

Applicant: Madelyn Nierengarten; CenterPoint Energy  
Consultant: Zachary Wrench; Merjent, Inc.  
Project: Natural Gas Pipe Replacement  
Location: Vernon Avenue and Walnut Drive: Edina  
Applicable Rule(s): 2, 3, 4, 5, and 6  
Reviewer(s): Louise Heffernan and Bob Obermeyer; Barr Engineering Co.

### **General Background & Comments**

CenterPoint Energy is proposing to abandon and replace 7,553 lineal feet of natural gas pipeline along Londonderry Road, Lincoln Drive and Vernon Avenue in Edina. The pipe installation will be installed by directional boring and will cross the North Fork of Nine Mile Creek (Creek) at Londonderry Road and at Vernon Avenue. The replacement pipe at the location of the Creek crossings will be installed a minimum of 10-feet beneath the bottom of the Creek channel. The directional boring pits for the Creek crossings will be a minimum distance of 50-feet from the centerline of the Creek. The boring pits for the Londonderry crossing will be located at an elevation that is 2.2 feet above 100-year frequency flood elevation of 868.3 M.S.L. for the Creek (the eastern boring pit is located at the lowest elevation of 870.5 M.S.L.). The boring pits at the Vernon Avenue crossing of the creek are to be located at elevations 862.2 M.S.L. (eastern boring pit) and 859.7 M.S.L. (western boring pit), respectively. The 100-year frequency flood elevation of the Creek at Vernon Avenue is 866.5 M.S.L. The boring pits are located 4.3 feet (east) and 6.8 feet (west) below the 100-year frequency flood elevation of the Creek.

The project is a linear project, as defined by the NMCWD rules, because the proposed land-disturbing activities include reconstruction of a public improvement, and reconstruction of utilities in a linear corridor. The project proposes no new impervious area for the installation of the replacement pipeline.

A NMCWD permit under Rule 2.0 Floodplain Management and Drainage Alterations, Rule 3.0 Wetland Management, Rule 4.0 Stormwater Management, Rule 5.0 Erosion and Sediment Control and Rule 6.0 Waterbody Crossings and Structures applies to the project.

#### **Exhibits Reviewed:**

1. Permit Application received July 14, 2022.
2. Project narrative and description dated July 14, 2022, prepared by Merjent.
3. Wetland Delineation Report, dated July 2022, prepared by Merjent.
4. Wetland Conservation Act Permit Application dated July 13, 2022, requesting a No-Loss Determination for the project.
5. Approved WCA No-loss determination dated July 29, 2022.

## **2.0 Floodplain Management and Drainage Alterations**

Proposed earth work (108 cubic yards of excavation for the directional boring pits) for utility improvements will take place below 866.5 M.S.L., the 100-year frequency flood elevation of the Creek at Vernon Avenue. Because the project will involve land-altering activities below the flood elevation at Vernon Avenue, the project must conform to the requirements of the District's Floodplain Management and Drainage Alterations Rule 2.0 in accordance with Rule 2.2.1.

Rule 2 criteria for floodplain and drainage alterations includes the following:

*2.3.1: The low floor elevation of all new and reconstructed structures must be constructed in accordance with the NMCWD Stormwater Rule, subsection 4.3.3*

The project does not include new or reconstructed buildings bridges or boardwalks that qualify as "structures" pursuant to NMCWD Resolution #22-02 adjacent to the Creek.

*2.3.2: Placement of fill below the 100-year flood elevation is prohibited unless fully compensatory flood storage is provided within the floodplain and:*

- a. at the same elevation +/- 1 foot for fill in the floodplain; or*
- b. at or below the same elevation for fill in the floodplain of a water basin or constructed stormwater facility.*

The project will not result in fill material placed below elevation 866.5 M.S.L., the flood elevation of the Creek at Vernon Avenue. Both of the boring pits at Vernon Avenue will result in excavation and temporary disturbance below elevation 866.5 M.S.L. At the completion of the pipe installation, the area will be restored to pre-project conditions and elevations.

*2.3.3. The District will issue a permit to alter surface flows only if it finds that the alteration is not reasonably likely to have a significant adverse impact on any upstream or downstream landowner and is not reasonably likely to have a significant adverse effect on flood risk, basin or channel stability, groundwater hydrology, stream base-flow, water quality or aquatic or riparian habitat.*

The project will not alter existing surface flows therefore will not have an adverse effect on flood risk, basin or channel stability, groundwater hydrology, stream base-flow, water quality or aquatic or riparian habitat.

*2.3.4 No structure may be placed, constructed, or reconstructed and no surface may be paved within 50 feet of the centerline of any water course, except that this provision does not apply to:*

- a. Bridges, culverts, and other structures and associated impervious surface regulated under Rule 6.0;*
- b. Trails 10 feet wide or less, designed primarily for nonmotorized use.*

No structure is proposed to be placed, constructed, or reconstructed as part of the project.

