compatibility with district land use restrictions.

Areas of Phase 2 and Phase 3 are within and/or surrounded by a delineated 100-year floodplain, 500-year floodplain, and the regulatory floodway. These areas are depicted for Phase 2 and Phase 3 in EIW Figure B24, EIW Figure B25 and EIW Figure B26 in Appendix B. During the design phase there will be meetings with Coon Creek Watershed District to ensure land use restrictions are met and restoration requirements are achieved during construction. There will be no filling or grade changes on the project.

13. **Water surface use.** Will the project change the number or type of watercraft on any water body? • Yes • No
If yes, indicate the current and projected watercraft usage and discuss any potential overcrowding or conflicts with other uses.

N/A

14. **Erosion and sedimentation.** Give the acreage to be graded or excavated and the cubic yards of soil to be moved: **3.5** Acres: **300** cubic yards. Describe any steep slopes or highly erodible soils and identify them on the site map. Describe any erosion and sedimentation control measures to be used during and after project construction.

There will be no grading with this work. However, with the placement of the temporary conveyance pipe at grade the existing grass may be disturbed, and soil exposed. This is due to equipment, such as a skid steer, used to lay the temporary conveyance pipe. The estimate of 3.5 acres is for laying the temporary conveyance pipe and the potential of exposing soil during that work.

Excavation associated with the project will be at some of the maintenance holes. Excavation is needed to install the equipment and pumps required for the temporary conveyance of wastewater flow. On Phase 2 and Phase 3 excavation is estimated at 5 maintenance holes each, for a total of 10 structures. The excavation at these 10 structures produces approximately 300 cubic yards of soil in total. This soil will be placed back into the hole after pumping is complete in each location. The specific maintenance holes that will have excavation surrounding them will be identified during design.

Due to the potential for exposed soils when placing the temporary conveyance pipe each project phase will include a Storm Water Pollution Prevention Plan (SWPPP). Erosion and sediment controls will be installed and maintained for the duration of the project for all disturbed project areas following erosion control standards and regulations from the watershed management organizations and the MPCA.

15. Water quality – surface-water runoff.

a. Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any storm water pollution prevention plans.

Water quantity and quality of site runoff will have no change from before the project to after the project. There will be no permanent controls to manage or treat runoff.

A stormwater pollution prevention plan (SWPPP) will be implemented at the beginning of the project and will remain in place through the duration of the construction until vegetation has been established and restoration is complete. The SWPPP will include inlet protection devices, filter sock, wetland mats, silt fence, and any other erosion control devices deemed necessary by the Engineer.

b. Identify routes and receiving water bodies for runoff from the site; include major downstream water bodies as well as the immediate receiving waters. Estimate impact runoff on the quality of receiving waters.

N/A

16. Water quality – wastewater.

a. Describe sources, composition and quantities of all sanitary, municipal and industrial wastewater produced or treated at the site.

The facilities included in this project will not produce or treat wastewater; rather the facilities will convey existing wastewater.

b. Describe waste treatment methods or pollution prevention efforts and give estimates of composition after treatment. Identify receiving waters, including major downstream water bodies, and estimate the discharge impact on the quality of receiving waters. If the project involves on-site sewage systems, discuss the suitability of site conditions for such systems.

N/A

c. If wastes will be discharged into a publicly owned treatment facility, identify the facility, describe any pretreatment provisions and discuss the facility's ability to handle the volume and composition of wastes, identifying any improvements necessary.

Wastewater will be conveyed by the proposed project to the MCES Metro Wastewater Treatment Plant (WWTP). The project will not alter the amount of wastewater conveyed to the wastewater treatment plant.

d. If the project requires disposal of liquid animal manure, describe disposal technique and location and discuss capacity to handle the volume and composition of manure. Identify any improvements necessary. Describe any required setbacks for land disposal systems.

N/A

17. Geologic hazards and soil conditions.

a. Approximate depth (in feet) to Groundwater *1* minimum; *2* average.
Bedrock: *130* minimum; *183* average.

Describe any of the following geologic site hazards to groundwater and also identify them on the site map: sinkholes, shallow limestone formations or karst conditions. Describe measures to avoid or minimize environmental problems due to any of these hazards.

There are no known sinkholes, shallow limestone formations, karst conditions, or other potential geologic hazards along the project.

b. Describe the soils on the site, giving U.S. Soil Conservation Service (SCS) classifications, if known. Discuss soil granularity and potential for groundwater contamination from wastes or chemicals spread or spilled onto the soils. Discuss any mitigation measures to prevent such contamination.

Soil information for the project is located in the Table below and in EIW Figure B27 and EIW Figure B28 in Appendix B. The information in the Table below was determined using the United State Department of Agriculture Natural Resources Conservation Survey (NRCS) Web Soil Survey. The information shown in the figures was mapped using the Surficial Geology from the University of Minnesota Geological Survey. The area studied encompasses the interceptor alignment as well as any potential temporary conveyance route. The information in the Table is a further breakdown of the high-level soil types shown in the Figures.

Soils throughout the project are predominantly alluvial land with sandy loam, loamy sand, and muck, though soils are variable over the large area covered by the project. Project area soil infiltration rates are mostly high with relatively flat slopes. The erodibility of the soils is generally moderate to high making erosion control during construction very important.

The project does not include the addition of any permanent chemical storage or risks for surface water or groundwater contamination and does not include any changes to land surface permeability. Lining of the interceptor sewers and maintenance holes will reduce exfiltration of untreated wastewater from compromised pipes and structures in the sanitary sewer system. Any chemicals stored on site during construction, such as fuel tanks or construction equipment, will require secondary containment to prevent environmental releases in the event of a spill.

Table 4: Soils in Project Area

Unit Name	Drainage Classification	Hydrologic Group	Representative Slope	Wind Erodibility Group	Erodibility Factor (Kw)
Alluvial land, mixed, frequently flooded	Very poorly drained	A/D	0.5	2	0.20
Cut and fill land	N/A	N/A	1.0	N/A	N/A
Isan-Isan, frequently ponded, complex, 0 to 2 percent slopes	Poorly drained	A/D	1.0	3	0.20
Nymore loamy sand, 1 to 6 percent slopes	Excessively drained	A	3.0	2	0.17
Duelm loamy sand, 0 to 2 percent slopes	Moderately well drained	A	1.0	2	0.17
Isanti fine sandy loam	Very poorly drained	A/D	0.5	3	0.24
Kratka loamy fine sand	Very poorly drained	B/D	0.5	2	0.20
Lino loamy fine sand, 0 to 4 percent slopes	Somewhat poorly drained	A/D	2.0	2	0.24
Markey muck, occasionally ponded, 0 to 1 percent slopes	Very poorly drained	A/D	0.5	8	N/A
Nymore loamy sand, 0 to 2 percent slopes	Excessively drained	A	1.0	2	0.15
Rifle mucky peat	Very poorly drained	A/D	0.5	5	n/a
Zimmerman fine sand, 1 to 6 percent slopes	Somewhat excessively drained	A	4.0	1	0.10
Zimmerman fine sand, 12 to 24 percent slopes	Excessively drained	A	15.0	1	0.10

18. Solid wastes, hazardous wastes, storage tanks.

a. Describe types, amounts and compositions of solid or hazardous wastes, including solid animal manure, sludge, and ash, produced during construction and operation. Identify method and location of disposal. For projects generating municipal solid waste, indicate if there is a source separation plan; describe how the project will be modified for recycling. If hazardous waste is generated, indicate if there is a hazardous waste minimization plan and routine hazardous waste reduction assessments.

There will be no hazardous waste, animal manure, or ash produced during construction. All solid waste and debris generated during construction will be disposed of offsite by the contractor in accordance with applicable state and local rules and regulations.

b. Identify any toxic or hazardous materials to be used or present at the site and identify measures to be used to prevent them from contaminating groundwater. If the use of toxic or hazardous materials will lead to a regulated waste, discharge, or emission, discuss any alternatives considered to minimize or eliminate the waste, discharge, or emission.

During construction, equipment and vehicles utilizing gasoline, diesel fuel, antifreeze, and oil will be used at the project site. Portable storage tanks of fuel may be temporarily located at the site during construction. Secondary containment will be used for any on-site storage of toxic or hazardous materials. Fueling of vehicles and equipment will be conducted away from sensitive areas.

The contractor will be required to follow the spills reporting and mitigation procedure laid out by MCES. MCES defines a spill as a release of wastewater, sludge treated effluent, chemical, petroleum, or other material outside of the contained conduit or treatment unit in which it is stored, transferred, or treated. The procedure requires that all spill reporters should first contact MCES Regional Dispatch at (651) 602-4511, except if the spill involves a release of a Superfund Amendments and Reauthorization Act (SARA) Title III material or an Industrial Waste Spill. MCES Regional Dispatch will coordinate and facilitate appropriate spill response and immediate corrective action and complete all the necessary notifications and contacts with both internal and external parties. If the release is of a SARA Title III material or an Industrial Waste, the contractor is required to contact the State Duty Officer at (800) 422-0798.

c. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans.

No permanent above ground or below ground tanks will be installed as part of the project. Portable fuel storage tanks may be temporarily located at the project site during construction. Fueling of vehicles and equipment will take place away from sensitive areas. The contractor will be required to follow all appropriate local, state, and federal rules for storage and handling of fuels. The construction contractor is obligated by contract to notify MCES of all emergencies and immediately act to prevent damage or loss. Any release of fuels or other hazardous materials will be reported to the State Duty Officer.

19. Traffic. Parking spaces added: *N/A* Existing spaces (if project involves expansion): *N/A*
Estimated total average daily traffic generated: *N/A* Estimated maximum peak hour traffic generated (if known) and its timing: *N/A* Provide an estimate of the impact on traffic congestion affected roads and describe any traffic improvements necessary. If the project is within the Twin Cities metropolitan area, discuss its impact on the regional transportation system.

N/A

20. Vehicle-related air emissions. Estimate the effect of the project's traffic generation on air quality, including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts. Note: If the project involves 500 or more parking spaces, consult *Environmental Assessment Worksheet (EAW) Guidelines* about whether a detailed air quality analysis is needed.

The project is not anticipated to effect traffic flow or generate additional traffic. Vehicle emissions associated with the construction of the project will not have a significant effect on air quality.

21. Stationary source air emissions. Describe the type, sources, quantities and compositions of any emissions from stationary sources of air emissions such as boilers, exhaust stacks or fugitive dust sources. Include any hazardous air pollutants (consult *EAW Guidelines* for a listing), any greenhouse gases (such as carbon dioxide, methane, and nitrous oxides), and ozone-depleting chemicals (chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons or sulfur hexafluoride). Also describe any proposed pollution prevention techniques and proposed air pollution control devices. Describe the impacts on air quality.

