Item 4D. BCWMC 6-20-19



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Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)

- From: Barr Engineering Co. (Barr)
- Subject: Item 4D Theodore Wirth Golf Course Cart Paths Golden Valley, MN BCWMC June 20, 2019 Meeting Agenda

Date: June 11, 2019

Project: 23270051 2019 2189

4D Theodore Wirth Golf Course Cart Paths – Golden Valley, MN BCWMC 2019-12

Summary:

Proposed Work: Cart path improvements
Basis for Review at Commission Meeting: Cut and fill in the floodplain
Impervious Surface Area: Increase 1.5 acres (all sidewalks and trails)
Recommendation: Conditional Approval

General Background & Comments

The proposed linear project is located at Theodore Wirth Golf Course in Golden Valley in the Bassett Creek Main Stem subwatershed. The proposed linear project includes gravel and bituminous cart path rehabilitation, drainage improvements, and minor grading, resulting in approximately 7.0 acres of land disturbance. The proposed project creates 2.35 acres of reconstructed impervious surfaces and 1.5 acres of net new impervious surfaces, from 2.35 acres (existing) to 3.85 acres (proposed), however all impervious surfaces are disconnected trails or sidewalks, which are exempt from BCWMC water quality requirements and are not included in the net new impervious surface calculations.

Floodplain

The proposed linear project includes work in the Bassett Creek floodplain. The August 2017 BCWMC Requirements for Improvements and Development Proposals (Requirements) document states that projects within the floodplain must maintain no net loss in floodplain storage and no increase in flood level at any point along the trunk system (managed to at least a precision of 0.00 feet). The floodplain elevation of Bassett Creek between Highway 55 and the confluence with the Sweeney Lake branch varies from 826.5 feet to 827.2 feet, NAVD88.

The proposed linear project will result in a net increase in floodplain storage of approximately 254 cubic yards as shown in the following table and does not result in an increase in flood level at any point along the trunk system.

Hole 10 Cut	Hole 10 Fill	Holes 15/16 Cut	Holes 15/16 Fill	Net
31 CY	568 CY	984 CY	193 CY	254 CY (Cut)



Wetlands

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

Stormwater Management

All impervious surfaces for the proposed linear project are disconnected trails or sidewalks, which are not included in the net new impervious surface calculations. The drainage patterns under existing and proposed conditions will remain similar; this project will not result in major changes to land use or topography.

Water Quality Management

All impervious surfaces for the proposed linear project are disconnected trails or sidewalks, which are exempt from BCWMC water quality requirements.

Erosion and Sediment Control

The proposed linear project creates more than one acre of land disturbance, The BCWMC Requirements document states that linear projects disturbing one or more acres shall be submitted to the BCWMC for erosion and sediment control review. Proposed temporary erosion and sediment control features include silt fence, filter logs, and rock construction entrances. Permanent erosion and sediment control features include riprap, seed, mulch, and erosion control blanket.

Recommendation

Conditional approval based on the following comment:

1. Storm sewer outfalls should be extended to discharge at the invert of the creek and in a downstream direction of 30 degrees or less from the normal flow direction to limit potential erosion at the creek and/or channelization between the outfall and receiving water body.

