COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: November 13, 2017
AGENDA NUMBER: 19
FILE NUMBER: 17-213
ITEM: Stonybrook Trunk Storm Sewer Improvements Project

RECOMMENDATION: Approve with 4 Stipulations

APPLICANT: City of Fridley
Attn: Jim Kosluchar
6431 University Ave NE
Fridley, MN 55432

PURPOSE: Address flooding issues at industrial park upstream of 78th Ave NE and Hickory St NE

LOCATION: East River Rd, Craigbrook Way NE and Alden Way NE, Fridley MN

APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work within or adjacent to a Public ditch within the Watershed District.
3. Any work in or adjacent to wetlands, lakes or water courses
4. One or more cumulative acres of land disturbance

**EXHIBITS:**
1. Construction Plan set (17 sheets); by WSB & Associates, dated 10/17, received 11/1/17.
2. Project Memo; by WSB & Associates, dated 10/24/17, received 11/1/17.

**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 a public ditch on the property. The public ditch is Stonybrook Creek according to the public drainage map. Stonybrook Creek is a natural watercourse and therefore does not have approved elevations. This project will replace structures at existing elevations. Existing elevations, slopes and condition of the ditch are 845.0ft MSL at the upstream end and 803.9ft MSL at the downstream end. The ditch is a 4th order stream. The ditch serves the primary role of trunk drainage system. The ditch serves approximately 0 acres of agricultural land. Land use in the area is toward residential. There are flooding concerns upstream. The ditch has been inspected. Existing elevations, slopes and condition of ditch are fair. Alternatives to repair and additional drainage have been considered and reviewed. The ditch is not in need of repair.

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

Erosion and Sediment Control: Soil affected by the proposal is Urban Land.
- Stabilizing vegetation is not 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 not 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 may exist on site. Dewatering is not anticipated.
**Floodplain:** There is no floodplain on the property according to the District model and FEMA.

**High Water Flooding:** Information has not been provided to substantiate low floor elevations and is not needed, no structures proposed.

**Groundwater:** Geotechnical information was not provided and is not needed.

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 should be notified and acknowledge the changes proposed.

**Maintenance:** The Owner of the Stormwater Management features and treatment practices is the City of Fridley. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sumps</td>
<td></td>
<td>City of Fridley</td>
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As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities.

Easements: The proposed project does include ditch maintenance easement. A ditch maintenance easement is not required.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved to the maximum extent practicable. 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. The project is proposed to alleviate flooding; the rate of post-development runoff from the site does
exceed predevelopment rates. However, the rates will not 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 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 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 work adjacent to wetlands, waterbodies and water conveyance systems are protected from erosion. The proposal will 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 and drains to an Impaired Water. The Impaired Water is Mississippi River. Mississippi River 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 new impervious surfaces proposed as part of this project.

**Wetlands:** Wetlands do exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey.

**Wetland Replacement Plan:** A wetland replacement 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.

**Performance Escrow:** $2600.00

**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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<tbody>
<tr>
<td><strong>Escrows:</strong> $2,000 + (1.2 ac * $500/ac) = $2600.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td><strong>Soils &amp; Erosion Control:</strong> District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.</td>
<td>2. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.</td>
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Inlet protection not shown on all existing and proposed stormwater structures.

3. Inlet protection needs to be shown on all proposed and existing stormsewer structures.

| Water Quality: The proposed project does cause an exceedance of State water quality standards. |
| Water quality treatment needs to be provided where possible along project location. Off-line sumps are recommended to meet water quality requirements to the maximum extent practicable. If sumps are used, provide calculations (SHASM can be used) to indicate sumps removal percentage. A minimum of 4-foot depth is required to prevent resuspension. |

**RECOMMENDATION:** Approve with 4 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
3. Inlet protection needs to be shown on all proposed and existing stormsewer structures.
4. Water quality treatment needs to be provided where possible along project location. Off-line sumps are recommended to meet water quality requirements to the maximum extent practicable. If sumps are used, provide calculations (SHASM can be used) to indicate sumps removal percentage. A minimum of 4-foot depth is required to prevent resuspension.