No significant air quality impacts are anticipated.

22. **Odors, noise, and dust.** Will the project generate odors, noise or dust during construction or during operation?

- Yes
- No

If yes, describe sources, characteristics, duration, quantities or intensity and any proposed measures to mitigate adverse impacts. Also identify locations of nearby sensitive receptors and estimate impacts on them. Discuss potential impacts on human health or quality of life. (Note: fugitive dust generated by operations may be discussed at item 23 instead of here.)

Heavy equipment used during temporary construction activities may result in odors, noise, and dust (from disturbed soils). No generation of odors, noise, or dust is expected from the project once construction is complete.

Exhaust odors from construction equipment likely will not be significant enough to warrant mitigation. The pipelining process involves the use of chemicals including a resin that can emit a strong, temporary odor. It is important that buildings along the pipeline route maintain water in their sanitary sewer traps, a normal state for sanitary sewer traps, so that odors do not travel through the pipe into the building. MCES has a communication plan that includes a project web site, public hearings and door hangers that inform the building owners of the lining process and to verify that there is water in their sanitary sewer traps before the lining begins.

If dust generation becomes an issue during construction, dust control consists of wetting exposed dirt surfaces and cleaning access roads of dirt, dust, and other debris on a frequent basis. This will occur as often as daily, if needed to minimize dust.

Construction will take place during daylight hours on weekdays or as permitted by local ordinances.

23a. **Nearby resources.** Are any of the following resources on or in proximity to the site? Projects should search the Minnesota State Historic Preservation Office's (SHPO) National Register of Historic Places database.

***Note:** Project proposers must contact the SHPO at datarequestshpo@mnhs.org to request a database review to obtain information on any known historical or archaeological sites in the project area.
Include a copy of correspondence with SHPO with the submittal of this EIW form.

a. Archaeological, historical, or architectural resources? • Yes • No

b. Prime or unique farmlands or land within an agricultural preserve? • Yes • No

c. Designated parks, recreation areas, or trails? • Yes • No

d. Scenic views and vistas? • Yes • No

e. Other unique resources? • Yes • No

If yes, describe the resource and identify any project-related impacts on the resources. Describe any measures to minimize or avoid adverse impacts.

The Minnesota State Historic Preservation Office (SHPO) was contacted to request a database review for information on any known historical or archaeological sites within and surrounding the project area. SHPO noted that their procedure has recently changed, and information shall be found through individual desktop research using their online databases. Email correspondence with SHPO can be found in Figure B29 in Appendix B. The Minnesota State Historic Preservations Office's (SHPO) National Register Database and Historic Places Database were used to identify any locations of concern. Nothing was noted by either database in the project area or within a mile radius of the project.

A Cultural Resource Literature Review and Preliminary Reconnaissance was completed for Phase 2 and a Cultural Resource Desktop Review was completed for Phase 3. No areas of concern were found in these reviews.

There are no parks, recreation areas, or trails along Phase 3 of the project. However, temporary conveyance for Phase 2 will parallel a bike trail that goes through Lions Coon Creek Park. The temporary conveyance will also cross Coon Creek east of Hanson Boulevard NW and north of Northdale Boulevard NW. The temporary conveyance will cross Coon Creek again in the Highway 10 right-of-way, east of Creek Meadow Drive NW. The remainder of the temporary conveyance will be within city, county, and state right-of-way. Temporary conveyance will be present in these parks and along these trails, but impacts will be minimized as parks and trails will stay open and operable throughout the duration of the project.

23b. **Section 106 Review** (36 CFR 800) is required for all CWRF projects. The following forms can be found on the MPCA Wastewater and Stormwater Financial Assistance website at https://www.pca.state.mn.us/ppl. Select Clean Water Revolving Fund tab; then scroll to Facilities Plan and Facilities Plan Supplement for Wastewater Treatment Systems heading.

a. Project is exempt from review (attach completed *Exemption Checklist*) • Yes • No

b. Project is required to complete further Section 106 Review: • Yes • No

   a. SHPO
   b. Tribal consultation
   c. Other Consulting parties

24. **Visual impacts**. Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling towers or exhaust stacks? • Yes • No

If yes, explain.

N/A

25. **Compatibility with plans and land use regulations.** Is the project subject to an adopted local comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency? • Yes • No

If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.

The proposed project is subject to MCES-approved Comprehensive Plans for communities served by the MCES system, as well as to Metropolitan Council plans for sanitary sewer service.

The 1976 Metropolitan Land Planning Act requires local governments to prepare Comprehensive Plans and submit them to the Metropolitan Council to determine their consistency with metropolitan system plans. These are known as Tier 1 plans. The local comprehensive plan is to include a sanitary element addressing the collection and disposal of wastewater generated by the community. Further, under Minnesota Statute 473.513, local governments are required to submit a Comprehensive Sewer Plan (CSP) to the Metropolitan Council for its approval, describing service needs from the MCES regional system. These are known as Tier 2 plans. The Comprehensive Sewer Plan is broader in scope than the sewer element of the local comprehensive plan and provides detailed sewer system engineering information. The CSPs outline potential alignment for city trunk sewers as well as connection points to the MCES interceptors.

26. **Impact on infrastructure and public services.** Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? • Yes • No

If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see *EAW Guidelines* for details.)

N/A

27. **Cumulative impacts.** Minn. R. 4410.1700, subp. 7, item B requires that the RGU consider the "cumulative potential effects of related or anticipated future projects" when determining the need for an environmental impact statement. Identify any past, present or reasonably foreseeable future projects that may interact with the project described in this EAW in such a way as to cause cumulative impacts. Describe the nature of the cumulative impacts and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to cumulative impacts (or discuss each cumulative impact under appropriate item(s) elsewhere on this form).

This project is maintaining the existing infrastructure in place; therefore, it serves to delay more invasive utility replacement projects by extending the life span of the existing utilities.

28. **Other potential environmental impacts.** If the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation.

N/A

29. **Summary of issues.** List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.

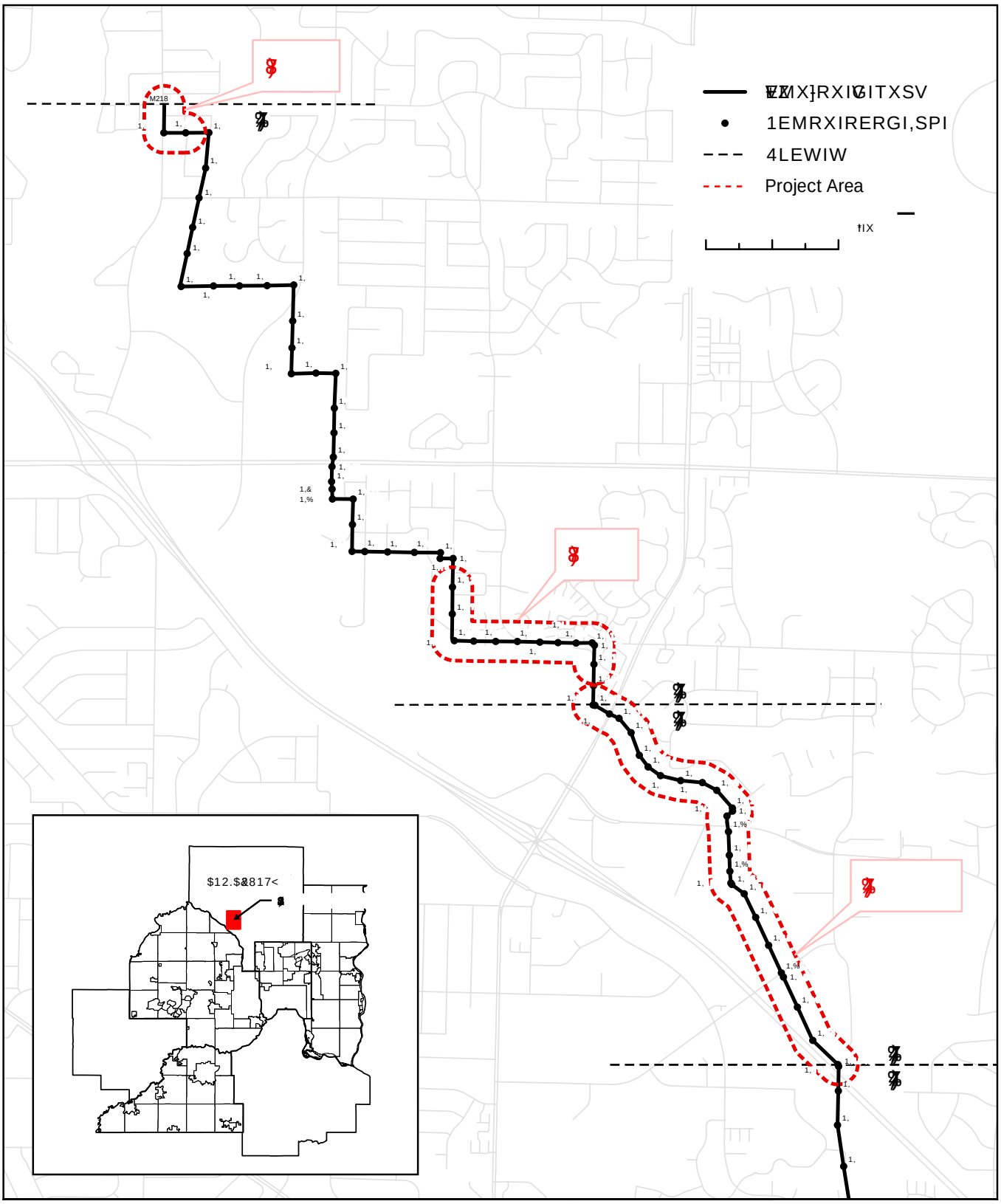
- x *Detailed erosion control plans must be prepared in accordance with the NPDES General Stormwater Construction Permit prior to construction.*
- x *Project work maps and plans will be developed and reviewed with local government units (cities, counties, state and watershed districts); with DNR if there are any potential impacts to public water, state species, native plant communities, Regionally Significant Ecological Areas, or State of Biodiversity Significance.*
- x *Containment plans need to be developed for the construction phase of each Phase to prevent any spills of fuel or other potential contaminants.*
- x *Soil borings need to be obtained during design for areas that are located in a high-water table to verify depth to water and dewatering requirements for excavation.*