## **3.0 Wetlands Management**

The applicant has submitted a Wetland Boundary Report, dated July 2022, and a Wetland Conservation Act Permit Application (WCA) dated July 13, 2022, requesting a no-loss

determination based on MN Rule 8420.0415, Subpart F. The district is the local governmental unit (LGU) administering the requirements of WCA in Edina.

A July 28, 2022, site field review by Barr staff on behalf of the district concurred with the no-loss request by the applicant. The no-loss determination based on MN Rule 8420.0415, Subpart F was approved by the district being the LGU on July 29, 2022.

#### **4.0 Stormwater Management**

The district's requirements for both stormwater management and erosion and sediment control apply to the project because more than 50 cubic yards of material (108 cubic yards) will be disturbed, Rules 4.2.1a and 5.2.1a. The project qualifies as a linear project as defined for purposes of the NMCWD rule, and subsection 4.2.4 determines applicability of NMCWD's stormwater-management requirements. For linear projects creating less than one (1) acre of new or additional impervious area (zero (0) acres of net new impervious area is proposed to be created), the stormwater requirements of Rules 4.3.1 or 4.3.2 do not apply.

#### **5.0 Erosion and Sediment Control**

The district's requirements for erosion and sediment control applies to the project because more than 50 cubic yards of material will be disturbed (108 cubic yards), Rule 5.2.1a. Silt fence, sediment logs and inlet protection will be used for controlling sediment from leaving disturbed areas.

The contractor for the project will need to designate a contact who will remain liable to the district for performance under the District's Erosion and Sediment Control Rule 5.0 from the time the permitted activities commence until vegetative cover is established, in accordance with subsection 5.4.1e.

#### **6.0 Waterbody Crossings and Structures**

The District's Waterbody Crossings and Structures Rule 6.0 applies to the project because the replacement pipe is to be directionally bored beneath the North Fork of Nine Mile Creek at Londonderry Road and Vernon Avenue. The pipe at the Creek crossings will be a minimum of 10-feet beneath the bottom of the Creek channel. The boring pits for the Creek crossing will be a minimum distance of 50-feet from the centerline of the Creek.

Rule 6.3.1 states construction, improvement, repair, or removal of a waterbody crossing in contact with the bed or bank of a waterbody:

- a) *Must retain adequate hydraulic capacity and assure no net increase in the flood stage of the pertinent waterbody:*

The project will not result in a flood stage of the Creek. The directional boring pits at Vernon Avenue will result in excavation and temporary disturbance below elevation 866.5 M.S.L. the 100-year flood elevation of the Creek at this location. At the completion of the pipe installation, the area will be restored to pre-project conditions and elevations.

- b) *Must retain adequate navigational capacity pursuant to any requirements of the waterbody's classification by the district:*

This reach of the creek is not used for navigational purposes.

- c) *Must not be reasonably likely to significantly adversely affect water quality, change the existing flowline/gradient, or cause increased scour, erosion, or sedimentation:*

Rule 6.3.1c criteria is addressed in **Section 2.0 Floodplain Management** of this report.

- d) *Must provide post-project wildlife passage along each bank and riparian area*

The project will not permanently change conditions in a manner that will deter wildlife from using the area adjacent to the Creek. Construction activities may temporarily displace wildlife until the area is restored to pre-project conditions. Because wildlife native to the area will be able to continue using the project corridor, the NMCWD engineer concurs that the proposed project is in compliance with subsection 6.3.1e criteria.

- e) *Must represent the “minimal impact” solution to a specific need with respect to all other reasonable alternatives:*

The directional boring option proposed for the pipe replacement is significantly less disruptive than “open-cutting” a construction trench for the pipe installation.

Rule 6.3.2 states, *projects involving directional boring or horizontal drilling must provide for minimum clearance of 3 feet below the bed of a waterbody and a minimum setback of 50 feet from any stream bank for pilot, entrance and exit holes.*

The replacement pipe at the Creek crossings will be installed a minimum of 10-feet beneath the bottom of the Creek channel. The directional boring pits at the Creek crossing(s) will be a minimum distance of 50-feet from the centerline of the Creek.

Rule 6.3.3 states, removal of structures or other waterway obstructions:

- a) *Must maintain the original cross-section and bed conditions to the greatest extent practicable:*

No removal of structures or other water obstructions is proposed with the project.

- b) *Must achieve complete removal of the structure, including any footings or pilings that impede navigation:*

No removal of structures or other water obstructions is proposed with the project.

- c) *Must not involve the removal of a water-level control device:*

No removal of structures or other water obstructions is proposed with the project.

Rule 6.3.4 requires *that the plans must state no activity affecting the bed of a protected water may be conducted between April 1 and June 30 on public water basins to minimize impacts on fish spawning and migration:*

The replacement pipe installation and associated work does not include activities that affect the bed of the North Fork of Nine Mile Creek.

Rule 6.3.5 states, *a separate permit under District Rule 7.0 is not required for shoreline or streambank stabilization associated with a waterbody crossing or structure, but such stabilization must comply with the criteria 7.3.3c to e.*

No shoreline stabilization is proposed.

