General Background & Comments

The City of Minnetonka has submitted plans for the construction of approximately 26,000 lineal feet of an 18-inch (1.5 foot) wide trail through Lone Lake Park for mountain bikes. The trail will be totally on City of Minnetonka properties, Lone Lake Park and along the South Fork of Nine Mile Creek, north of Rowland Road. The trail is to follow the rolling topography within the area that varies vertically by more than 100 feet. The trail will likely be constructed using a “Dingo”, a walk behind Bobcat-type machine, that will be able to create the 18-inch wide trail yet minimize the area disturbed.

In addition to Lone Lake, designated Public Waters 94P by the Minnesota Department of Natural Resources, there are three wetlands identified within the project area. The City is the local governmental unit administering the requirement of the Wetland Conservation Act within Minnetonka. The wetland boundaries have been determined and approved in November, 2016. No wetland impacts are proposed by the project however, section 3.4, Wetland Buffers, of the District Rules states for any activity for which a permit is required under any District rule must provide buffer on all wetlands downgradient from the activity. For this site, a Minnesota Routine Assessment Method analysis for determining wetland(s) value is not necessary since section 3.4.2 of the rules applies to require that the buffers extend to the top of the slope since the slope of the topography is greater than 12 percent or greater over a distance of 50 feet or more upgradient of the wetlands. Portions of the proposed non-motorized trail are to be located within the buffer area(s) which is allowable under section 3.4.6 of the rules.

The proposed trail is an impervious surface because it will be, under NMCWD’s definition of “impervious surface”, ground surface that has been compacted or covered with a layer of material, or is likely to become compacted from expected use, such that it is or will be highly resistant to infiltration of rainwater and snowmelt. The trail will be constructed from the native underlying soils that will become compacted with use. More than 50 cubic yards and more
than 5,000 square feet surface area will be disturbed by the project, triggering both subsections Rules 4.2.1a and b of the NMCWD Stormwater Management Rule. However in this instance, stormwater is not required because section 4.2.2 c of the rules states that the requirements of section 4.2.1 do not apply if a trail not exceeding 10 feet in width is bordered downgradient by a pervious area extending at least half the width of the trail (9-inches). In all instances along the trail alignment this requirement is met.

The portions of the trail riparian to the South Fork of Nine Mile Creek and upstream of Rowland Road are a minimum of 2 feet above elevation 897 M.S.L., the Atlas 14 high water elevation No work or impacts are proposed below the 100-year flood elevation of the creek.

The following is additional information for the project:

- The water surface elevation of Lone Lake, recorded by District on June 1, 2020, was 901.5 M.S.L.
- The surface overflow elevation for Lone Lake, using Lidar topographic information, is 928 +/- M.S.L. Should an overflow from Lone Lake occur, the overflow is to the north to Shady Oak Lake.
- The lowest elevation of the trail adjacent to the lake is approximately 944 M.S.L. The trail will be approximately 42.5 feet above the current lake elevation and approximately 15.7 feet above the surface overflow from the lake. The section of the trail adjacent to the wetland complex south of the lake is 911 M.S.L. This is 10 feet above the current water surface elevation of the lake yet below the lakes surface overflow elevation of 928 M.S.L.

Exhibits

3. Wetland boundary and type application dated October 17, 2019, prepared by Bolton & Menk. Wetland Notice of Decision dated November 15, 2019, City of Minnetonka being the LGU administering WCA, approving the wetland boundary determination.
4. Environmental Impacts of Proposed Mountain Biking Trails in Lone Lake Park, dated February 27, 2020, prepared by Emmons & Olivier Resources.
5. Hydraulic Assessment Technical Memo, dated June 4, 2020, prepared by Emmons and Olivier Resources.

3.0 Wetlands Management

As previously stated, the City of Minnetonka is the LGU administering the requirements of WCA. However, section 3.4, Wetland Buffers, of the District Rules states that any activity for which a permit is required under any District rule triggers the NMCWD buffer requirement. The applicant must provide buffer on all wetlands disturbed by any activity and on all wetlands downgradient from the activity.

An MnRAM analysis for determining wetland(s) value is not required for this site since section 3.4.2 of the rules apply to require that the buffer(s) extend to the top of the slope since the
slope of the topography is 12 percent or greater over a distance of 50 feet or more upgradient of the wetland. The plans show that the required wetland buffer(s) extend to the top of the slope of the wetlands identified on the site, in each case extending beyond the maximum buffer width required by NMCWD of 60 feet. Wetland buffer makers consistent with section 3.4.5 are shown to be provided. Portions of the proposed non-motorized trail to be located within the buffer areas are allowable by section 3.4.6 of the rules.