EIW Figure B1

United States Geological Survey (USGS) Map

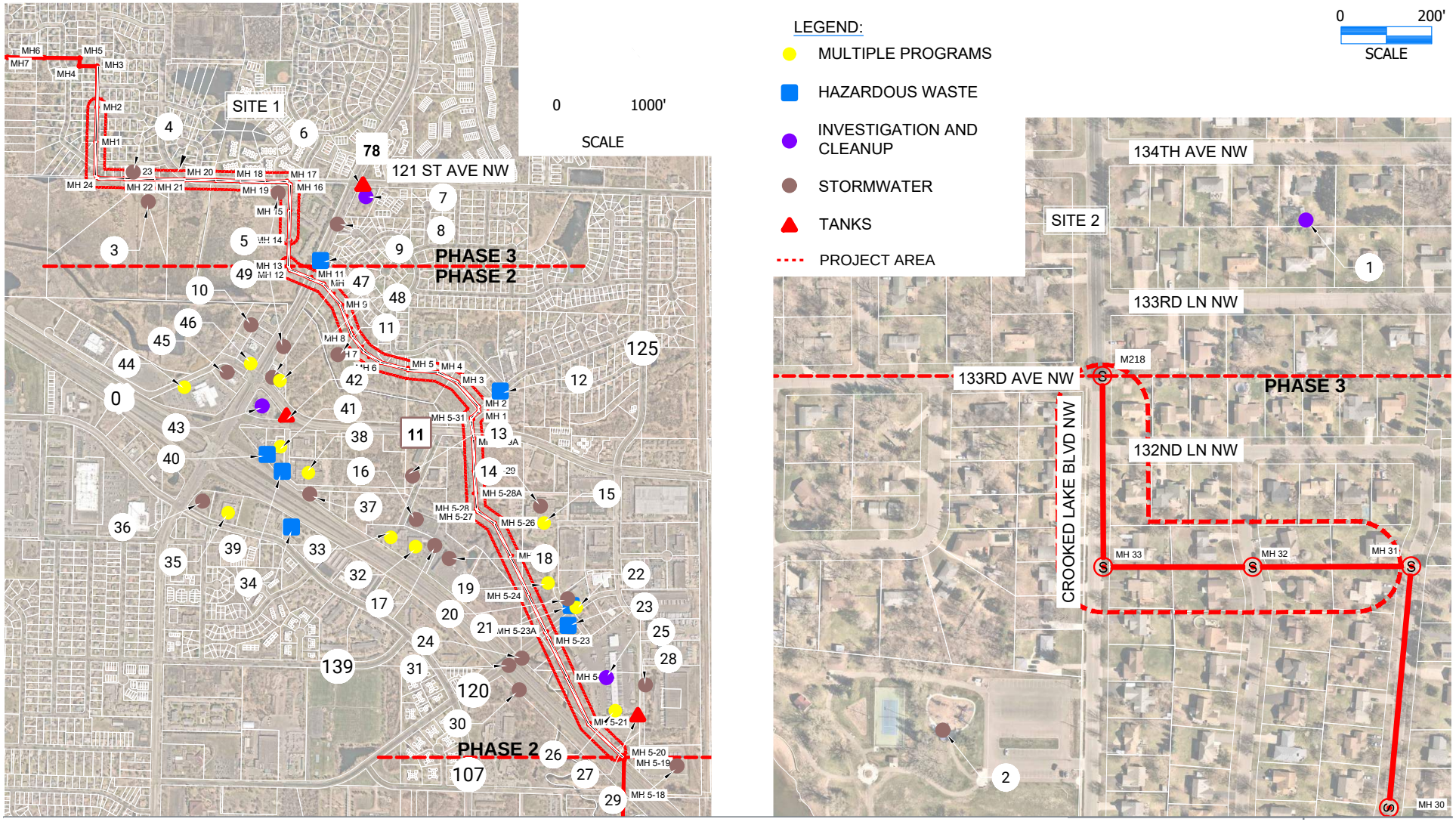
EIW Figure B2

Site Map With County Inset



EIW Figure B3

MPCA Hazardous Site Inventory



EIW Figure B3

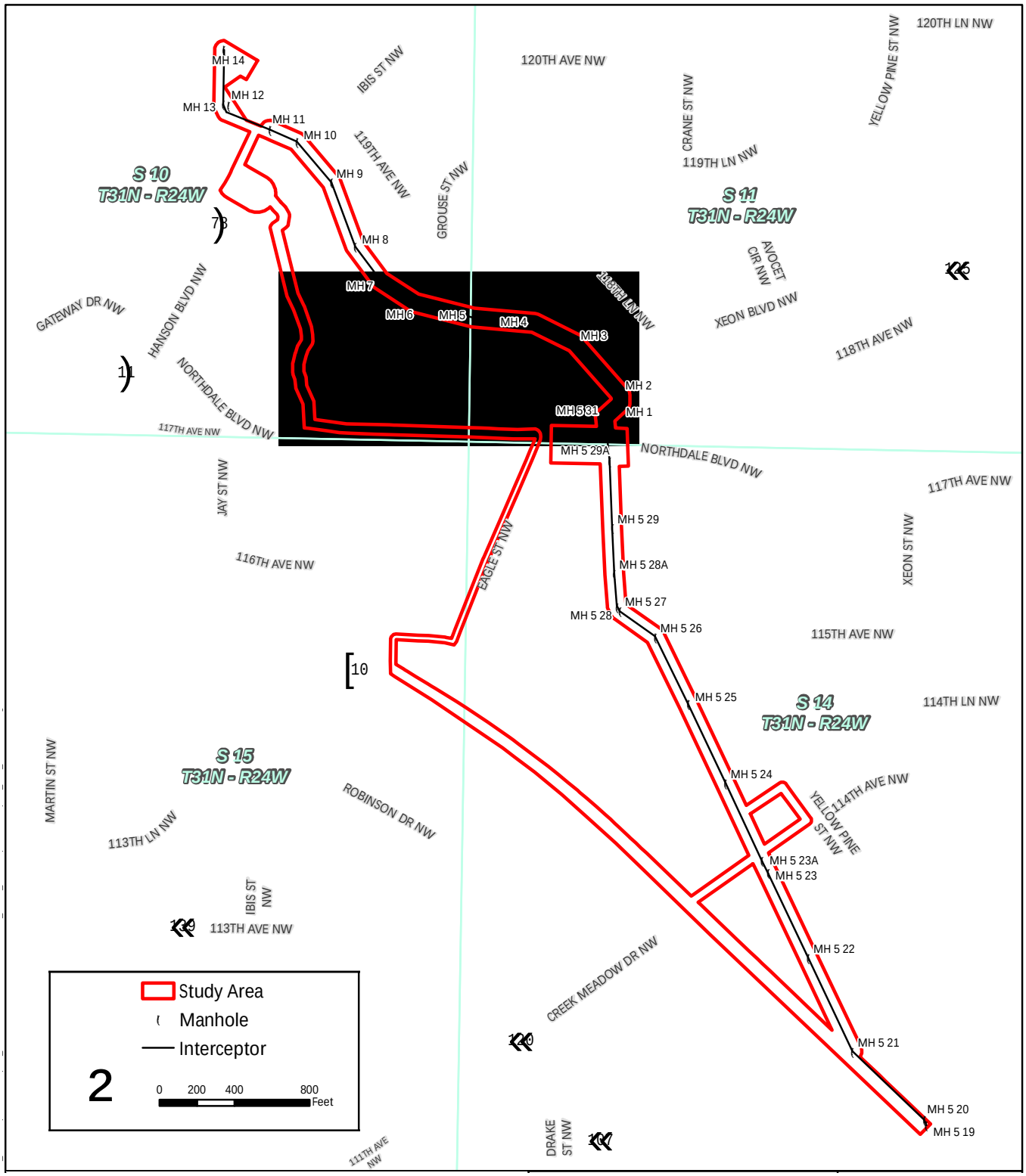
MPCA Hazardous Site Inventory

ID	MPCA_ID	NAME	ADDRESS	ACTIVITY	LATITUDE	LONGITUDE	STATUS
1	5A0007068	Absorptn Pnd	-	Site Assessment	45.21329536	-93.33550809	Active
2	C00048841	Crooked Lake Park Improvements	Crooked Lake Beach Park	Construction Stormwater	45.209987	-93.338513	Active
3	C00063893	Pheasant Hollow	12031 Partridge Street NW	Construction Stormwater	45.189999	-93.318826	Active
4	C00045348	City Project 17-4	-	Construction Stormwater	45.190385	-93.318657	Active
5	C00032378	Coon Rapids Project 11-2	Address Unknown	Construction Stormwater	45.1897	-93.3125	Inactive
6	T50012316	Fastrip Markets	12095 Hanson Blvd	Underground Tanks	45.18997109	-93.30915388	Active
7	L50007468	Brooks Food Store #48	12095 Hanson Blvd	Petroleum Remediation, Leak Site	45.18967883	-93.30878472	Active
	L50009036	Brooks Food Store #48	12095 Hanson Blvd	Petroleum Remediation, Leak Site	45.18967883	-93.30878472	Active
8	C00055402	SP 002-678-025	-	Construction Stormwater	45.189061	-93.309846	Active
9	MNR000071217	North Suburban Chiropractic	12045 Hanson Blvd NW	Hazardous Waste, Very small quantity generator	45.1878007	-93.3106791	Active
10	C00057387	New Creations Coon Rapids	1805 Gateway Drive	Construction Stormwater	45.185953	-93.31292	Active
11	C00053256	Lions Coon Creek Park Redevelopment	1664 119th Ave NW	Construction Stormwater	45.184791	-93.310013	Active
12	MNR000034264	Anoka County Community Action	11740 Xeon Blvd NW	Hazardous Waste, Very small quantity generator	45.1834596	-93.30349179	Active
13	C00062964	Eagle Street Tech Center	11670 Eagle Street Northwest	Construction Stormwater	45.181903	-93.306303	Active
14	MNRNE3CZX	Medtronic PRL	11520 Yellow Pine St NW	Industrial Stormwater	45.180278	-93.301389	Active
15	00300232	Medtronic PRL	11520 Yellow Pine St NW	Air Quality	45.1799	-93.3012	Active
	MND981090194	Medtronic PRL	11520 Yellow Pine St NW	Hazardous Waste, Small quantity generator	45.1799	-93.3012	Active
	C00010444	Medtronic PRL	11520 Yellow Pine St NW	Construction Stormwater	45.1799	-93.3012	Inactive
	A00016840	Medtronic PRL	11520 Yellow Pine St NW	Industrial Stormwater	45.1799	-93.3012	Inactive
	MNRNE34R3	Medtronic PRL	11520 Yellow Pine St NW	Industrial Stormwater	45.1799	-93.3012	Inactive
16	A00022637	Park Precision Machining Inc	11551 Eagle St NW Ste 1	Industrial Stormwater	45.179945	-93.306623	Inactive
	MNRNE336L	Park Precision Machining Inc	11551 Eagle St NW Ste 1	Industrial Stormwater	45.179945	-93.306623	Active
17	MNRNE36F6	Reliance Machining Inc	11522 Eagle St NW Ste 2	Industrial Stormwater	45.17905	-93.305737	Inactive
18	MNRNE38MZ	Reliance Machining Inc	11521 Eagle St NW Ste 2	Industrial Stormwater	45.178699	-93.305252	Active
	A00021789	Reliance Machining Inc	11521 Eagle St NW Ste 2	Industrial Stormwater	45.178699	-93.305252	Inactive
19	C00016878	Medronic Inc Parking Lot EXP	11520 Yellow Pine St NW	Construction Stormwater	45.1776411	-93.3006208	Inactive
	T50012994	Medronic Inc Parking Lot EXP	11520 Yellow Pine St NW	Aboveground Tanks	45.1776411	-93.3006208	Active
	T50012994	Medronic Inc Parking Lot EXP	11520 Yellow Pine St NW	Underground Tanks	45.1776411	-93.3006208	Active
	C00020404	Medtronic PRL Expansion & Renovation	11520 Yellow Pine St NW	Construction Stormwater	45.1776411	-93.3006208	Inactive
20	062651294	Woods Unlimited	11421 Yellow Pine St NW	Industrial Stormwater	45.17720652	-93.30003089	Inactive
21	MNS000116509	Spiral Manufacturing Co Inc	11419 Yellowpine St NW	Hazardous Waste	45.1771862	-93.3000101	Active
22	00300091	Modeen Company	1285 114th Ave NW Ste 140	Air Quality	45.177149	-93.2999598	Inactive
	MND154444350	Modeen Company	1286 114th Ave NW Ste 140	Hazardous Waste - One time generator	45.177149	-93.2999598	Active
23	MND064785231	Metric Tool & Stamping Inc	1300 114th Ave NW	Hazardous Waste, Minimal quantity generator	45.1768931	-93.3000724	Active
24	C00005275	Creek Meadown	-	Construction Stormwater	45.17566794	-93.30228311	Inactive
25	VP25580	USF Holland Trucking Terminal	11220 Xeon St NW	Voluntary Investigation Cleanup	45.1751734	-93.2984492	Inactive
26	MNR000107532	USF Holland Inc	11220 Xeon St NW	Hazardous Waste - Small quantity generator	45.17406679	-93.29802631	Active
	L50017573	USF Holland Inc	11220 Xeon St NW	Petroleum Remediation - Leak Site	45.17406679	-93.29802631	Inactive
	MNR05385M	USF Holland Inc	11220 Xeon St NW	Industrial Stormwater	45.17406679	-93.29802631	Inactive
	MNR0535F7	USF Holland Inc	11220 Xeon St NW	Industrial Stormwater	45.17406679	-93.29802631	Inactive
27	T50020593	USF Holland	11220 Xeon St NW	Underground Tanks	45.1739597	-93.2970495	Active
28	MNRNE34RL	NorthMarq - Coon Rapids	11225 Xeon St NW	Industrial Stormwater	45.17465	-93.296945	Inactive
29	C00053901	Xeon Industrial	-	Construction Stormwater	45.17246	-93.295891	Active

