Project Purpose: The proposed project will construct approximately 1.2 miles of 8’ bituminous trail as part of the City of Forest Lake Safe Routes to School Pedestrian Connection Improvements project. This will include an addition of 0.22 acres of new impervious surface.

Project Location: Trails along 3rd Ave SW at N Lakes Academy and from 12th St. SW to 6th St. SW, 6th St. SW from 3rd Ave SW to 2nd Ave SW, 2nd Ave SW from 6th St SW to 5th St. SW, 2nd Ave SW from 4th St. SW to 1st St. SW, 4th St. SW from 3rd Ave SW to 7th Ave SW, and 8th St. SW from 3rd Ave SW to Southwest Junior High School, all within the City of Forest Lake.

Applicable District Rules: 2.0 & 3.0 (Note: Revised District Rules were adopted on February 22, 2018, and are effective for applications determined complete on or after March 12, 2018. The City of Forest Lake concurs in the application of the revised rules to this proposal.)

Recommendation: Approval with the following conditions:
1. Specification of pretreatment measures and native seed mixes or plantings for the proposed biofiltration areas before permit issuance.
2. Maintenance of stormwater management facilities in accordance with the terms of the “Cooperative Agreement for Maintenance of Stormwater Management Facilities and Watercourse and Basin Crossings” (November 9, 2012).

Rule 2.0: Stormwater Management

The proposed project consists of trail improvements along existing streets near several schools located within the City of Forest Lake. These Schools include: Southwest Junior High School, Forest View Elementary School, Forest Lake Elementary School, and Forest Lake Area Schools Central Learning Center. The project will construct 8-foot wide multi-use trails along several segments of roadways. This project is partially located in Rice Creek Watershed District (RCWD). This permit reviews only the portion of the project located within CLFLWD. The portions of the project located within RCWD will be permitted by RCWD. Runoff from the new trail segments located in CLFLWD is
generally routed towards 3rd Avenue through wetland basins and then eventually to the Sunrise River and Comfort Lake.

The project will create 0.22 acres of new impervious surface within the CLFLWD. The District’s trail exemption does not apply because the needed filter strip is not provided between the trail and the adjacent roadway. The required treatment volume for the project is 1.1 inches of runoff from the new impervious surface which equates to 865 cubic feet (CF). The onsite soils are not suitable for infiltration, therefore biofiltration is proposed. The volume conversion factor for biofiltration is 0.65; therefore the required treatment volume is 1,331 CF. The project proposes two biofiltration basins along 3rd Avenue with sand filtration berms. The proposed treatment volume is 1,914 CF therefore satisfying the District’s volume control requirements. The basins capture runoff from both the trail and the roadway. The basins are sized to capture the required volume reduction from this combined flow with higher flows bypassing the BMPs. Runoff from some of the trail is not directly tributary to the basins. The sediment load from the non-tributary trail segments is negligible and the downstream conveyance system will reduces sediment loading prior to reaching the Sunrise River. Therefore, total suspend solids in runoff that is not captured by a practice will be reduced by the maximum extent practicable as required under 2.3.3(b).

The proposed project provides a slight decrease in rates compared to existing conditions, thereby stratifying District Rate Control. A summary table of rates leaving the site is summarized below.

<table>
<thead>
<tr>
<th>Conditions</th>
<th>2-year</th>
<th>10-year</th>
<th>100-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing (cfs)</td>
<td>23.44</td>
<td>33.72</td>
<td>47.62</td>
</tr>
<tr>
<td>Proposed (cfs)</td>
<td>23.09</td>
<td>33.35</td>
<td>46.9</td>
</tr>
</tbody>
</table>

Proposed revegetation includes turf and native vegetation, however detailed revegetation specifications for the biofiltration basins have not been provided. Also, it is unclear how pretreatment is proposed to be handled for the biofiltration basin (e.g. vegetated filter strips or water quality inlet device designed and sized according to MPCA Stormwater Manual guidance). Updated details that specify the means for pretreatment and specification of appropriate native vegetation for the biofiltration basin are required.

A detailed SWPPP has been submitted and the proposed basins shall be constructed concurrent with the work authorized by the permit.

The CLFLWD and the City of Forest Lake have a Cooperative Agreement for Maintenance of Stormwater Management Facilities and Watercourse and Basin Crossings which satisfies the District’s maintenance requirements.

**Rule 3.0: Erosion Control**

Detailed erosion control plans and a Stormwater Pollution Prevention Plan have been provided. The proposed plans include biorolls and inlet protection, silt fence, revegetation specifications and an implementation schedule. The proposed project meets District erosion control requirements.
Rule 4.0: Lake, Stream, and Wetland Buffer Requirements

The proposed project does not trigger this rule; a subdivision was not proposed and no municipal rezoning or variance was required for this project.

Rule 5.0: Shoreline and Streambank Alterations

The proposed project does not trigger this rule; a DNR general permit excusing property owners who hold a District permit is not in effect.

Rule 6.0: Watercourse and Basin Crossings

The proposed project does not trigger this rule; no roadways, utilities, or water control structures are proposed in the bed of District waterbodies.

Rule 7.0: Floodplain and Drainage Alterations

The proposed project does not trigger this rule; the City of Forest Lake has a state-approved floodplain ordinance.

Rule 8.0: Wetland Management

The proposed project does not trigger this rule; the District is not the LGU for wetland impacts.

Rule 9.0: Fees

The proposed project does not trigger this rule, government agencies are exempt.

Rule 10.0: Financial Assurances

The proposed project does not trigger this rule; the Board previously decided that financial assurances are not requested from government agencies.

Rule 11.0: Variances

The proposed project does not request a variance.

Submittals Received

The following submittals were received and reviewed as the basis for this permit application review:

2. Construction Plan Set (70 Sheets), received March 9, 2018, last revised March 7, 2018, prepared by Bolton & Menk, Inc.
3. Hydrologic Report, received March 9, 2018, prepared March 8, 2018 by Bolton & Menk, Inc.
4. Hydrologic Calculation Summaries, received March 9, 2018, prepared March 9, 2018, prepared March 8, 2018 by Bolton & Menk, Inc.