In accordance with the requirements of subsection 6.5 for the maintenance of the waterbody structures, CenterPoint Energy must submit a draft agreement with NMCWD providing for maintenance of the waterbody crossings (that is within City of Edina right-of-way or a drainage and/or a utility easement), then execute the agreement on approval of NMCWD.

### **11.0 Fees**

Fees for the project are:

Rules 2.0, 4.0, 5.0 and 6.0	\$1,800
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### **12.0 Financial Assurances**

Financial Assurances for the project are:

Rule 5: Perimeter Control: 702 L.F. x \$2.50/L.F. =	\$1,755
Inlet Protection: 42 x \$100 =	\$4,200
Site Restoration: 0.02 acres x \$2,500/acre =	\$50
Contingency and Administration	\$2,595

### **Findings**

1. The proposed project includes the information necessary for review.
2. The proposed project conforms with Rules 2, 3, 4, 5 and 6.

### **Recommendation**

*Approval, contingent upon:*

General Provisions

Financial assurance in the amount of \$8,600 for erosion and sediment control, and site restoration.

Per Rule 6.5, CenterPoint Energy must submit for NMCWD approval, then execute an agreement providing for the maintenance of the utility crossings beneath the channel of the North Fork of Nine Mile Creek.

Provide a name and contact information from the contractor responsible for the erosion and sediment control at the site. NMCWD must be notified if the responsible individual changes during the permit term.

*By accepting the permit, when issued, the applicant agrees to the following stipulations for closeout of the permit and release of the financial assurance after the project:*

Per Rule 4.5.6, an as-built drawing of the floodplain areas disturbed and restored conforming to the design specifications as approved by the district.



**EROSION and SEDIMENT CONTROL PLAN**

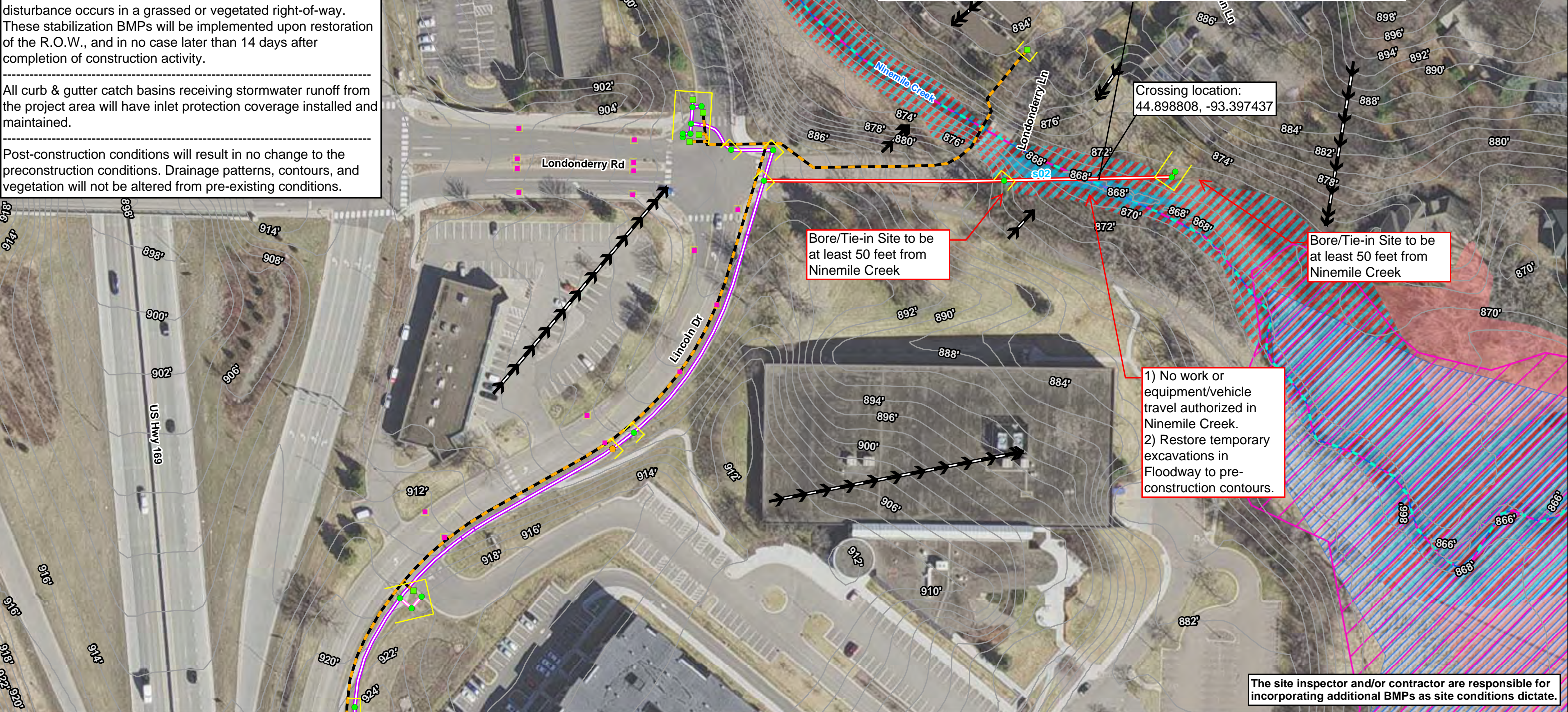
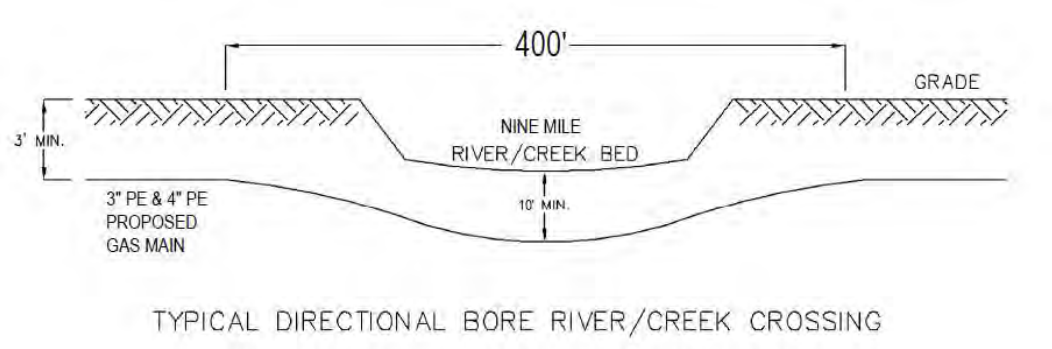
Perimeter sediment controls (curlex or equivalent) will be installed down-gradient of temporary stockpiles, displaced trench material, and bore pits.