ID	MPCA_ID	NAME	ADDRESS	ACTIVITY	LATITUDE	LONGITUDE	STATUS
30	C00033717	Project 11-28 City Vehicle Parking Garag	11155 Robinson Dr	Construction Stormwater	45.1751	-93.3025	Inactive
31	C00027313	SP 0215-67 (TH 10) - Coon Rapids	-	Construction Stormwater	45.1755	-93.3027	Inactive
32	A00021683	Plateworks Plus	11501 Eagle St NW	Industrial Stormwater	45.17909444	-93.30660083	Inactive
	BF0001445	Plateworks Plus	11501 Eagle St NW	Petroleum Brownfield and Voluntary Investigation and Cleanup	45.17909444	-93.30660083	Active
	MN5000117259	Plateworks Plus	11501 Eagle St NW	Hazardous Waste - Very small quantity generator	45.17909444	-93.30660083	Active
33	MNR000077123	BTW Inc	11551 Eagle St NW Ste 3	Hazardous Waste - Minimal Quantity Generator	45.1793311	-93.3076373	Active
	MNRNE33JQ	BTW Inc	11551 Eagle St NW Ste 3	Industrial Stormwater	45.1793311	-93.3076373	Inactive
	MNRNE38R6	BTW Inc	11551 Eagle St NW Ste 3	Industrial Stormwater	45.1793311	-93.3076373	Inactive
	MNRNE3BRQ	BTW Inc	11551 Eagle St NW Ste 3	Industrial Stormwater	45.1793311	-93.3076373	Inactive
	MNRNE3CR4	BTW Inc	11551 Eagle St NW Ste 3	Industrial Stormwater	45.1793311	-93.3076373	Active
34	MNR000020552	Healthpartners Coon Rapids Medical	11475 Robinson Dr NW	Hazardous Waste, Very small quantity generator	45.1797342	-93.3118876	Active
35	00300230	Caliber Collision - Coon Rapids 3309	11585 Robinson Drive	Air Quality	45.1802256	-93.3145236	Inactive
	BF0001376	Caliber Collision - Coon Rapids 3309	11585 Robinson Drive	Brownfield Voluntary Investigation and Cleanup	45.1802256	-93.3145236	Inactive
	MNR000061937	Caliber Collision - Coon Rapids 3309	11585 Robinson Drive	Hazardous Waste - Very small quantity generator	45.1802256	-93.3145236	Active
36	C00031765	United Educators Credit Union	11599 Robinson Dr. NW	Construction Stormwater	45.1805401	-93.315559	Active
	LS0015537	Phillips 66 #24273	11599 Robinson Dr NW	Petroleum Remediation - Leak Site	45.1805401	-93.3155656	Inactive
	T50004605	Phillips 66 #24273	11599 Robinson Dr NW	Underground Tanks	45.1805401	-93.3155656	Active
	MND985745991	Phillips Petroleum Co 55 24273	11591 Robinson Dr NW	Hazardous Waste - Minimal Quantity Generator	45.1805424	-93.3155623	Active
37	C00012895	Keller Williams - Marshfield Ponds	1760 116th Ave NW	Construction Stormwater	45.1807854	-93.3114532	Inactive
38	006212443	Steinwall, Inc. - CR1	1759 116th Ave NW	Industrial Stormwater	45.181438	-93.311347	Inactive
	MND006480966	Steinwall, Inc. - CR1	1759 116th Ave NW	Hazardous Waste - Very small quantity generator	45.181438	-93.311347	Active
	MNRNE37TR	Steinwall, Inc. - CR1	1759 116th Ave NW	Industrial Stormwater	45.181438	-93.311347	Inactive
	MNRNE39BD	Steinwall, Inc. - CR1	1759 116th Ave NW	Industrial Stormwater	45.181438	-93.311347	Active
39	MNR000026450	Metro Moulded Parts Inc	11610 Jay St NW	Hazardous Waste - Very small quantity generator	45.1813626	-93.3122396	Active
40	MND981527567	Mr Bs	1818 117th Ave NW	Hazardous Waste	45.1818578	-93.3128511	Inactive
41	00300188	Coon Rapids Collision	11630 Jay St NW	Air Quality	45.18217396	-93.31240744	Active
	LS0009722	Coon Rapids Collision	11631 Jay St NW	Petroleum Remediation - Leak Site	45.18217396	-93.31240744	Inactive
	MND981200900	Coon Rapids Collision	11632 Jay St NW	Hazardous Waste - Very small quantity generator	45.18217396	-93.31240744	Inactive
	MND981960693	Coon Rapids Collision	11633 Jay St NW	Hazardous Waste - Very small quantity generator	45.18217396	-93.31240744	Active
42	T50000119	Nedegaard Construction/J&B Properties	1804 Northdale Blvd	Underground Tanks	45.1830844	-93.3120875	Inactive
43	LS0006696	Nedegaard Construction	11814 Northdale Blvd	Petroleum Remediation - Leak Site	45.1833107	-93.31317205	Inactive
44	C00047930	Rapids Honda	1950 Gateway Dr	Construction Stormwater	45.184021	-93.316415	Active
	C00049074	Rapids Honda	1951 Gateway Dr	Construction Stormwater	45.184021	-93.316415	Active
	T50130808	Rapids Honda	1952 Gateway Dr	Aboveground Tanks	45.184021	-93.316415	Active
45	C00037657	McDonalds	-	Construction Stormwater	45.184365	-93.314719	Inactive
46	C00032516	Holiday 3514	1855 Gateway Drive NW	Construction Stormwater	45.18452	-93.31364	Inactive
	T50125593	Holiday 3514	1855 Gateway Drive NW	Underground Tanks	45.18452	-93.31364	Active
47	C00061932	Shine Car Wash	1829 Northdale Blvd NW	Construction Stormwater	45.184324	-93.312657	Active
48	BF0001760	Coon Rapids BP	1829 Northdale Blvd NW	Petroleum Brownfield	45.18432085	-93.31252829	Active
	L50014636	Coon Rapids BP	1829 Northdale Blvd NW	Petroleum Remediation - Leak Site	45.18432085	-93.31252829	Inactive
	LS0021471	Coon Rapids BP	1829 Northdale Blvd NW	Petroleum Remediation - Leak Site	45.18432085	-93.31252829	Inactive
	MND985724236	Coon Rapids BP	1829 Northdale Blvd NW	Hazardous Waste - Minimal quantity generator	45.18432085	-93.31252829	Active
	T50010301	Coon Rapids BP	1829 Northdale Blvd NW	Underground Tanks	45.18432085	-93.31252829	Inactive
49	C00066853	Take 5 Oil Change Coon Rapids	11851 Hanson Blvd NW	Construction Stormwater	45.184804	-93.312431	Active

