

Permit Application Review Report Date: 3/19/2025

Board Meeting Date: 3/24/2025

Agenda Item: 11

Applicant/Landowner: City of Blaine Attn: Cody Sylvester 10801 Town Square Drive Blaine, MN 55449

Project Name: City of Blaine 2025 Southwest Area Street Reconstruction Project

Project PAN: P-25-004

Project Purpose: road reconstruction and associated stormwater treatment features

Project Location: Jefferson St to Able Street; Directly SW of the City of Blaine's 2024 SW Area

Street Recon Project, City of Blaine

Site Size: size of disturbed area - 9.49 acres; size of regulated impervious surface - 6.84 acres

Applicable District Rule(s): Rule 2, Rule 3, Rule 4

Recommendation: Approve with 2 Conditions and 4 Stipulations

Description: The City of Blaine is proposing the reconstruction of numerous city streets and the construction of new stormwater treatment features. The project will disturb 9.49 acres and slightly reduce the overall impervious to 6.84 acres. The area drains to Springbrook Creek. The relevant water resource concerns are stormwater treatment and erosion and sediment control, which correspond to District Rules 3 and 4. See attached Figure 1: Project Location and Figure 2: Site Plan.

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Submittal of a performance escrow in the amount of \$6,745.00.

Rule 3.0 – Stormwater Management

2. The "Proposed PVC Pipe Inlet U/S Invert Elev" and "Inlet Structure Invert Elev. w/ 4' Sump" elevations listed in Table C1.13 are not consistent with the elevations shown on the storm sewer profiles. Please update storm sewer profile elevations to match Table C1.13.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

1. If dewatering is required, provide DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location,

- schedule and quantities prior to construction.
- 2. Completion of post construction infiltration tests on Infiltration Cells #1 through #16 by filling to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
- 3. Submittal of as-builts for the stormwater management practices and associated structures listed in Tables 2 and 3, including volume, critical elevations and proof of installation for hydrodynamic separators.
- 4. The applicant must apply for coverage under the Minnesota Pollution Control Agency's (MPCA's) Construction Stormwater Permit (Permit No: MNR100001)

Exhibits:

Exhibit Type	Exhibit Author	Signature Date	Received Date
TSS Loading Rates	Bolton & Menk	01/22/2025	02/26/2025
BMP Table	Bolton & Menk	undated	02/26/2025
Drainage Figures	Bolton & Menk	02/2025	02/26/2025
HydroCAD Existing & Proposed	Bolton & Menk	01/30/2025	02/26/2025
MIDS 1-10	Bolton & Menk	01/22/2025	02/26/2025
MIDS 11-16	Bolton & Menk	01/22/2025	02/26/2025
Stormwater Management Narrative	Bolton & Menk	02/26/2025	02/26/2025
Construction Plans	Bolton & Menk	undated	02/26/2025

Findings

Fees and Escrows (Rule 2.7):

The applicant is a government agency and is therefore exempt from an application fee or a review and inspection fee deposit. The applicant will be required to submit a performance escrow in the amount of \$6,745.00. This corresponds to a base escrow of \$2,000, plus an additional \$500/acre of disturbance (9.49 acres of land disturbance proposed).

Stormwater Management (Rule 3.0):

Rule 3.0 applies to the proposed project because it is a public linear project where the sum of the new and fully reconstructed impervious surface equals one or more acres. The Hydrologic Soil Group (HSG) of soils on site are HSG B.

<u>Rate Control</u>: Peak stormwater flow rate at the Outfall 1 point of site discharge increases from the pre-development condition for the 24-hour precipitation event with a return frequency of 2-, 10-, 100- years as shown in Table 1. This increase has been reviewed, and no adverse impacts are anticipated. The project will not impact Drainage Sensitive Use areas. The rate control standard is met to the maximum extent practicable.

Point of Discharge	2-year (cfs)		10-year (cf	10-year (cfs)		100-year (cfs)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed	
Outfall 3 - 89th Ave	1.6	1.6	2.89	2.89	6.01	6.01	
Outfall 2 - 87th Ln	24.31	24.02	52.22	51.76	124.55	123.67	
Outfall 1 - Jefferson St	18.66	18.83	36.25	36.46	80.93	81.26	

Table 1.

<u>Volume Control</u>: The proposed project is new development; therefore, the volume reduction requirement is equal to 1.1 inches over the area of all impervious surface. The amount of proposed impervious required to be treated is 297,950 ft².

