



Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co.
Subject: Item 5C – Golden Valley 2017 Pavement Management Program Project – Golden Valley, MN
BCWMC March 16, 2017 Meeting Agenda
Date: March 8, 2017
Project: 23270051 2017 2109

5C Golden Valley 2017 Pavement Management Program Project – Golden Valley, MN BCWMC 2017-02

Summary:

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

Basis for Commission Review: Linear project disturbing over five (5) acres, consideration of variance from MIDS performance goal

Impervious Surface Area: Decrease approximately 0.62 acres

Recommendation: Conditional Approval

General Background & Comments

The proposed project includes reconstruction of Wheeler Boulevard directly south of Earl Street North, Naper Street North from Mendelssohn Avenue North to Flag Ave North, Olympia Street North from Mendelssohn Avenue North to Gettysburg Avenue North, Independence Avenue North from Olympia Street North to Earl Street North, Hillsboro Avenue North from Winsdale Street north to Naper Street North, Gettysburg Avenue North from Olympia Street North to Naper Street North, a portion of the alley north of Naper Street North between Mendelssohn Avenue North and Independence Avenue North, the alley between Earl Street North and Wheeler Boulevard, a portion of Harold Avenue North between Winnetka Avenue North and Rhode Island Avenue North, a portion Glenwood Avenue (CSAH 40) between Olson Memorial Hwy (TH 55) and Harold Avenue North, and a portion of Wayzata Boulevard between Hwy 100 (TH 100) and Natchez Avenue South including storm sewer replacement, 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 Wayzata Boulevard work in the Sweeney Lake subwatershed. The proposed project results in 6.33 acres of grading, and a decrease of approximately 0.62 acres of impervious surface, from 4.40 acres under existing conditions to 3.78 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.

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

Background

In 2016, the City of Golden Valley submitted plans for their 2016 Pavement Management Program (PMP) project. The City was not able to meet the MIDS performance goal as part of the project, therefore 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. The 2016 letter from the City requesting the variance and the 2016 memo from the City's consultant discussing the MIDS design sequence are attached.

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 were not available and not suitable for construction of water quality treatment BMPs, the City was unable to meet FTO 3 (off-site mitigation) as part of the 2016 PMP project.

Because the City was unable to meet any of the flexible treatment options, the City proposed to provide equivalent offsite treatment to meet the MIDS performance goals for the project by the end of 2018. Therefore the City requested 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.

At their March 2016 meeting, the Commission approved the project and granted a variance from the MIDS performance goal with conditions, including:

1. The City shall implement all practical and feasible water quality best management practices, including reducing impervious area and installing sump manholes with SAFL baffles, related to the construction of the project; and
2. The City shall provide offsite treatment to meet the MIDS performance goals for the project by the end of 2018 or as soon thereafter as is reasonable possible.

The BCWMC's resolution granting the variance for the 2016 Golden Valley PMP Project is attached.

2017 Golden Valley PMP Project

There is currently little to no water quality treatment in the City's 2017 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 0.17 acre-feet (7,400 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 two sump manholes to provide water quality treatment for the project (approximately 20% TSS removal, negligible TP removal). The City is not proposing to construct any volume reduction BMPs.

Because the City cannot meet 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 provides future offsite treatment. The 2017 cover letter from the City is attached.

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*)

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.

CIP Funding Request

The City of Golden Valley is proceeding with the preliminary design of a water quality improvement project to be constructed as part of the 2018 PMP project. The water quality improvement project will be constructed following City acquisition of the remaining three flood-prone homes in the area. The City of Golden Valley has requested Capital Improvement Program (CIP) funds from the Commission to assist in the acquisition of the three flood-prone homes and expedite the construction of the water quality improvement. This request is covered in a separate agenda item (see 5D).