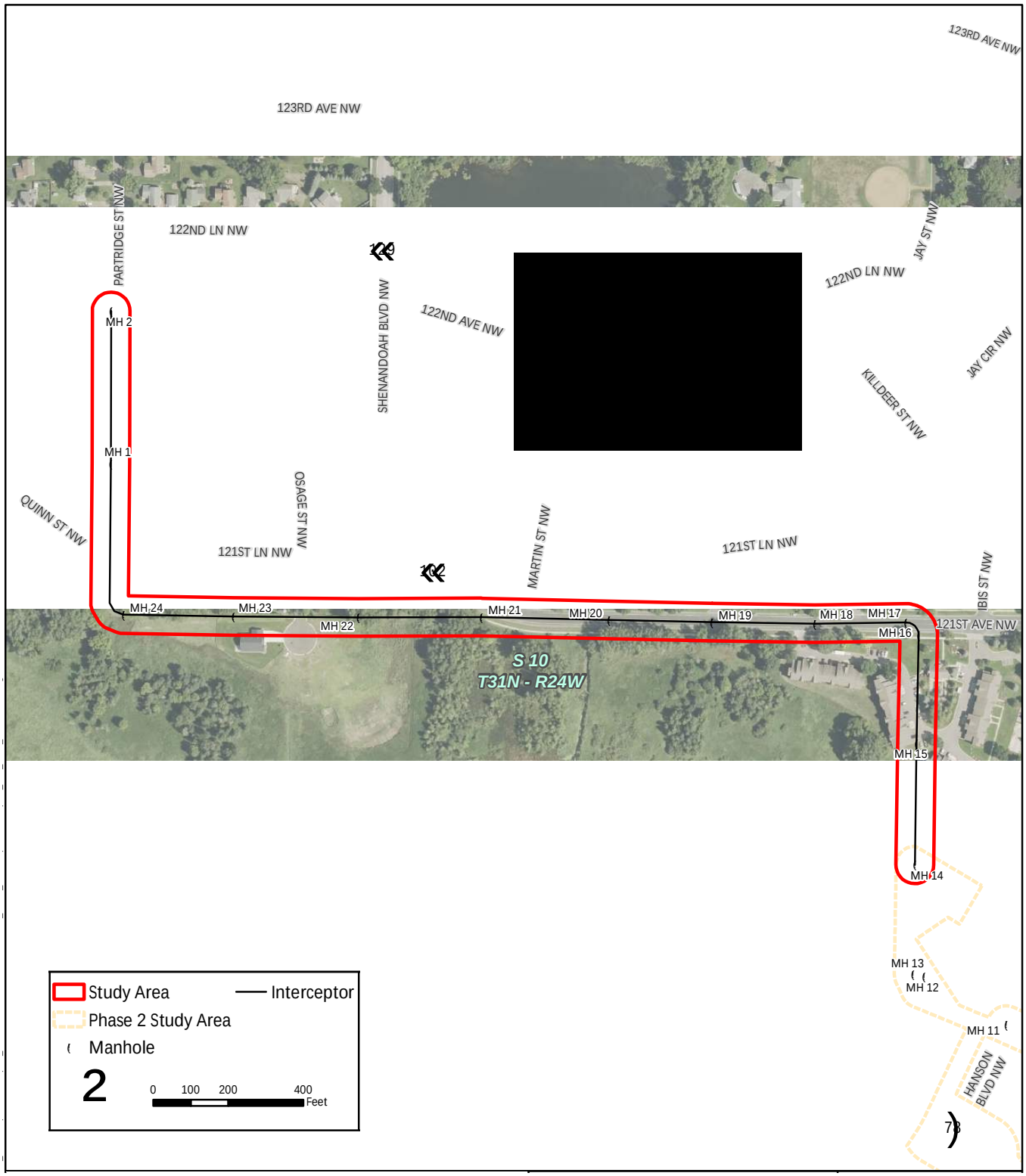
EIW Figure B4

Phase 2 Wildlife Management Areas



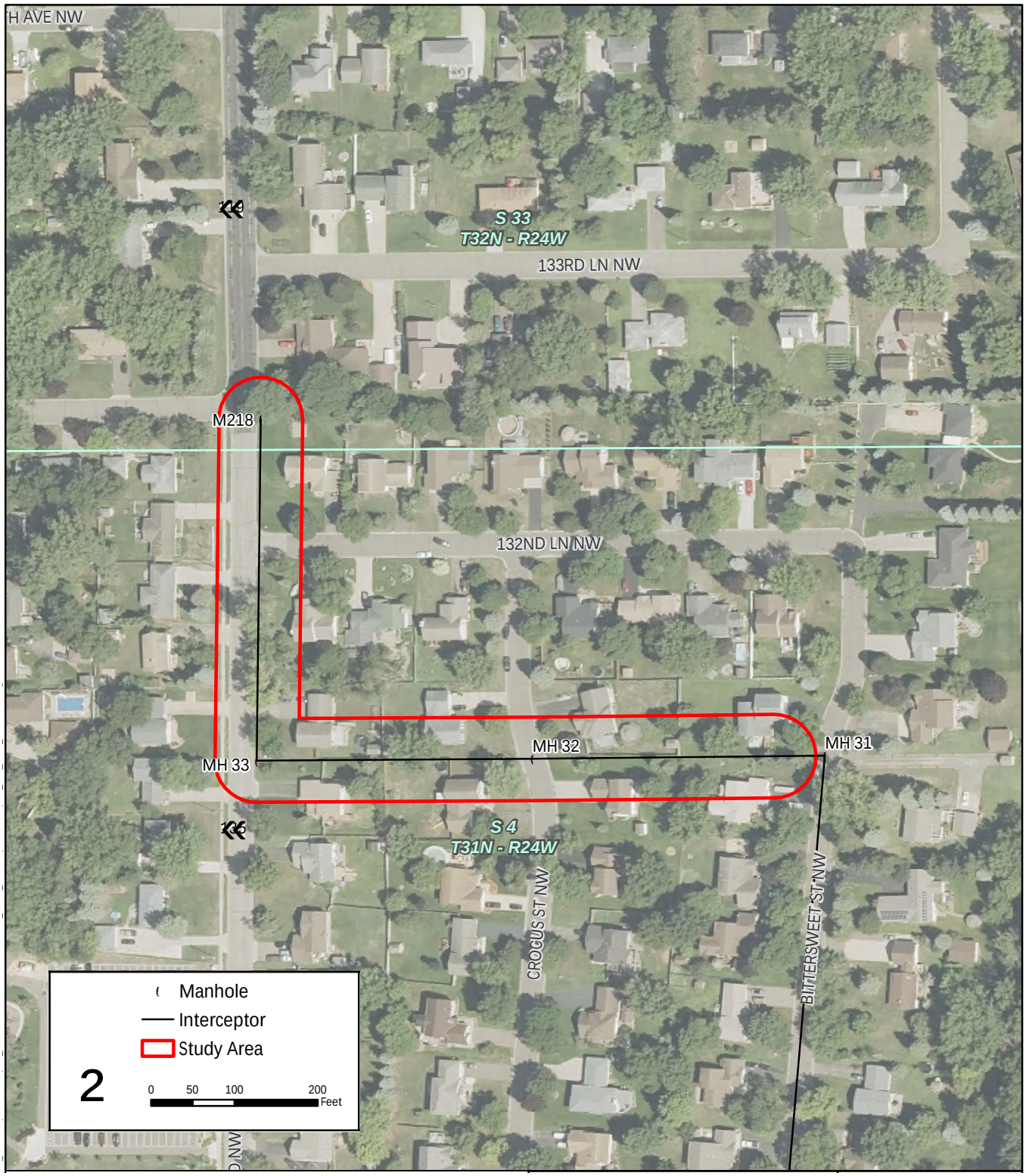
EIW Figure B5

Phase 3 Site 1 Wildlife Management Areas



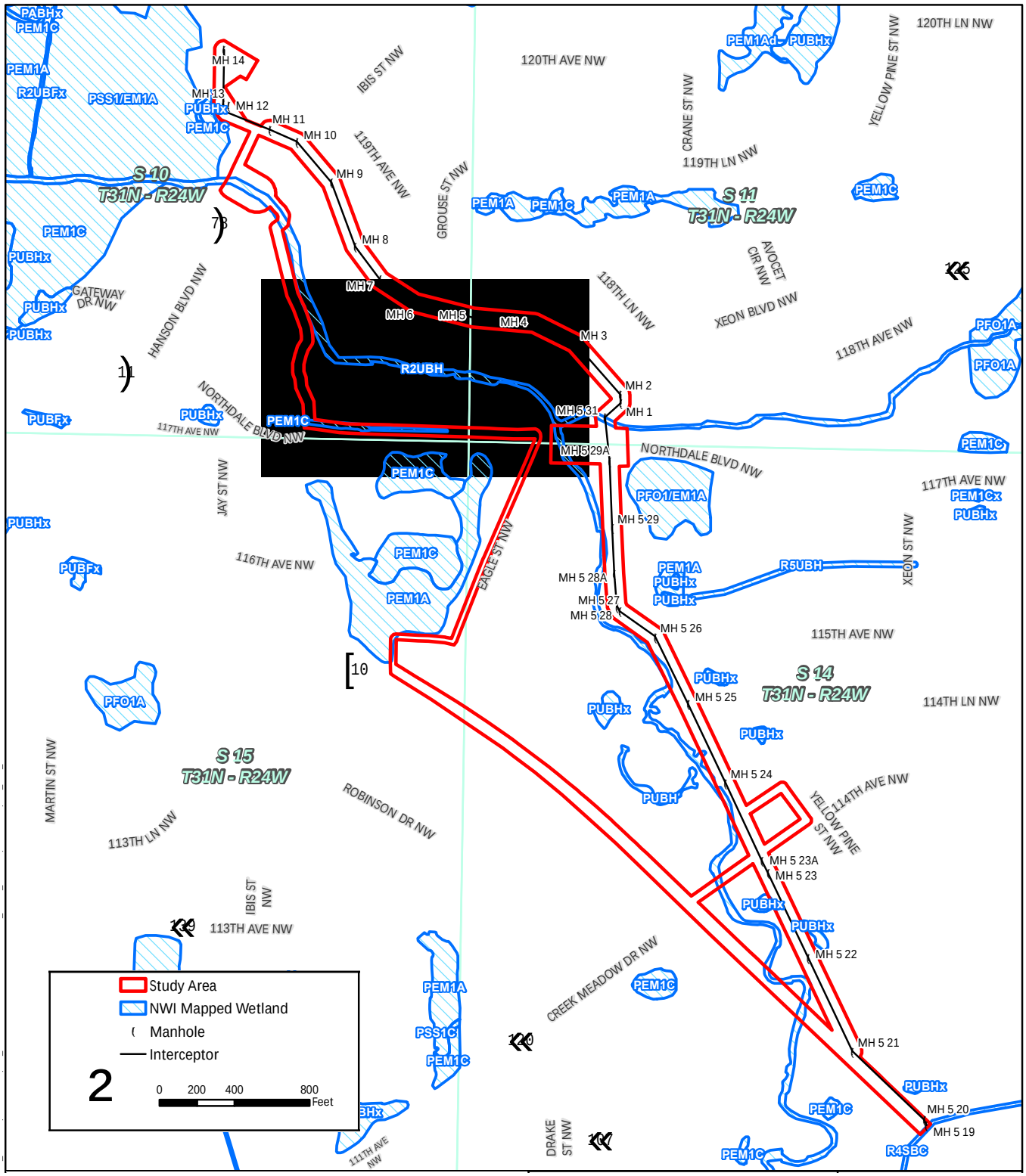
EIW Figure B6

Phase 3 Site 2 Wildlife Management Areas



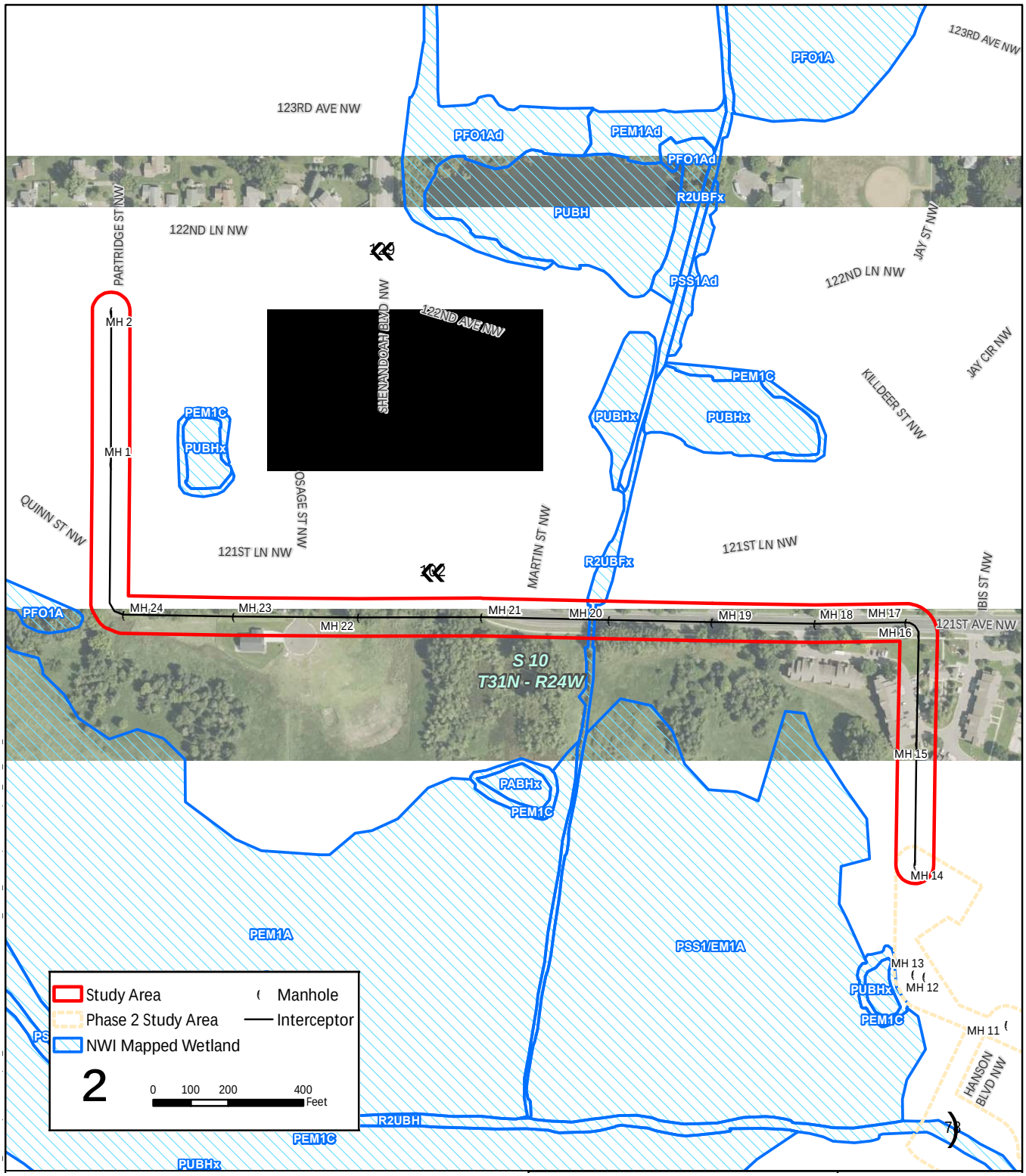
EIW Figure B7

