

Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Jim Herbert, PE; Gabby Campagnola)
Subject: Item 4G: Plymouth 2026 Street Reconstruction – Plymouth, MN
BCWMC December 18, 2025 Meeting Agenda
Date: December 11, 2025
Project: 23270051.65 1020 2512

4G Plymouth 2026 Street Reconstruction – Plymouth, MN BCWMC 2025-12

Summary:

Proposed Work: Road reconstruction and utility improvements

Project Proposer: City of Plymouth

Project Schedule: Construction May 2026 to October 2026

Basis for Review at Commission Meeting: Linear project with more than five acres of disturbance

Impervious Surface Area: Increase 0.6 acres

Recommendations for Commission Action: Conditional approval

General Project Information

The proposed linear project is in the City of Plymouth, along Highway 55 Frontage Road, within the Medicine Lake and Plymouth Creek subwatersheds (see attached map for location). The proposed linear project includes street reconstruction and utility improvements (including water main and storm sewer), resulting in 6.2 acres of proposed site disturbance. The proposed linear project creates 3.8 acres of new and fully reconstructed impervious surfaces and an increase of 0.60 acres of impervious surfaces, from 3.2 acres (existing) to 3.8 acres (proposed).

The initial submittal was received on November 20, 2025. The BCWMC engineer reviewed the submittal and provided comments to the city on December 3, 2025.

Floodplain

The proposed project does not involve work in the BCWMC 100-year floodplain; therefore, BCWMC floodplain review is not required.

Wetlands

The City of Plymouth is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required.

Rate Control

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC rate control review is not required.

Water Quality

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC water quality review is not required. However, the project includes three sump structures, one with a SAFL baffle to remove sand, silt and debris.

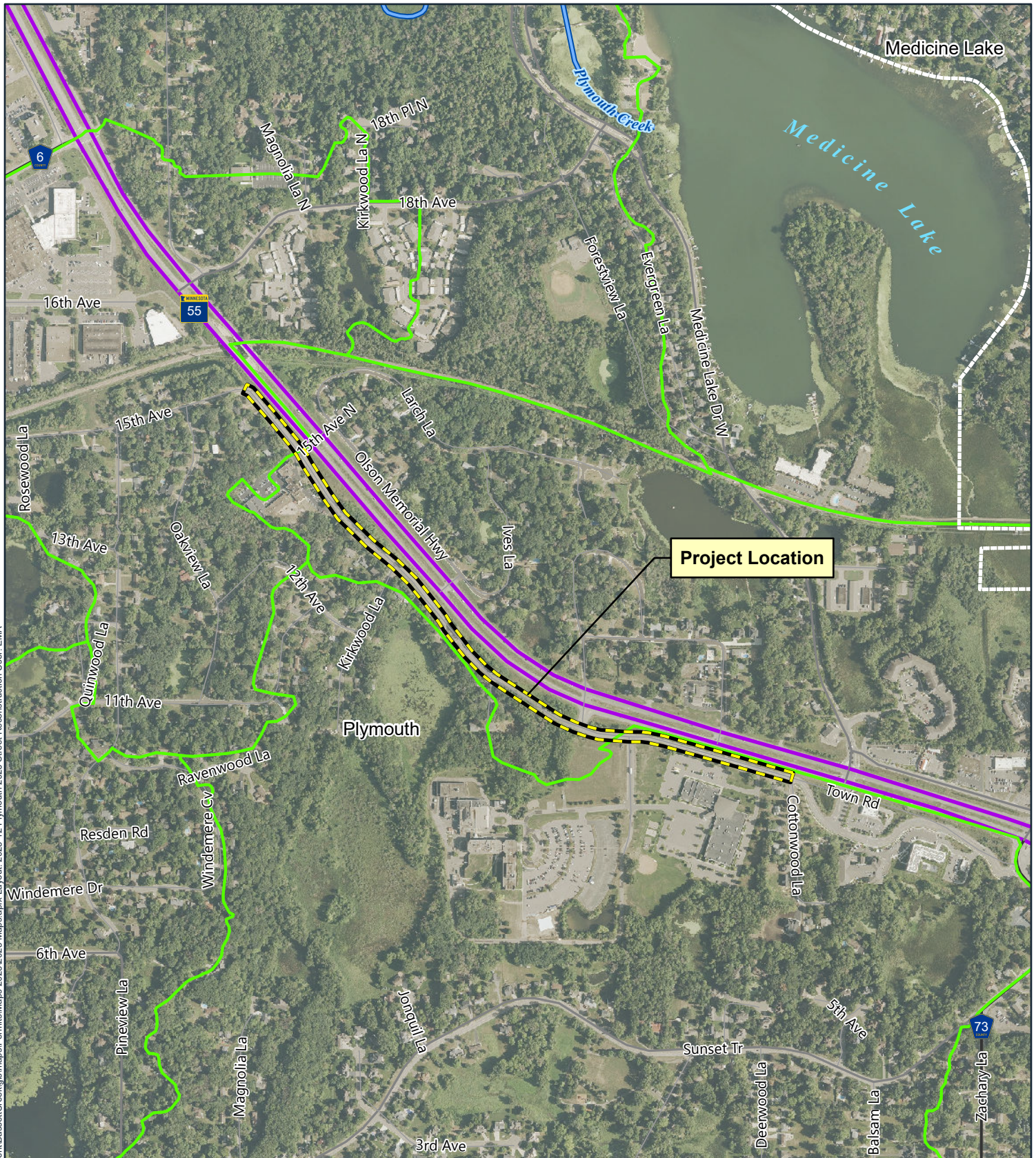
Erosion and Sediment Control

The proposed linear project results in one or more acres of land disturbance; therefore, the proposed project must meet the BCWMC erosion and sediment control requirements. Proposed temporary erosion and sediment control features include rock construction entrances, sediment control logs, silt fence, and storm drain inlet protection. Permanent erosion and sediment control features include stabilization with sod or seed and blanket.






Recommendation for Commission Action

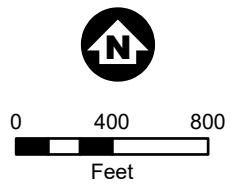
Conditional approval based on the following comments:

1. Plans must be revised to identify flared end sections (FESs) that include riprap and filter installation.
2. FES 49 and FES 52 must be extended to discharge near the ditch invert elevation to help prevent scour along the ditch slope. Drop structures and flatter pipe slopes will likely need to be incorporated into the design. The average outlet velocity must not exceed 4 feet-per-second, or 8 feet-per-second if riprap is used, to limit potential erosion.
3. The outlet velocity at FES 57 appears to exceed 4 feet-per-second when the pipe is flowing full. Flatter pipe slopes, drop structures, or other energy dissipation methods must be used to provide an average outlet velocity of no more than 4 feet-per-second, or 8 feet-per-second if riprap is used, to limit potential erosion.
4. Revised plans (paper copy and final electronic files) must be provided to the BCWMC Engineer for final review and approval.



Project Location

-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  BCWMC Hydrologic Boundary
-  Major Subwatershed



**BCWMC 2025-12
Plymouth 2026 Street
Reconstruction
Plymouth, MN**

LOCATION MAP