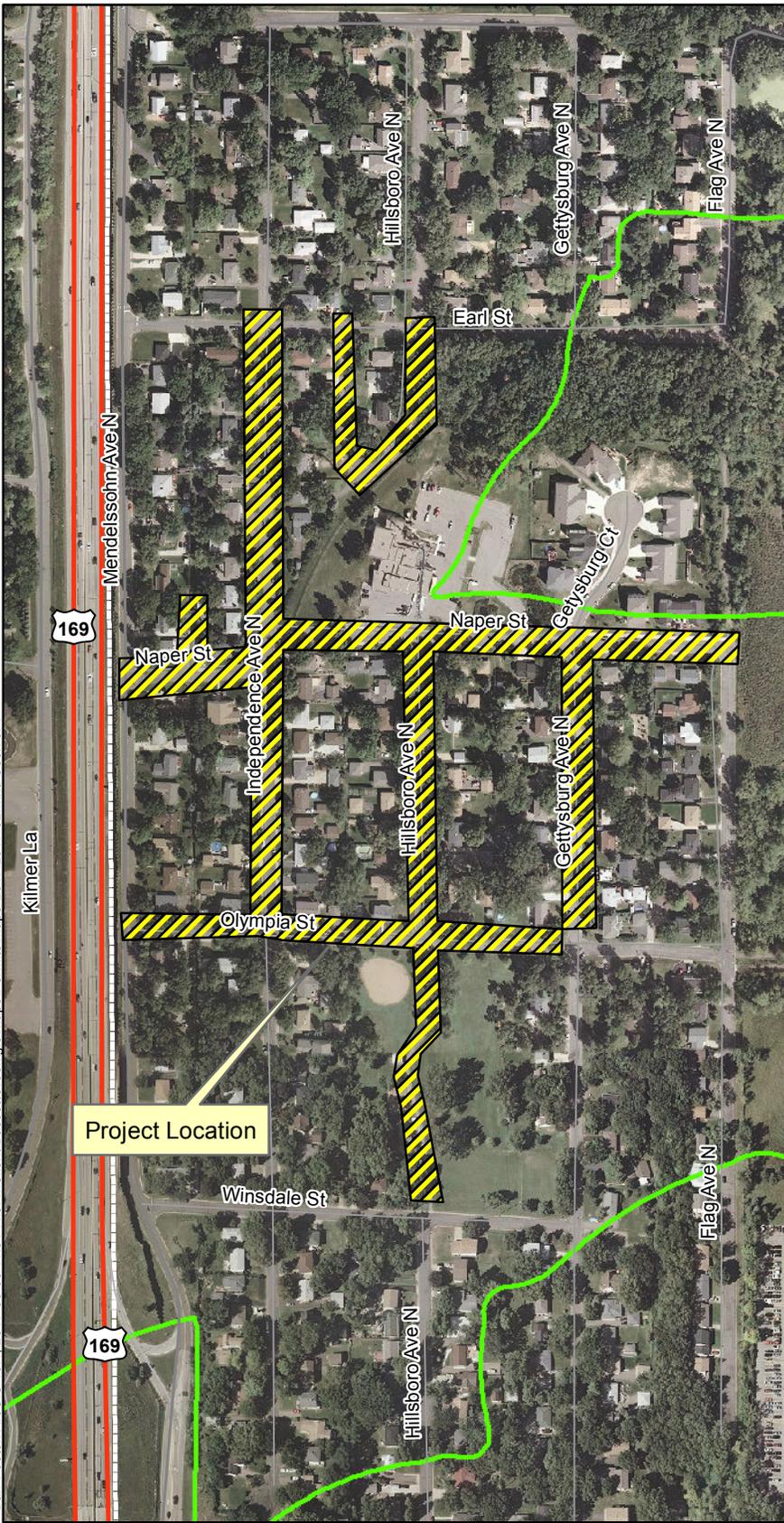
Erosion and Sediment Control

Since the area to be graded is greater than one acre, the proposed project must be submitted to the BCWMC for review. Proposed temporary erosion control features include silt fence and catch basin inlet protection

Recommendation

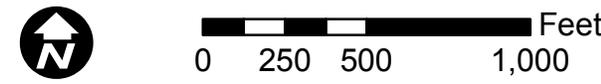
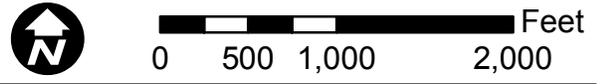
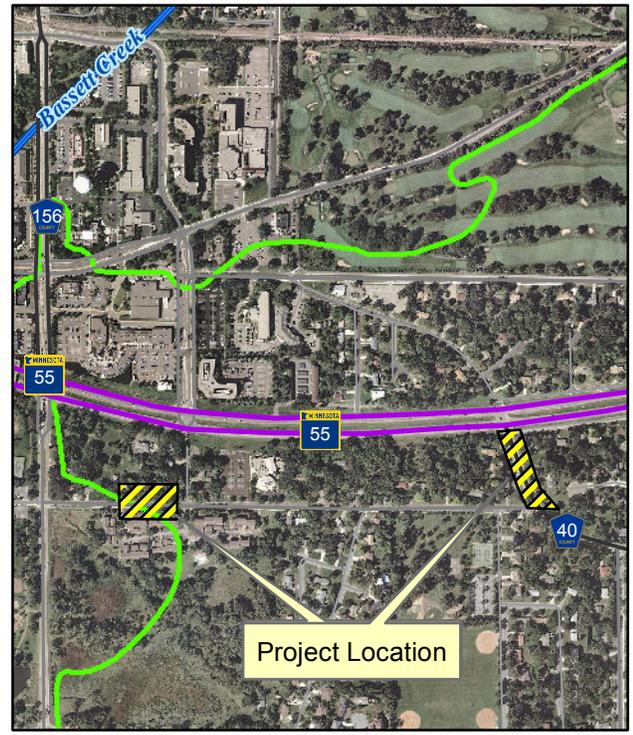
Conditional approval based on the following comments:

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.
2. Construction entrances must have a wash-off berm with a minimum height of 2 feet above the adjacent roadway.
3. Construction entrances should be shown on the plans.
4. 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)

-  Project Location
-  Bassett Creek
-  WMC Boundary
-  Major Subwatershed
-  Municipality
-  Stream



**LOCATION MAP
APPLICATION 2017-02
Golden Valley 2017 PMP
Golden Valley, MN**