Phase 2 National Wetland Inventory



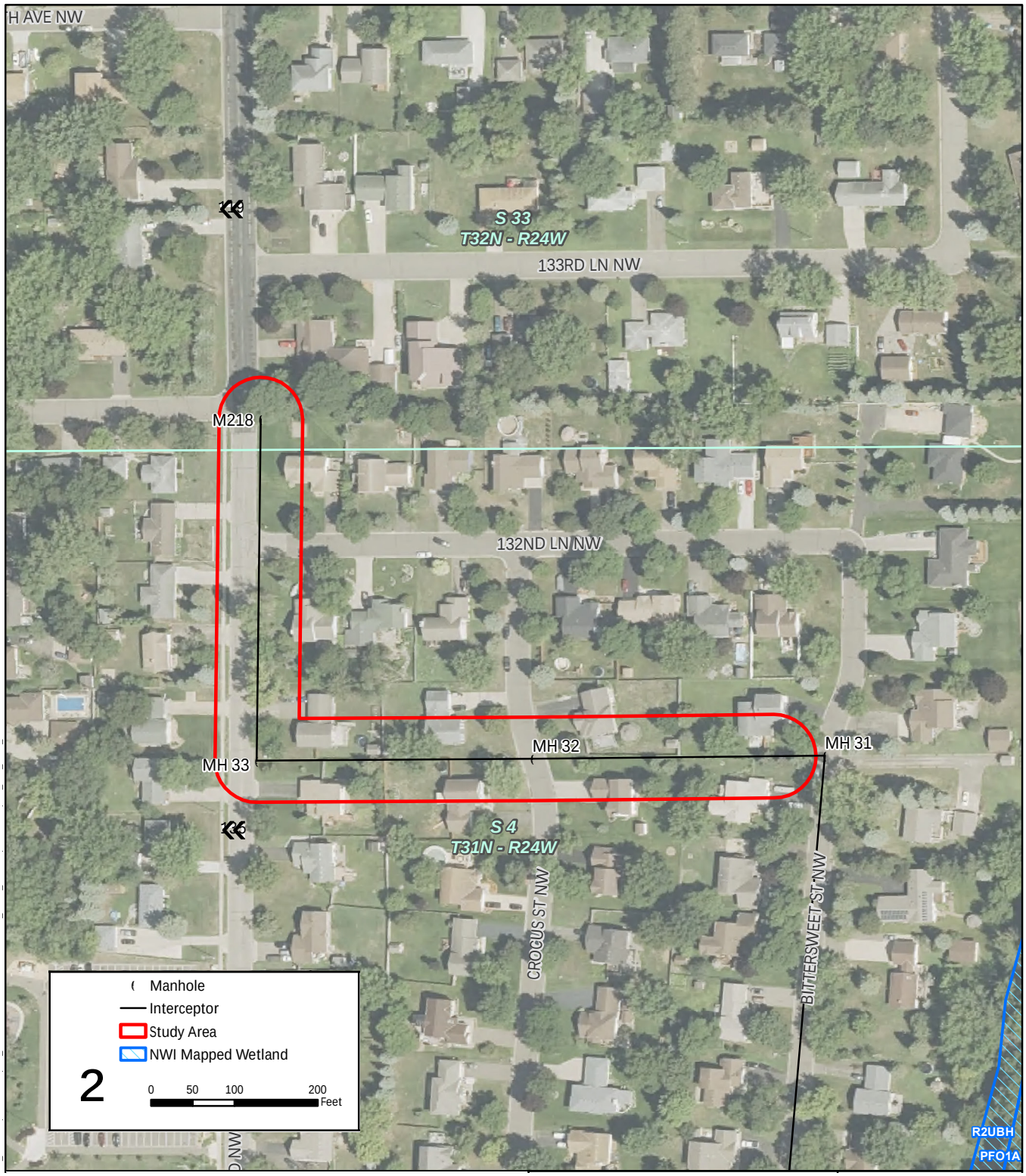
EIW Figure B8

Phase 3 Site 1 National Wetland Inventory



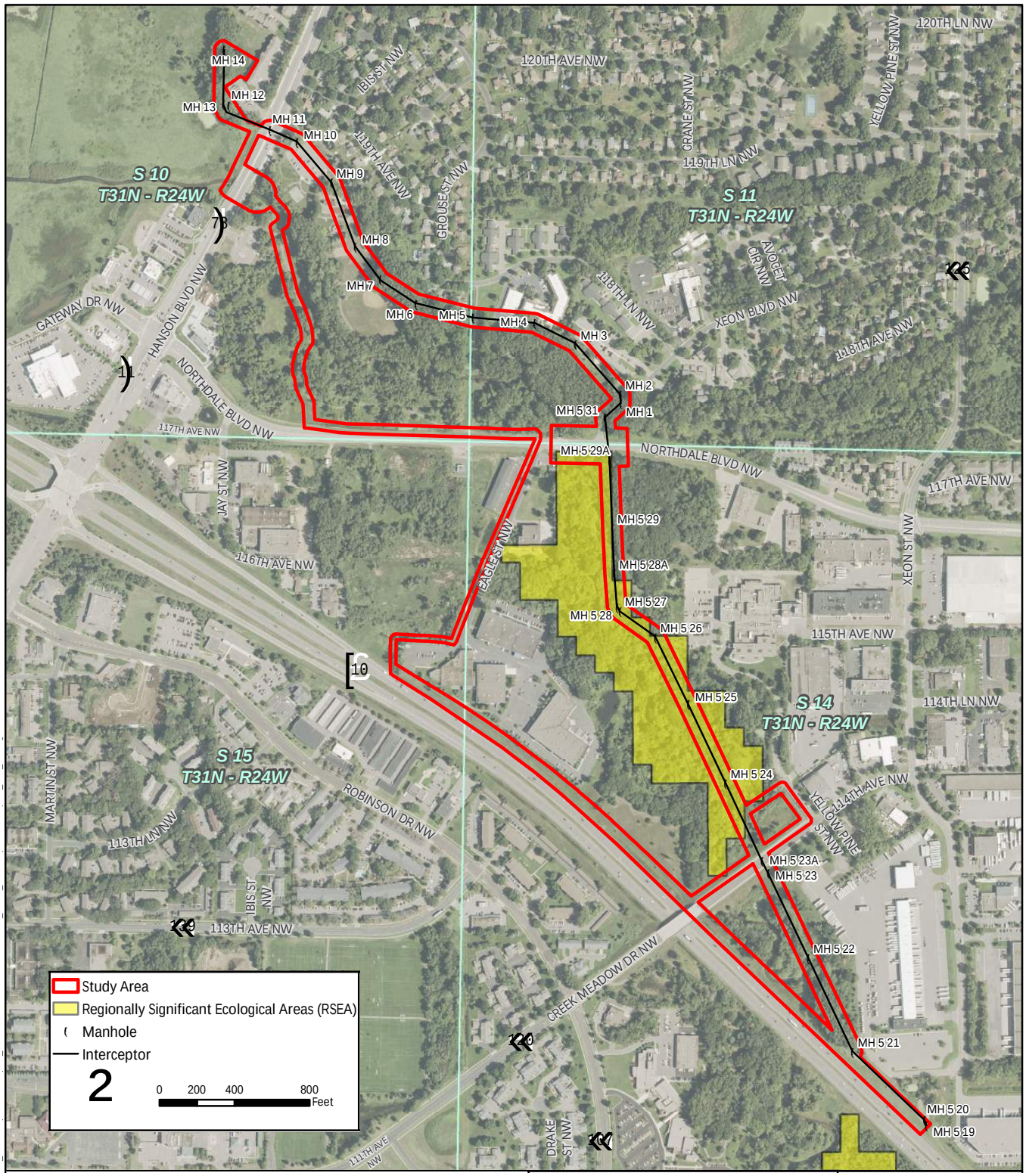
EIW Figure B9

Phase 3 Site 2 National Wetland Inventory



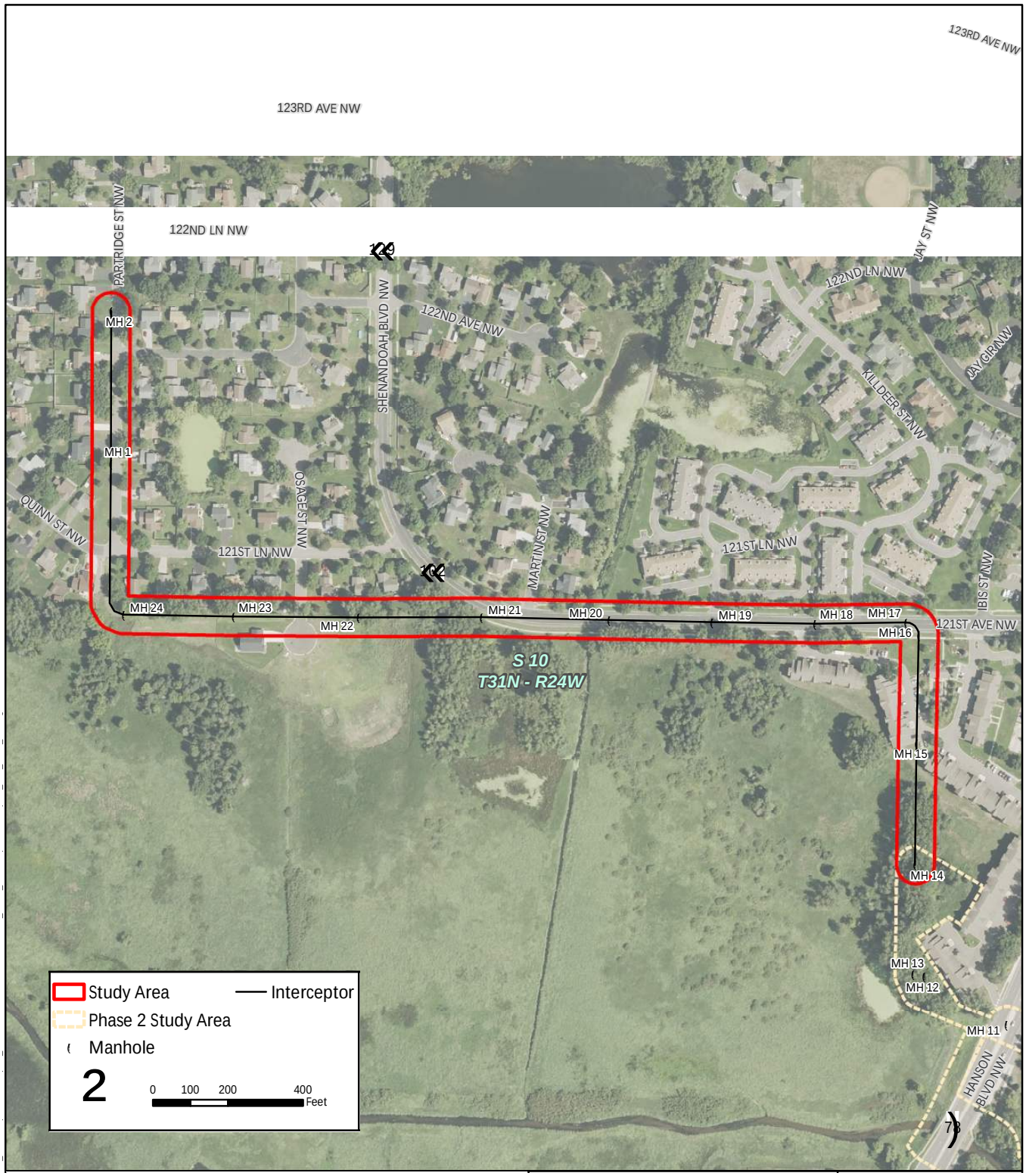
EIW Figure B10

Phase 2 Regionally Signi cant Ecological Areas