All associated equipment will be clean of soil or sediment before leaving off site. Street sweeping will be performed routinely as needed to remove tracked sediment.

Seed and erosion control blanket will be installed wherever soil disturbance occurs in a grassed or vegetated right-of-way. These stabilization BMPs will be implemented upon restoration of the R.O.W., and in no case later than 14 days after completion of construction activity.

All curb & gutter catch basins receiving stormwater runoff from the project area will have inlet protection coverage installed and maintained.

Post-construction conditions will result in no change to the preconstruction conditions. Drainage patterns, contours, and vegetation will not be altered from pre-existing conditions.



0 50 100 Feet  
1 inch = 100 feet

**merjent.** **CenterPoint Energy**

For Environmental Review Purposes Only

**Figure 2: Site Plan**  
**Vernon Ave & Walnut Drive Project (WO# 102576451)**  
**CenterPoint Energy**  
**Edina, Hennepin County, Minnesota**  
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|------------------------------------|--------------------|--------------------------------|-------------------------------|
| Proposed Service Line              | Cut and Cap        | Stormdrain w/ inlet protection | Field Determined Wetland      |
| 2" Proposed Pipeline - Bore Method | Service Excavation | MN Impaired Streams            | NHD Waterbody                 |
| 3" Proposed Pipeline - Bore Method | BMP                | PWI Waterway                   | NWI Wetland                   |
| 4" Proposed Pipeline - Bore Method | 2' Contour         | PWI Basin                      | 1% Annual Chance Flood Hazard |
| Proposed Abandonment               | Stormwater Flow    | Field Determined Waterbody     | Administrative Floodway       |
| Bore/Tie-In Site                   |                    |                                |                               |

The site inspector and/or contractor are responsible for incorporating additional BMPs as site conditions dictate.

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Date: (6/1/2024)