The applicant is proposing the Stormwater Management Practices (SMPs) described below:

Drainage Area	Impervious required to be treated (ft²)	Proposed SMP	TP Removal Factor	Required Water Quality Volume (ft³)	Water Quality Volume Provided (ft³)
Outfall 3 - 89th Ave	7,405	0	0	309	0
Outfall 2 - 87th Ln	138,085	BMP-9, BMP- 10, BMP-11, BMP-12, BMP-13, BMP-14, BMP-15, BMP-16	1	5,754	2,893
Outfall 1 - Jefferson St	152,460	BMP-1, BMP- 2, BMP-3, BMP-4, BMP- 5, BMP-6, BMP-7, BMP- 8	1	6,353	2,675
Totals:	297,950			12,416	5,568

Table 2.

The following pretreatment has been provided:

SMP ID	Pretreatment Device/Method	Percent TSS Removal
SS-3334	Catch Basin Sump	59
SS-3336	Catch Basin Sump W/ SAFL Baffle	59
SS-3309	Catch Basin Sump	50
BMP 16 - SS-3339A	Catch Basin Sump	100
BMP 15 - SS-3344A	Catch Basin Sump	100
BMP 14 - SS-3342A	Catch Basin Sump	100
BMP 13 - SS-3349	Catch Basin Sump	100
BMP 12 - SS-3350	Catch Basin Sump	99
BMP 11 - SS-3327A	Catch Basin Sump	100
BMP 10 - SS-3330A	Catch Basin Sump	100
BMP 9 - SS-3325	Catch Basin Sump	100
BMP 8 - SS-3323	Catch Basin Sump	99
BMP 7 - SS-3324	Catch Basin Sump	100
BMP 6 - SS-3320A	Catch Basin Sump	100
BMP 5 - SS-3318A	Catch Basin Sump	99
BMP 4 - SS-3314A	Catch Basin Sump	99
BMP 3 - SS-3314	Catch Basin Sump	100
BMP 2 - SS-3305C	Catch Basin Sump	100
BMP 1 - SS-3305B	Catch Basin Sump	100

Table 3.

Pretreatment is required to be designed such that the device/method provides removal of 80% TSS entering an infiltration or filtration Stormwater Management Practice. The proposed project meets

pretreatment requirements as shown in Table 3. Structures SS-3334, 3336, & 3309 are not being used as pretreatment, they are providing additional water quality treatment prior to discharging offsite per water quality requirements below.

The volume control standard has not been met as shown in Table 2. However, due to limited green space and the presence of many underground utilities the volume control standard has been met to the maximum extent practicable.

Water Quality: The total Water Quality Volume for the project has not been provided in aggregate.

Stormwater treatment on site must remove at least 80% of the average annual post development TSS per discharge location. The following TSS removal has been provided:

Discharge Point	TSS Removal Provided
Outfall 3 - 89th Ave	0
Outfall 2 - 87th Ln	81
Outfall 1- Jefferson St	81

Table 4.

The TSS removal standard is not met at each discharge point as shown in Table 4. There are no proposed BMPs within the area that drains to Outfall 3. This is a small area which sheet drains to the north. The lack of storm sewer makes this area unable to be routed to a treatment BMP.

<u>Discharges to Wetlands</u>: Stormwater from the proposed project is not being discharged into any wetlands, therefore this section does not apply.

<u>Landlocked Basins</u>: The proposed drainage system does not outlet to a landlocked basin, therefore this section does not apply.

<u>Low Floor Freeboard</u>: The proposed project is not considered new development with buildings and habitable structures; therefore, this section does not apply.

Maintenance:

Access: Sufficient maintenance access has been provided on the plans for all stormwater management practices.

Easements: All required maintenance easements have been provided on the plans.

Maintenance Agreements: All proposed stormwater management practices will be maintained as part of standard municipal public work activities. Therefore, no maintenance agreement will be required.

Soils and Erosion Control (Rule 4.0)

Rule 4.0 applies to the proposed project because it is a land disturbing activity that requires a permit under another District rule.

The proposed project drains to Springbrook Creek. The soils affected by the project include Zimmerman and Lino and have a soil erodibility factor of 0.15 or greater. Disturbed areas are proposed to be stabilized within 24 hours, as required. The proposed erosion and sediment control plan includes inlet protection and street sweeping. The erosion control plan meets District Requirements. The site does require a NPDES permit. See attached Figure 3: Erosion and Sediment Control Plan.

Wetlands (Rule 5.0)

The proposed project does not include activities which result in the filling, draining, excavating, or otherwise altering the hydrology of a wetland. Rule 5.0 does not apply.

Floodplain (Rule 6.0)

The proposed project does not include land disturbing activities within the floodplain as mapped and modeled by the District. Rule 6.0 does not apply.

Drainage, Bridges, Culverts, and Utility Crossings (Rule 7.0)

The proposed project does not include land disturbing activities which construct, improve, repair, or alter the hydraulic characteristics of a bridge profile control or culvert structure on a creek, public ditch, or major watercourse. The proposed project does not include land disturbing activities which involve a pipeline or utility crossing of a creek, public ditch, or major watercourse.

