COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: January 13, 2020
AGENDA NUMBER: 17
FILE NUMBER: 19-207
ITEM: Spring Lake Park Church Outlot

RECOMMENDATION: Approve with 5 Conditions and 2 Stipulations

APPLICANT: Prince Peace Lutheran Church
7700 Monroe Street
Spring Lake Park, MN 55432

PURPOSE: 6 Single Family Homes

LOCATION: 7700 Monroe Street, Spring Lake Park

APPLICABILITY:
1. One or more cumulative acres of land disturbance.
2. High infiltration soils.
3. Highly erodible soils.
EXHIBITS:
1. Construction Plan set (4 sheets); by Sathre-Bergquist, Inc., dated 1/02/2020, received 1/02/2020.
6. Draft O&M Agreement; by Coon Creek Watershed District and J.P. Custom Homes, undated, received 1/02/2020.

PREVIOUS ACTION TAKEN: This is a new application.

FINDINGS:
Pre-application Meeting: The project as submitted has not received a general review during a pre-application meeting.
Ditches: There is not a public ditch on the property.

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

Erosion and Sediment Control: Soils affected by the proposal are Urban-Lino and Urban-Isanti.

- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have been proposed to be fitted with sediment-trapping measures to prevent soil loss and do have a note to stabilize within seven (7) days of inactivity.
- 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.
- Stormwater runoff does not pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity and is not needed.
- 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 tracking 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.
- Details provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

Dewatering: Shallow ground water does not exist on site. The project does not require dewatering.

Floodplain: There is no floodplain on the property according to the District model and FEMA.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Spring Lake Park; 2 feet above 100 year.
Groundwater: Geotechnical information collected in October of 2019 indicates long term groundwater elevation is present at 5-7 feet below the surface.

The project site is within the 10 Year Well Head Protection Area and 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 not been notified and acknowledge the changes proposed.

Maintenance: The owner of the Stormwater Management features and treatment practices is Spring Lake Park. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Inspection &amp; Maintenance Responsibility</th>
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</thead>
<tbody>
<tr>
<td>Infiltration Basins</td>
<td>1</td>
<td>Spring Lake Park</td>
</tr>
<tr>
<td>Grass Filter Strip</td>
<td>1</td>
<td>Spring Lake Park</td>
</tr>
</tbody>
</table>

It is unknown whether the City of Spring Lake Park will be responsible for the inspection and maintenance of stormwater facilities. A maintenance agreement has not been executed. The applicant has submitted a Maintenance Plan for each Stormwater Treatment Practice. The Maintenance Plan is 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 allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes a vegetated filter strip and an infiltration basin. Calculations have been provided that illustrate the 1-inch infiltration volume is achieved below outlet.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site does not exceed predevelopment rates to the west. The rate of post-development runoff from the site does exceed predevelopment rates to the
east to Monroe Street. There are no adverse impacts anticipated due to the slight increase in rates. 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 a 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 the infiltration basin are pretreated via a sump and overland flow and are not 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 and does not drain to 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. Wetlands have not been delineated and do not need to be.

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

**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. The applicant has not contacted the MDNR natural heritage or endangered species program and does not need to.

If the project is present, the project does not propose substantial adverse alteration or significant detrimental impact on a species or removal of a plant species will occur.

**Performance Escrow:** $3,000.00
**Wetland Escrow:** $N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (2.0 ac * $500/ac = $3,000.00</td>
<td>1. Receipt of escrows.</td>
</tr>
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</table>
**Stormwater & Hydraulics:** According to the infiltration basin detail, it appears 6” of MnDOT filter topsoil will be placed on top of tilled in-situ soils. Notes #11 and #12 indicate a bioretention soil mix and a sand filtration shelf.

The infiltration basin is designed to contain the back-to-back 100-year event. The EOF directed to the residential back yards is still shown on the grading plan.

2. Verify type of soil mix to be placed in the infiltration basin. Delete notes on the infiltration basin detail if they are not applicable.

3. Remove the infiltration basin EOF from the grading plan.

**Water Quality:** A 2-foot sump is proposed for pretreatment prior to discharging to the infiltration basin.

4. Update to a 4-foot sump. A minimum of 4-foot depth is required to prevent resuspension.

**Maintenance:** It is unknown whether the City of Spring Lake Park will be responsible for the inspection and maintenance of stormwater facilities.

5. Clarify if the City of Spring Lake Park will be responsible for the inspection and maintenance of stormwater facilities. If not, provide an O&M Agreement that meets District requirements.

**RECOMMENDATION:** Approve with 5 Conditions and 2 Stipulations:

**Conditions:**
1. Receipt of escrows.
2. Verify type of soil mix to be placed in the infiltration basin. Delete notes of the infiltration basin detail if they are not applicable.
3. Remove the infiltration basin EOF from the grading plan.
4. Update to a 4-foot sump. A minimum of 4-foot depth is required to prevent resuspension.
5. Clarify if the City of Spring Lake Park will be responsible for the inspection and maintenance of stormwater facilities. If not, provide an O&M Agreement that meets District requirements.

**Stipulations:**
1. Submittal of as-builts for stormwater features; including but not limited to utility inverts, sump depth, and basin volumes.
2. Completion of a post construction infiltration test on Infiltration Basin by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or at least 2 double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test(s) to witness the results.