**EROSION and SEDIMENT CONTROL PLAN**

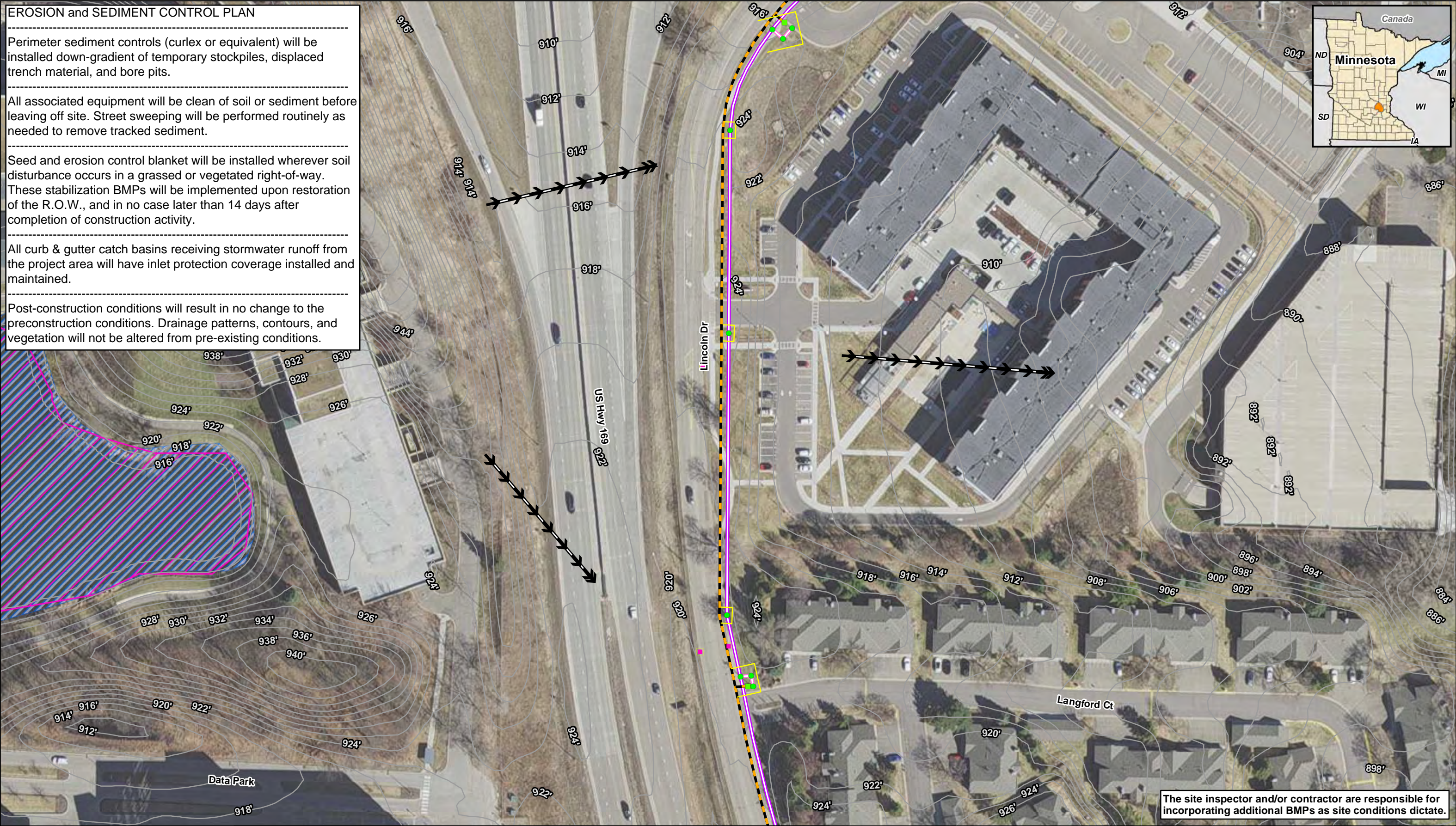
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**CenterPoint Energy**  
**Edina, Hennepin County, Minnesota**  
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	Proposed Service Line		Cut and Cap		Stormdrain w/ inlet protection		Field Determined Wetland
	2" Proposed Pipeline - Bore Method		Service Excavation		MN Impaired Streams		NHD Waterbody
	3" Proposed Pipeline - Bore Method		BMP		PWI Waterway		NWI Wetland
	4" Proposed Pipeline - Bore Method		2' Contour		PWI Basin		1% Annual Chance Flood Hazard
	Proposed Abandonment		Stormwater Flow		Field Determined Waterbody		Administrative Floodway
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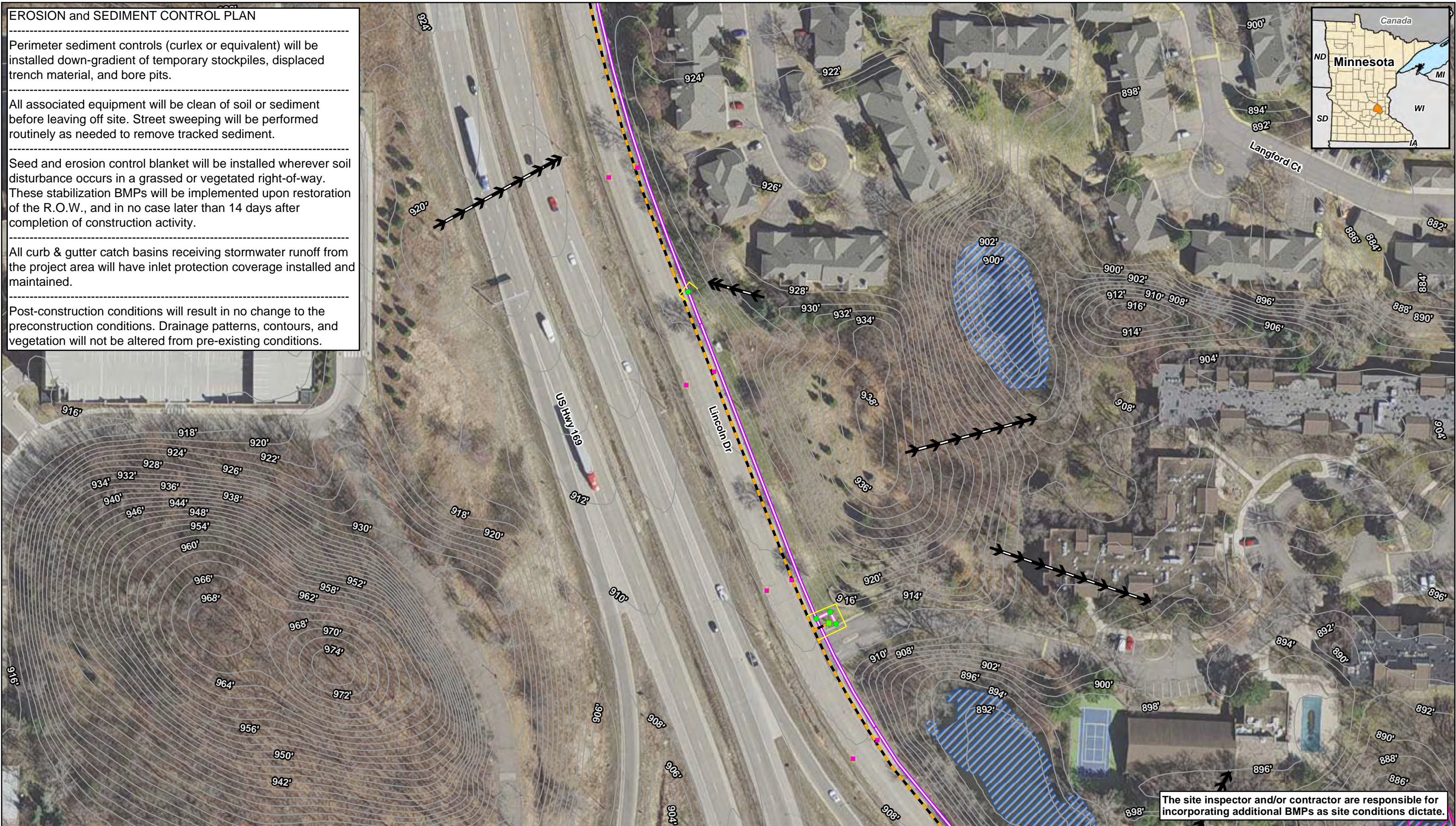
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**Edina, Hennepin County, Minnesota**  
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CenterPoint Energy