4.0 Stormwater Management

The proposed trail is an impervious surface because it will be, under NMCWD’s definition of “impervious surface,” ground surface that will be compacted from expected use, such that it is or will be highly resistant to infiltration of rainwater and snowmelt. The District’s requirements for stormwater management are triggered by the project because 50 cubic yards or more will be disturbed and 5,000 square feet or more of surface area will be disturbed, Rules 4.2.1a and b. However section 4.2.2 c of the rules states that stormwater management is not required for trail not exceeding 10 feet in width (1.5 feet, 18-inches, proposed) and is bordered down gradient by a pervious area extending at least half the width of the trail (9-inches). In all instances along the trail alignment this requirement is met.

5.0 Erosion and Sediment Control

Where surface runoff will be directed off the trail section, sediment logs will be installed downgradient for erosion control. The sediment logs are to be vegetated and will permanently remain in place to provide a long term method for preventing sedimentation of downgradient water resources. The project contact is Mike Waltman, Bolton & Menk.

11.0 Fees

Because the property owner is a public entity, no fees are charged:

Rules 2.0-6.0 $0

12.0 Financial Assurances

Because the property owner is a public entity, the District’s financial assurance requirements do not apply.

Sureties for the project are: $0

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.

2. Rule 3, 4 and 5 are met.

Recommendation

Approval, contingent upon:

1. General Conditions of the District.
2. In accordance with Rule 4.3.5, submission of a document signed by an official with authority with the City of Minnetonka being a public entity assuming the maintenance obligation for the wetland buffers.
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

MICHAEL J. WALTMAN, P.E.
I HEREBY CERTIFY that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the state of Minnesota.
Permittees must make the SWPPP, including all inspection reports, maintenance records, training records and other information up to date, until the project NOT is filed.

Payment for all work associated with Erosion and Sediment Control shall be as described in the Project Manual. Unless otherwise authorized by the Owner no additional payment shall be made for any work required to administer and maintain the site erosion and sediment control BMPs.

The Contractor shall provide one or more trained Construction SWPPP Manager(s) knowledgeable and experienced in the application of erosion prevention and sediment control BMPs that will oversee the implementation of the SWPPP, and the installation, inspection and maintenance of the erosion prevention and sediment control BMPs.

The Contractor shall provide one or more trained Construction SWPPP Manager(s) knowledgeable and experienced in the application of erosion prevention and sediment control BMPs, to oversee the implementation of the SWPPP, and the installation, inspection, and maintenance of the erosion prevention and sediment control BMPs.

The Contractor shall provide a re-inspection within 72 hours upon receipt by the MRPCA.

ADDITIONAL COMPENSATION

Payment for all work associated with Erosion and Sediment Control shall be as described in the Project Manual. Unless otherwise authorized by the Owner no additional payment shall be made for any work required to administer and maintain the site erosion and sediment control BMPs.

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SOIL TYPE SUMMARY

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<th>Soil Name</th>
<th>Hyd. Group</th>
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</tr>
</tbody>
</table>

NHEL - Not Highly Erodible Land
PHEL - Potentially Highly Erodible Land
HEL - Highly Erodible Land

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

- SITE MAP
- DIRECTION OF FLOW
- DRAINAGE STRUCTURES
- DRAINAGE TABULATION
- STORM SEWER PLAN & PARCEL SHEETS
- EROSION & SEDIMENT CONTROL DETAILS
- EROSION CONTROL TABULATION
- TURF ESTABLISHMENT TABULATION
- NARRATIVE & NOTES
BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED
MICHAEL J. WALTMAN, P.E.

MINNETONKA, MINNESOTA
LONE LAKE MOUNTAIN BIKE TRAIL
EROSION CONTROL PLAN
EAST TRAIL

CASTLE LAKE AVENUE
BROOKFIELD, WISCONSIN 53005
Phone: (262) 968-0000
Email: burnsville@bolton-menk.com
www.bolton-menk.com

100 YEAR STORM ELEVATION
GRADING LIMITS
WETLAND BOUNDARY
SHORELAND DISTRICT
MIDFIELD DISTRICT
TYP.
MONUMENTATION/MARKERS AT
200' SPACING TO MEET NMCWD
AND CITY REQUIREMENTS (TYP.)