The proposed project does not include land disturbing activities which construct, improve, repair or alter the hydraulic characteristics of a conveyance system that extends across two or more parcels of record not under common ownership and has a drainage area of 200 acres or greater. Rule 7.0 does not apply.

Buffers (Rule 8.0)

The proposed project does not include a land disturbing activity on land adjacent or directly contributing to a Public Water, Additional Waters, High or Outstanding Ecological Value Waters, a Public Ditch, or Impaired Waters/waters exceeding state water quality standards. Rule 8.0 does not apply.

Variances (Rule 10.2)

The proposed project is not requesting a variance from the District's rules, regulations, and policies. Rule 10.2 does not apply.



Figure 1: Project Location

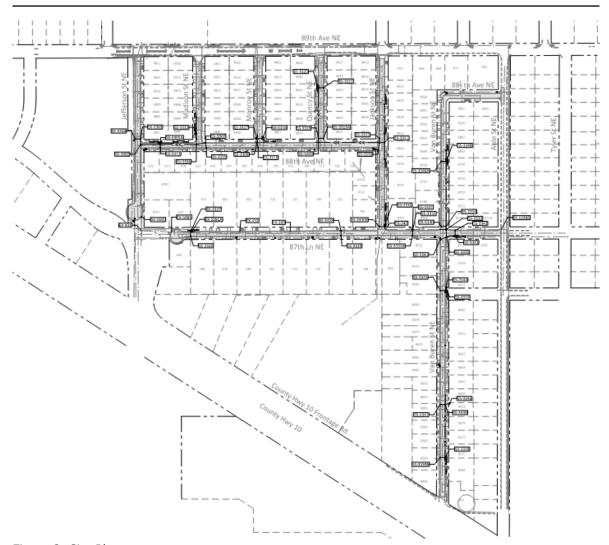
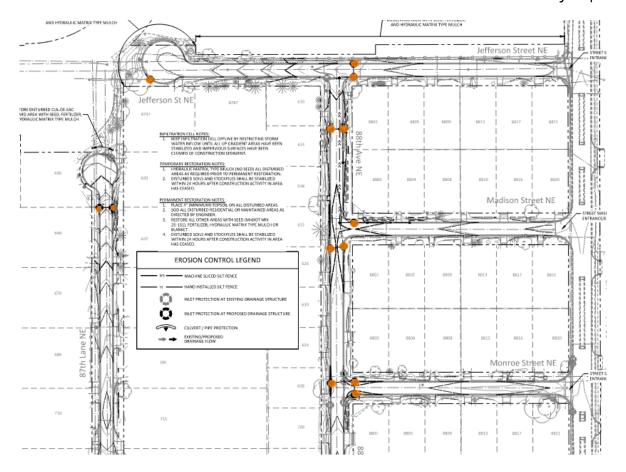


Figure 2: Site Plan

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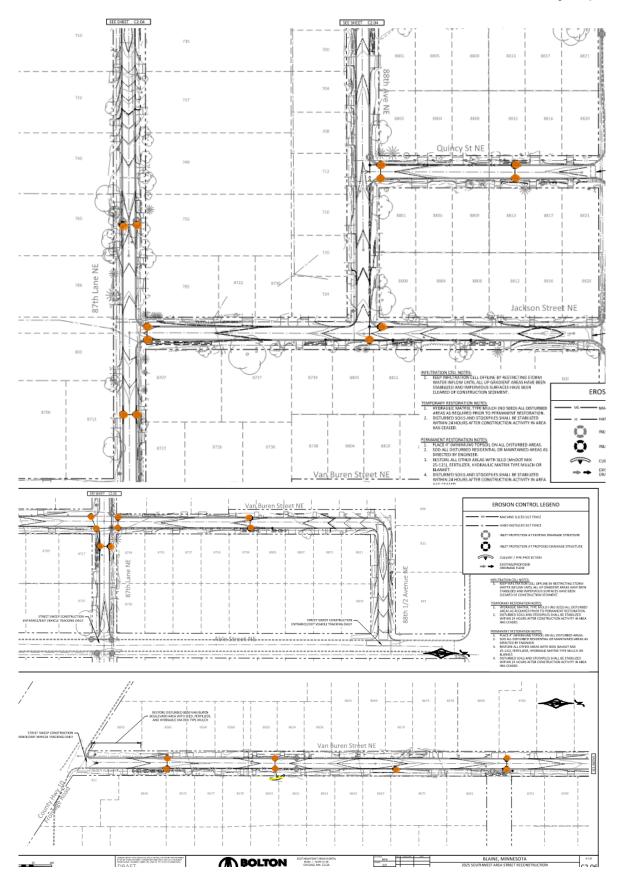


Figure 3: Erosion and Sediment Control