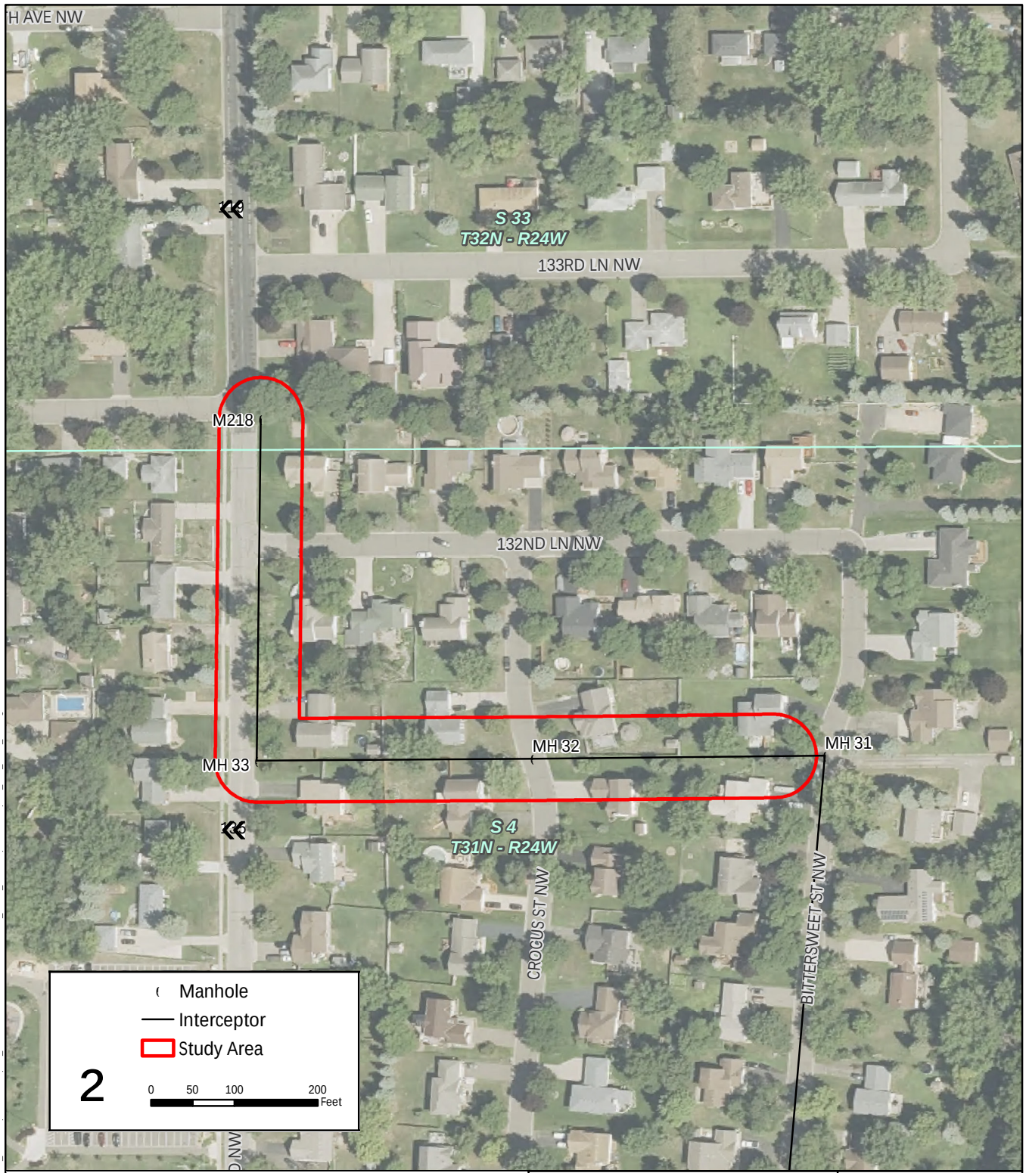
EIW Figure B11

Phase 3 Site 1 Regionally Signi cant Ecological Areas



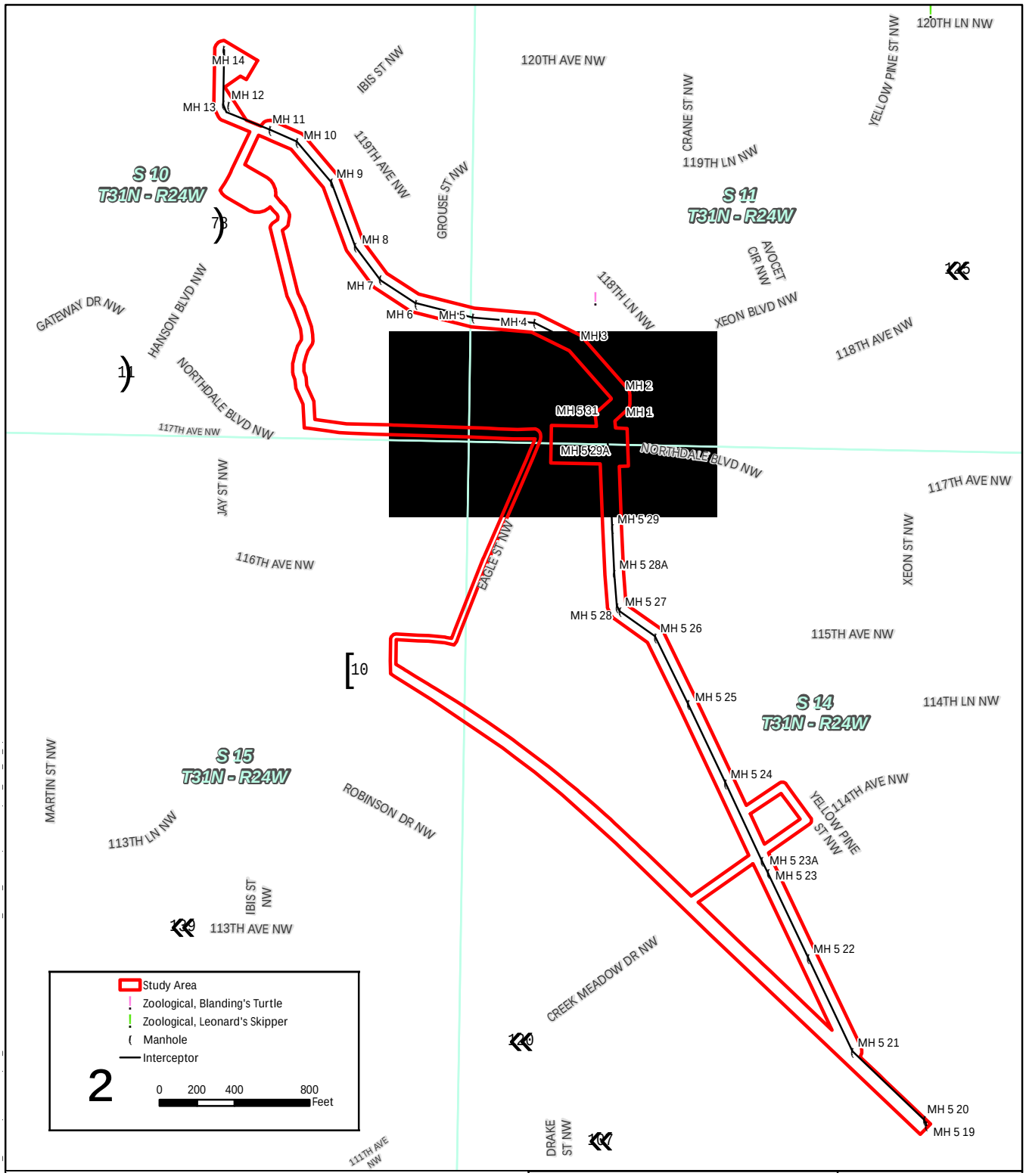
EIW Figure B12

Phase 3 Site 2 Regionally Signi cant Ecological Areas



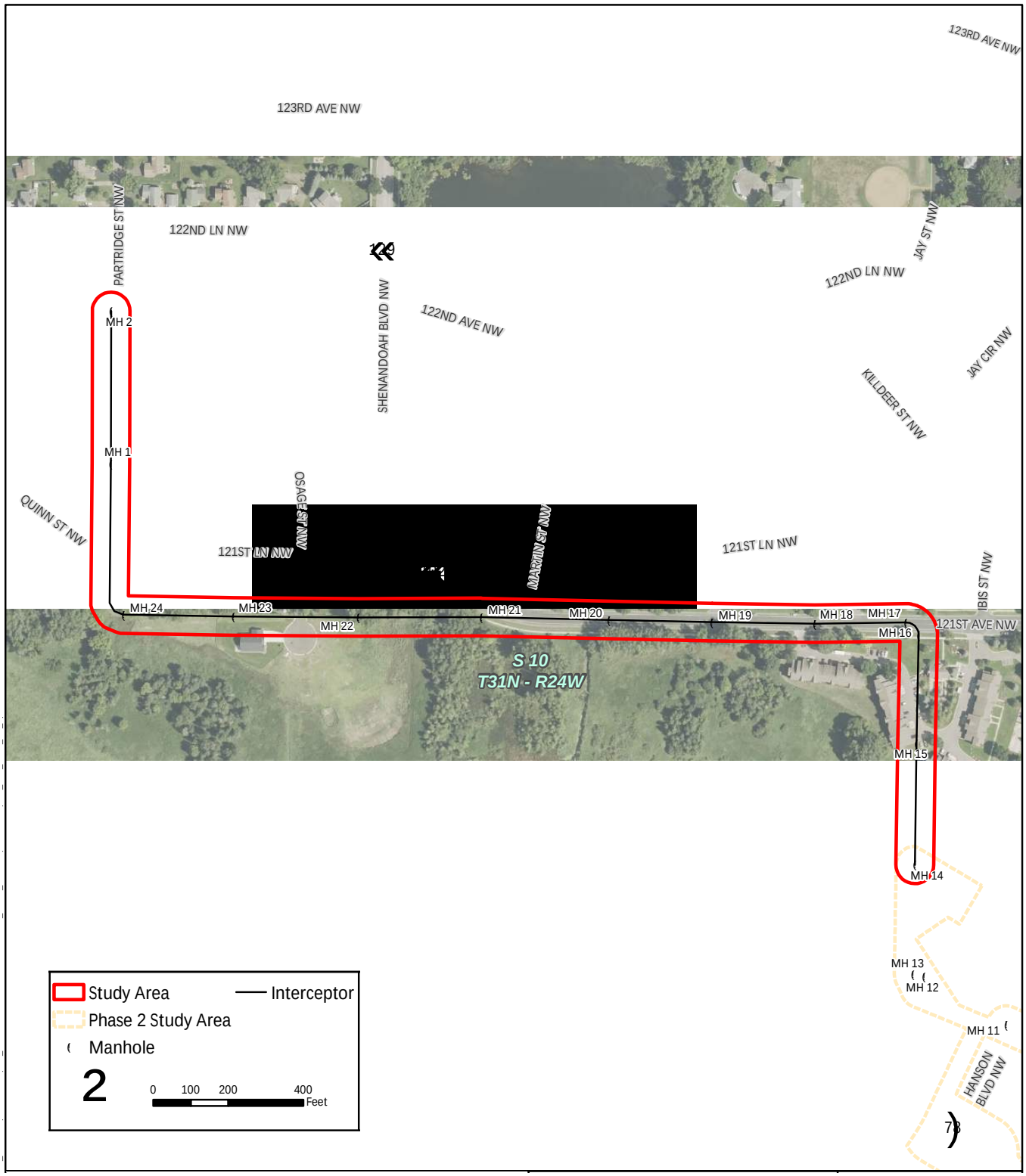
EIW Figure B13

Phase 2 State-Listed Threatened and Endangered Species



