COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: January 14, 2019
AGENDA NUMBER: 23
FILE NUMBER: 17-166
ITEM: L-34 CR Lift Station Improvements

RECOMMENDATION: Approve with 5 Stipulations

APPLICANT: Jeannine Clancy
390 Robert St. N
St. Paul, MN 55101

PURPOSE: Lift Station Rehabilitation

LOCATION: 1055 Coon Rapids Blvd, Coon Rapids, MN

APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work in or adjacent to wetlands, lakes or water courses.
3. The lands and waters that have been or may be covered by the regional flood.

**EXHIBITS:**
1. Construction Plan set (11 sheets); by HTPO, dated 12/20/2018, received 1/02/2019.
2. Stormwater Narrative; by HTPO, dated 12/20/2018, received 1/02/2019.

**PREVIOUS ACTION TAKEN:** This is a new application.

**FINDINGS:**

**Pre-application Meeting:** The project as submitted has 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 Hayden and Braham.
- 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.
• 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 not exist on site. The project does not anticipate dewatering.

**Floodplain:** There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 842.7 feet. The project does propose to place fill within the floodplain for constructability. The total floodplain impact is insignificant. The proposed impact is within the flood fringe. Compensatory storage is not needed. There are no flooding concerns upstream and/or downstream.

**High Water Flooding:** Information is not needed to substantiate low floor elevations. No new structures are proposed as part of this project.

**Groundwater:** Geotechnical information collected in November 2017 indicates long term groundwater elevation is present at 26-29 feet below the surface.

The project site is within the Drinking Water Supply Management Area. The project site is not within the Emergency Response Area/10 Year Well Head Protection 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 should be notified and acknowledge the changes proposed.

Maintenance: The owner of the Stormwater Management features and treatment practices is MCES. 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>
</tr>
</thead>
<tbody>
<tr>
<td>Filtration Basin</td>
<td>1</td>
<td>MCES</td>
</tr>
<tr>
<td>Rain Guardian</td>
<td>1</td>
<td>MCES</td>
</tr>
</tbody>
</table>

A maintenance agreement has not been executed. The applicant requests to waive the maintenance agreement as the maintenance of this facility is considered a standard municipal public activity.

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 1.1-inch filtration is achieved. The stormwater management system utilizes filtration. Calculations have been provided that illustrate the 1.1-inch filtration 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, 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/stormwater basins 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 within one (1) mile of an Impaired Water. The Impaired Water is Lower Coon Creek. Lower Coon Creek is impaired for Aquatic Life (Macro-invertebrates)/Aquatic Recreation (E. coli). The major stressors are Total Suspended Solids (TSS)/Total Phosphorus (TP)/E.coli. There is an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water.

There are no 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 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 is not required 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.

Performance Escrow: $2,385
Wetland Escrow: $N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (0.77 ac * $500/ac) = $2,385</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: Type I geotextile filter fabric is proposed around drain tile. The District has found that underdrains perform better without filter sock as they are prone to clogging. It’s not clear if filtration basin is lined</td>
<td>2. It is recommended that the filter sock be removed from the underdrain of the filtration basin. 3. Provide a liner for the filtration basin.</td>
</tr>
<tr>
<td>Soils and Erosion Control: Stormwater being discharged out of concrete dissipater appears that it could create erosion downstream to creek.</td>
<td>4. Provide erosion control measures or clarification that stormwater being discharged downstream of the concrete dissipator will not cause erosion.</td>
</tr>
</tbody>
</table>
Detail 6/CS7 shows the 12” storm pipe connecting to the concrete dissipator below the top of concrete. The layout of the concrete dissipator shown on detail 6/CS7 is inconsistent with the layout shown on the storm sewer profile.

5. Update detail 6/CS7 to reflect the correct location of the 12” storm pipe. Update detail 6/CS7 and/or the storm sewer profile to reflect the correct layout of the concrete dissipator.

RECOMMENDATION: Approve with 5 Stipulations

Stipulations:

1. Receipt of escrows.
2. It is recommended that the filter sock be removed from the underdrain of the filtration basin.
3. Provide a liner for the filtration basin.
4. Provide erosion control measures or clarification that stormwater being discharged downstream of the concrete dissipator will not cause erosion.
5. Update detail 6/CS7 to reflect the correct location of the 12” storm pipe. Update detail 6/CS7 and/or the storm sewer profile to reflect the correct layout of the concrete dissipator.