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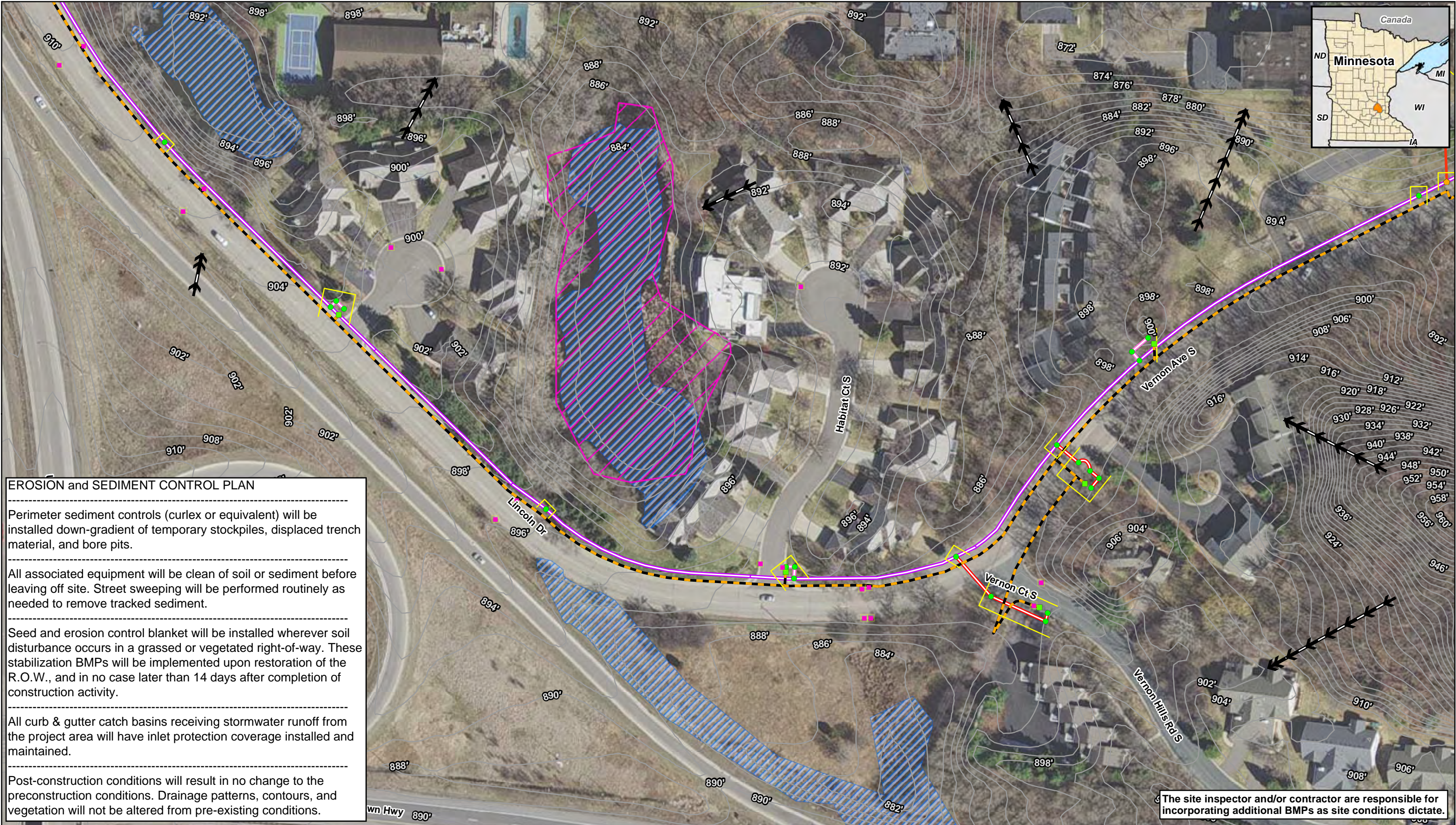
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|------------------------------------|--------------------|--------------------------------|-------------------------------|
| Proposed Service Line              | Cut and Cap        | Stormdrain w/ inlet protection | Field Determined Wetland      |
| 2" Proposed Pipeline - Bore Method | Service Excavation | MN Impaired Streams            | NHD Waterbody                 |
| 3" Proposed Pipeline - Bore Method | BMP                | PWI Waterway                   | NWI Wetland                   |
| 4" Proposed Pipeline - Bore Method | 2' Contour         | PWI Basin                      | 1% Annual Chance Flood Hazard |
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| Bore/Tie-In Site                   |                    |                                |                               |

