

Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co.
Subject: Item 5D – GV 2016 PMP STH 169-Plymouth Ave– Golden Valley
BCWMC March 17, 2016 Meeting Agenda
Date: March 9, 2016
Project: 23270051 2016 2072

5D GV 2016 PMP STH 169-Plymouth Ave – Golden Valley

Summary:

Proposed Work: Excavation, grading, concrete curb and gutter, bituminous paving, storm sewer, sanitary sewer repair, water main replacement, concrete sidewalk, and retaining wall construction.

Basis for Commission Review: Consideration of variance from MIDS performance goal

Impervious Surface Area: Decrease approximately 7,400 square feet (0.17 acres)

Recommendation: Conditional approval

General Background & Comments

The proposed project includes reconstruction of Independence Avenue North from Plymouth Avenue North to Olympia Street, Hillsboro Avenue North from Plymouth Avenue North to Winsdale Street, Winsdale Street from Mendelssohn Avenue North to Hillsboro Avenue North, Wisconsin Avenue North from Golden Valley Drive to Golden Valley Road, and Winnetka Avenue North from Highway 55 to Golden Valley Drive including storm sewer, sanitary sewer repair, water main replacement, concrete sidewalk, and retaining wall construction. The project is located primarily in the Medicine Lake Direct subwatershed with the Wisconsin Avenue North work in the Bassett Creek Main Stem subwatershed and the Winnetka Avenue North work in the Sweeney Lake subwatershed. 2.82 acres will be graded as part of the project. The proposed project results in a decrease of approximately 7,400 square feet (0.17 acres) of impervious surface, from 1.98 acres under existing conditions to 1.81 acres of impervious surface under proposed conditions.

Floodplain

The project does not involve work in the Bassett Creek floodplain.

Wetlands

The project appears to involve work adjacent to wetlands. The City of Golden Valley is the LGU for administering the Minnesota Wetland Conservation Act of 1991.

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Stormwater Management

The drainage patterns under existing and proposed conditions will remain similar; this project will not result in major changes to land use or topography. This project will reduce stormwater volumes and rates by decreasing the amount of impervious surface within the project area.

Water Quality Management

There is currently little to no water quality treatment in the City's 2016 pavement management program (PMP) area. Because the project is a linear redevelopment that creates one acre or greater of new and/or fully reconstructed impervious surfaces, the September 2015 BCWMC Requirements for Improvements and Development Proposals (Requirements) document requires that the project capture and retain the larger of 1) 0.55 inches of runoff from the new and fully reconstructed impervious surfaces, or 2) 1.1 inches of runoff from the net increase in impervious area. In this case, 0.55 inches of runoff from the new and fully reconstructed impervious surfaces is the larger volume, resulting in a required treatment volume of 0.08 acre-feet (3,600 cubic feet). If the performance goal is unable to be met due to site restrictions, the Requirements document requires that the MIDS flexible treatment options approach be used, following the MIDS design sequence flow chart.

The City proposes to construct four sump manholes with SAFL baffles to provide water quality treatment for the project (approximately 14 to 25% TSS removal, negligible TP removal). The City is not proposing to construct any volume reduction BMPs.

Because the City is not able to meet the MIDS performance goal, the City's consultant provided a sequencing analysis following the MIDS design sequence flow chart and indicating what treatment options were explored and feasible on the site. Please see the attached letter from the City's consultant discussing the MIDS design sequence.

The City prepared the Lakeview Park Pond feasibility study in the project area to identify strategies to improve water quality treatment, address flooding issues in the neighborhood and provide relief to the undersized storm sewer system that discharges from the project area under TH 169 and into Medicine Lake. The study concluded that construction of a pond for water quality or rate control was not feasible in this area due to poor soils and homes with flooding risk. Because other areas in the watershed are not available and not suitable for construction of water quality treatment BMPs, the City cannot meet FTO 3 (off-site mitigation) as part of this project.

Because the City cannot meet any of the flexible treatment options as part of this project, the City proposes to provide equivalent offsite treatment to meet the MIDS performance goals for the project by the end of 2018. Therefore the City requests a variance from the MIDS performance goal in accordance with Section 3.3 of the Requirements document with the condition that the City provide future offsite treatment.

In granting variances, the Commission shall make a finding showing that all of the following conditions exist (*note the City's justification corresponding to the requirements below in italics*)

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1. There are special circumstances or conditions affecting the property such that the strict application of the provisions of these standards and criteria would deprive the applicant of the reasonable use of the applicant's land.
Because the project is a linear road project, there is limited right-of-way in which to install BMPs for water quality treatment. The project area has poor soils which are not conducive to volume reduction.
2. The variance is necessary for the preservation and enjoyment of a substantial property right of the applicant.
The property is public road right-of-way; therefore, the land use cannot be changed or further reduced from the current footprint.
3. The granting of the variance will not be detrimental to the public welfare or injurious to the other property in the territory in which the property is situated.
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4. In applications relating to a use in the 1% (base flood elevation, 100-year flood) floodplain set forth in Table 2-9 of the Plan, the variance shall not allow a lower degree of flood protection than the current flood protection.
The project is not located in the Bassett Creek floodplain.
5. The granting of the variance will not be contrary to the intent of taking all reasonable and practical steps to improve water quality within the watershed.
Because the project will reduce the impervious surface of the project area from existing conditions, the project will be improving water quality from existing conditions, but is not in compliance with the current Requirements document. The City will provide equivalent offsite treatment by the end of 2018.

Please see the attached letters from the City and its consultant for more information related to the variance request.

Erosion and Sediment Control

Since the area to be graded is greater than 10,000 square feet, the proposed project must meet the BCWMC erosion control requirements. Proposed temporary erosion control features include silt fence, and catch basin inlet protection.

Recommendation

Conditional approval based on the following comments:

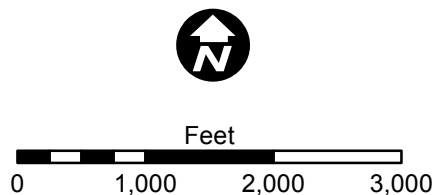
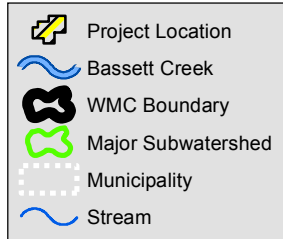
1. Commission approval of the City's variance request, including providing equivalent offsite treatment to meet the MIDS performance goals for the project by the end of 2018. Drawings for the future offsite treatment must be provided to the BCWMC Engineer for administrative review and approval.

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2. Existing and proposed contours must be shown on the plans to verify silt fence placement in relation to project removals.
3. Erosion control should be shown for the Winnetka Avenue North sidewalk work and the Wisconsin Avenue retaining wall work.
4. A construction entrance should be shown for the western portion of the project.
5. Revised drawings (paper copy and final electronic files) must be provided to the BCWMC Engineer for final review and administrative approval.



Imagery Source: Aerial Express (2009)



LOCATION MAP
APPLICATION 2016-06
GV 2016 PMP
STH 169 - Plymouth Ave
Golden Valley, MN