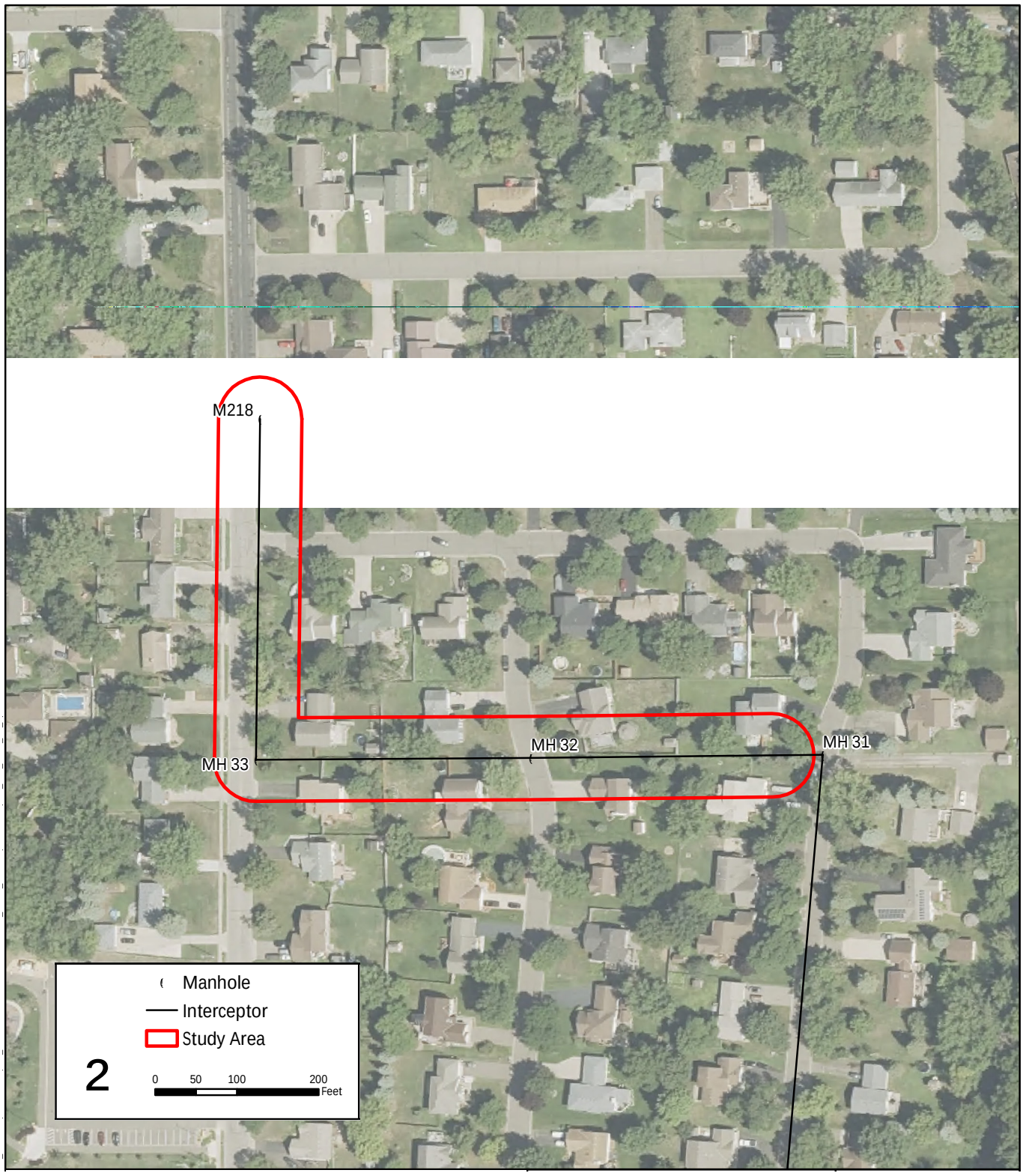
EIW Figure B14

Phase 3 Site 1 State-Listed Threatened and Endangered Species



EIW Figure B15

Phase 3 Site 2 State-Listed Threatened and Endangered Species



EIW Figure B29

Minnesota State Historic Preservation Of ce (SHPO) Correspondence

RQ	QS	RR
RP	QS	S
RP	QS	PQ
RP	QS	PQ
RP	QS	PP
RP	QS	PS
RP	QS	PT