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**EROSION and SEDIMENT CONTROL PLAN**

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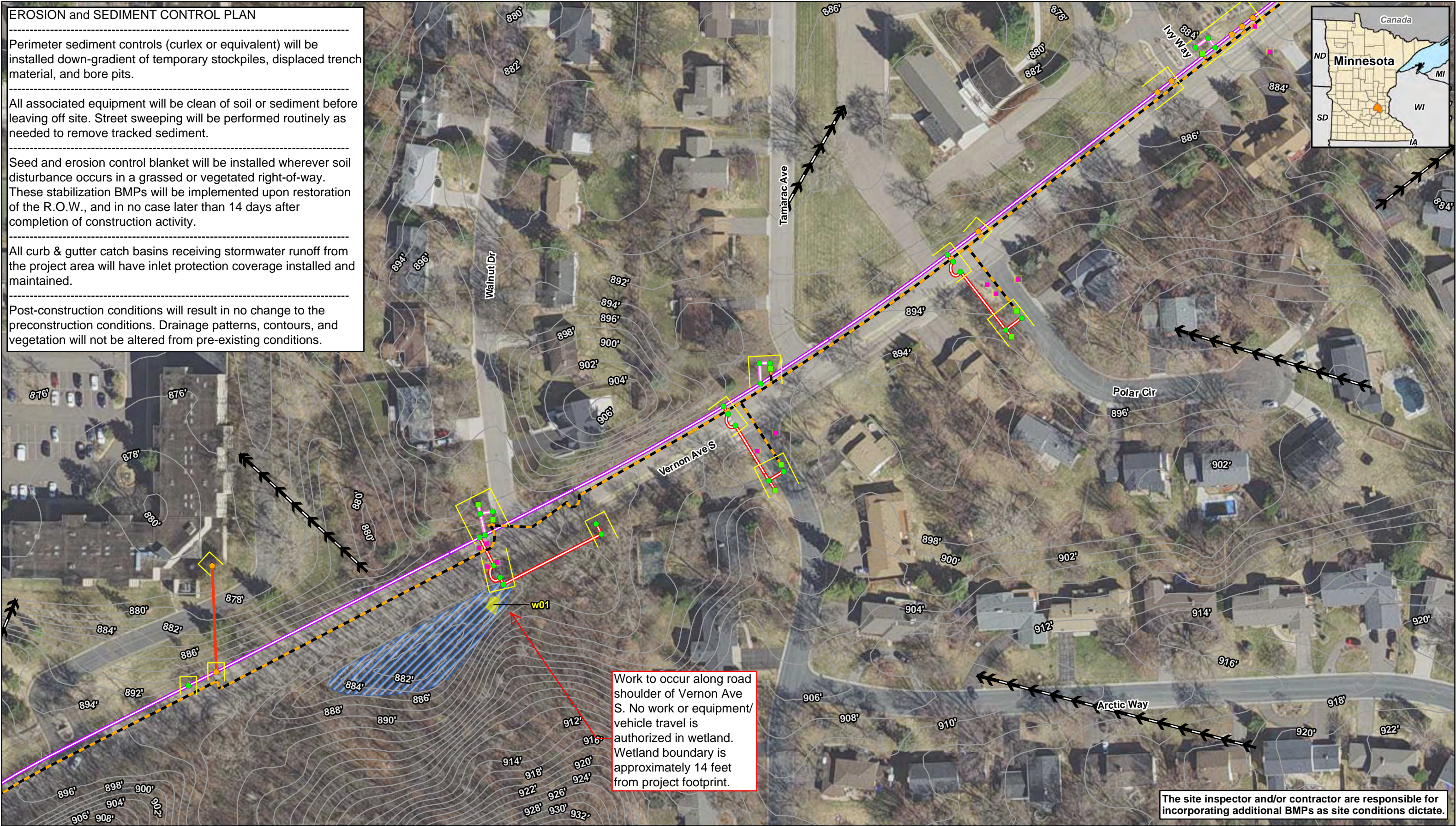
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Work to occur along road shoulder of Vernon Ave S. No work or equipment/ vehicle travel is authorized in wetland. Wetland boundary is approximately 14 feet from project footprint.

