COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 27, 2017
AGENDA NUMBER: 12
FILE NUMBER: 17-026
ITEM: Spring Lake Park Elementary School

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: Spring Lake Park Schools
1415 81st Avenue NE
Spring Lake Park, MN 55432

PURPOSE: New school and parking lot

LOCATION: Southeast of the intersection of 105th Avenue NE and Davenport St. NE in Blaine, Minnesota.
APPLICABILITY:
1. Any work within or adjacent to a Public ditch within the Watershed District.
2. Any work in or adjacent to wetlands, lakes or water courses
3. One or more cumulative acres of land disturbance
4. The lands and waters that have been, or may be covered by the regional flood.
5. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
6. High water table, outwash and organic soils
7. High infiltration soils
8. Highly erodible soils

EXHIBITS:
1. Construction Plan set (10 sheets); by Anderson Johnson and Associates, dated 2-10-17, received 3-9-17.
2. Stormwater Management Report; by Anderson Johnson and Associates, dated 3-1-17, received 3-9-17.
FINDINGS:

Pre-application Meeting: The project as submitted has received a general review during a pre-application meeting.

Ditches: There is a public ditch on the property. The public ditch is Ditch 41 (Sand Creek) according to the public drainage map. The Ditch 41 system was established in 1904. The ditch has was last inspected in 2015. The approved elevations through this property are 890.5 ft MSL at the downstream end and 891.0 ft MSL at the upstream end. The observed elevations through this property are 891.3 ft MSL at the downstream end and 892.0ft MSL at the upstream end. Existing elevations of the ditch represent a 0.8-1.0 ft variance above the approved elevations. Alternatives to repair and additional drainage have been considered and reviewed. The ditch is a 3rd order stream. The ditch serves the primary role of storm water conveyance and a collector system. The ditch serves approximately 0 acres of agricultural land. Land use in the area is toward commercial and park. There are flooding concerns upstream and downstream. Existing elevations, slopes and condition of ditch are fair. The ditch is in need of repair.

Ditch Hydraulics: A crossing of the ditch is not proposed.

Erosion and Sediment Control: Soils affected by the proposal are Lino, Isanti, & Rifle.
Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.

Adjacent properties and stormwater ponds are protected from sediment deposition.

Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases have been provided.

Stabilization adequate to prevent erosion has been provided at the outlets of all storm sewer pipes.

All storm sewer inlets are protected from sediment-laden water during construction.

All work adjacent to water or related resource has taken precautions to contain sediment, and stabilize the work area during construction.

Provisions have been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.

Provisions have been made for cleaning road surfaces where sediment is transported by the end of the day.

Construction entrance points are clearly located on the erosion and sediment control plan.

The erosion and sediment control plan does provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.

Dewatering: Shallow ground water does exist on site. The project will require dewatering.

An assessment of risks to other water and related resources has been conducted. The proposed dewatering technique will be determined by the contractor and is part of the bid scope and will be submitted to CCWD after the project is bid.

Floodplain: There is floodplain on the property according to the District model and FEMA. The project does propose to place fill within the floodplain. The total floodplain impact is 3,001 acre-feet. Compensatory storage is provided. There are flooding concerns upstream.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations meet the criteria for the City of Blaine; 2 ft above mottled, 2 ft above 100 yr.

Groundwater: Geotechnical information collected in November of 2016 indicates long term groundwater elevation is present at 4-7 feet below the surface.

The site is not within a Municipal Drinking Water Supply Area (DWSMA).

The project site is not within the Emergency Response Area/10 Year Well Head Protection Area/Drinking Water Supply Management Area.
The proposal does not contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA).

**Historic Sites:** The proposed project does not include sites of historic or archeological significance.

**Local Planning & Zoning:** The proposed project is consistent with local planning and zoning. There is an approved local water plan.

Property owners affected by changes in drainage have been notified and acknowledge the changes proposed.

**Maintenance:** The Owner of the Stormwater Management features and treatment practices is ISD 16, Spring Lake Park Schools on the school property and the National Sports Center at the parking lot location. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>Pervious pavement – School Property</td>
<td>1</td>
</tr>
<tr>
<td>Pervious pavement – NSC Property</td>
<td>1</td>
</tr>
</tbody>
</table>

Inspection and maintenance of stormwater facilities will be the responsibility of ISD 16, Spring Lake Park Schools on the school property and the National Sports Center at the parking lot location. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice. It is unknown if the Maintenance Plan(s) is/are consistent with District Maintenance standards for each STP.

Easements: The proposed project does not include ditch maintenance easement. A ditch maintenance easement is not required. A maintenance access to all storm water management features is provided.

**Stormwater & Hydrology:** Infiltration is not allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system uses filtration. Stormwater leaving the site is discharged into a well-defined receiving channel or pipe and routed to a public drainage system.

Drainage sensitive uses do not exist downstream from the proposed site, however, they do exist upstream of the project area. The rate of post-development runoff from the site does not exceed predevelopment rates, or rates which would interfere with sensitive downstream land uses. Properties and waterways downstream from the project are protected from erosion due to increases in the volume, velocity and peak water flow rates of stormwater runoff. Concentrated storm water leaving the site is discharged directly into a well-defined natural or man-made off-site receiving channel or pipe. All on-site
constructed storm water conveyance channels are constructed to withstand the expected velocity from a 2-year frequency storm without erosion.

**Water Quality:** The proposed project does not cause an exceedance of State water quality standards. The project does not contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into wetlands are pretreated by a sediment basin/water quality pond, and are designed correctly. All work adjacent to wetlands, waterbodies and water conveyance systems are protected from erosion. The proposal will not detrimentally affect the existing water quality of the receiving water. The proposal will not cause extreme fluctuations of water levels or temperature changes.

**Impairments:** This project is not within one (1) mile of an Impaired Water.

There are new impervious surfaces proposed as part of this project.

**Wetlands:** Wetlands do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and is not needed.

**Wildlife:**
The proposed project does not include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

**Performance Escrow:** $7,450.00  
**Wetland Escrow:** N/A  
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
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<th>NEED</th>
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<td><strong>Floodplain:</strong> Additional information needed for floodplain impacts.</td>
<td>1. Provide floodplain map with fill and mitigation locations and elevations.</td>
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<td><strong>Stormwater &amp; Hydraulics:</strong> The applicant is may be meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. Additional details are needed.</td>
<td>2. The applicant must update detail 17 (C2.11) with elevations so a treatment depth is shown that match the water quality calculations.</td>
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<td><strong>Maintenance:</strong> It is unknown who will be responsible for the inspection and maintenance of stormwater facilities. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater</td>
<td>3. Provide an O&amp;M Agreement that meets District requirements.</td>
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Treatment Practice.

**RECOMMENDATION:** Approve with 3 Stipulations

**Stipulations:**
1. Provide floodplain map with fill and mitigation locations and elevations.
2. The applicant must update detail 17 (C2.11) with elevations so a treatment depth is shown that match the water quality calculations.
3. Provide and O&M agreement that meets the District requirements.