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Proposed Service Line

2" Proposed Pipeline - Bore Method

3" Proposed Pipeline - Bore Method

4" Proposed Pipeline - Bore Method

Proposed Abandonment

Bore/Tie-In Site

Cut and Cap

Service Excavation

BMP

2' Contour

Stormwater Flow

Stormdrain w/ inlet protection

MN Impaired Streams

PWI Waterway

PWI Basin

Field Determined Waterbody

Field Determined Wetland

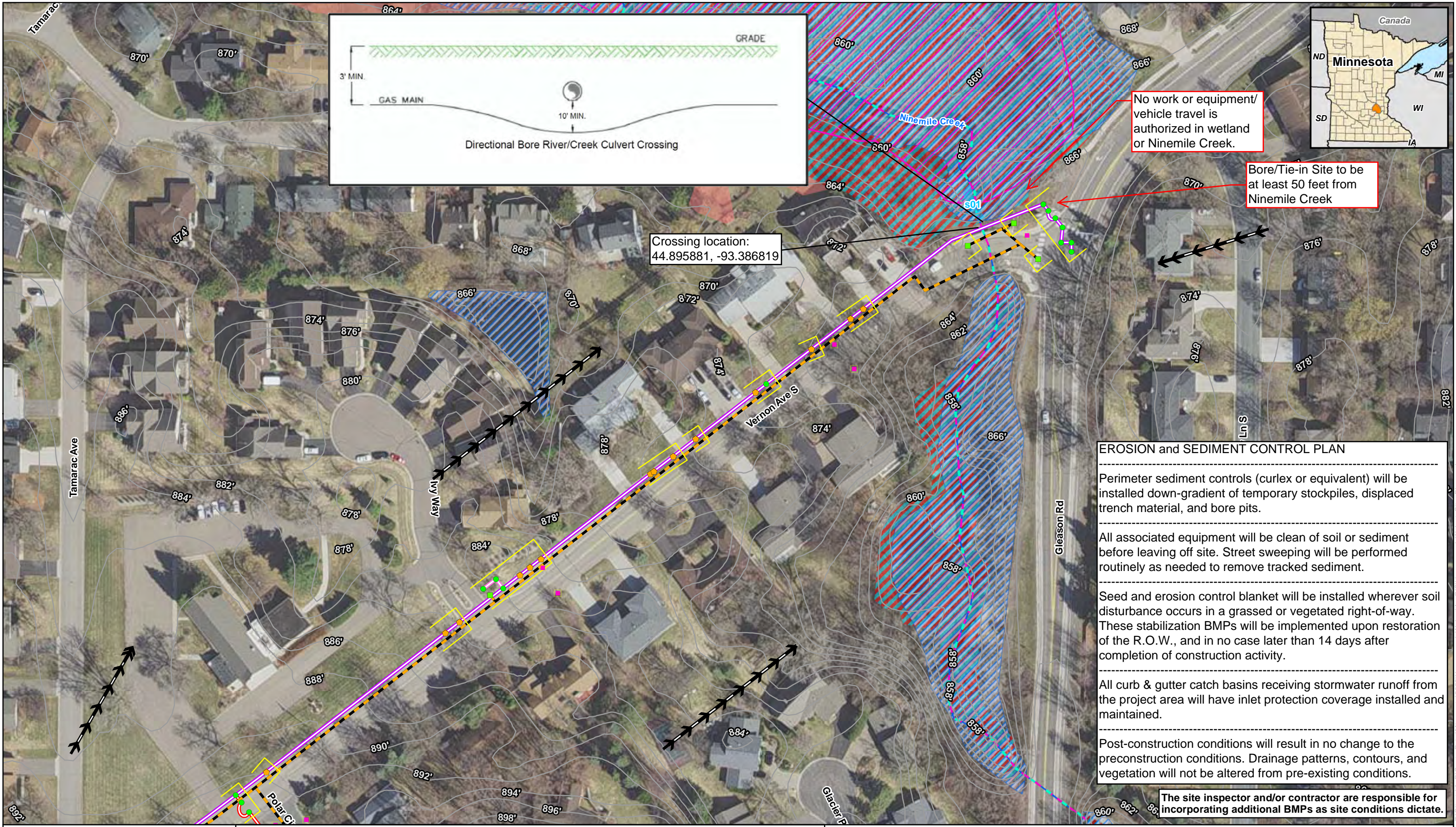
NHD Waterbody

NWI Wetland

1% Annual Chance Flood Hazard

Administrative Floodway





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