COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 8, 2017
AGENDA NUMBER: 13
FILE NUMBER: 17-077
ITEM: Culvert Replacement CSAH 60 (Constance Blvd)

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: Anoka County Highway Department
PURPOSE: 66” CMP Replacement
LOCATION: 680’ West of University Ave, Andover, MN

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. The lands and water that have been, or may be covered by the regional flood.
4. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Uses)
5. High water table, outwash and organic soils.
6. High infiltration soils.
7. Highly erodible soils
8. Excavation or filling or a combination of excavation and filling of sand or other excavation or fill material including the laying, repairing, replacing or enlarging of a culvert or an underground pipe or facility where it crosses a public ditch or waters of the state.

EXHIBITS:
1. Permit Application for Crossing or Culvert Installation and required documents by Anoka County Highway Department, dated 4/12/17, received 4/13/17.

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 County Ditch 58-7 according to the public drainage map. The approved/as-built elevations through this property are 892.38 ft MSL at the downstream end and 892.85 ft MSL at the upstream end.

The 2013 observed elevations through this property are 892.85 ft MSL at the downstream end and 893.04 ft MSL at the upstream end (NAVD 88). Existing elevations of the ditch represent a 0.54-0.67 ft variance from 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 collector system.

The ditch serves approximately 171 acres of agricultural land. Land use in the area is agriculture and single family residential. There are no flooding concerns upstream or downstream.

The ditch has been inspected. Existing elevations, slopes and condition of ditch are fair. The ditch is not in need of repair.

Ditch Hydraulics: A crossing of the ditch is proposed. The proposed crossing involves the replacement of a culvert. The proposed culvert is of sufficient hydraulic capacity.

Erosion and Sediment Control: Soils affected by the proposal are Rifle and Markey.

- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have not been proposed to be fitted with sediment-trapping measures to prevent soil loss.
• Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases have not been provided.
• Stormwater runoff does pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity and is not needed.
• No additional storm sewer affected during construction of the project.
• All work adjacent to water or related resource has taken precautions to contain sediment, and stabilize the work area during construction.
• Provisions have not been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.
• Provisions have not 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. The project does not require dewatering.

Floodplain: There is floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 899.2 on the upstream side and 898.0 on the downstream site. The total floodplain impact is 0 acre-feet, within the floodway.

Groundwater: Surficial ground water is present at unknown feet. The site does not include groundwater sensitive areas. No buildings or infiltration proposed, information is not needed to substantiate low floor elevations.

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.
**Maintenance:** No stormwater management features or treatment practices proposed as part of the project.

Easements: The proposed project does include a ditch maintenance easement or utility line crossings. It is not necessary to notify property owners affected by changes in drainage because this is a culvert replacement matching hydraulics.

**Stormwater & Hydraulics:** No new impervious proposed as part of the project, infiltration requirements do not apply. 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 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. No increases in the volume, velocity and peak water flow rates of stormwater runoff are expected. Concentrated storm water leaving a site is discharged directly into a well-defined natural or man-made off-site receiving channel or pipe. No on-site constructed storm water conveyance channels are proposed.

**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 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 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.

**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:** $2050.00  
**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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<tr>
<td>Escrows: $2,000 + (0.1 ac * $500/ac) = $2050.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Ditch Hydraulics:</strong></td>
<td>2. Provide as-builts that the proposed culvert was installed at the approved elevations of 892.3’/892.4’ (DS/US) as referenced to the NAVD 88 Datum.</td>
</tr>
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<td>The proposed culvert should be installed at the approved elevations of 892.3’/892.4’ (DS/US) as referenced to the NAVD 88 Datum.</td>
<td></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>3. Provide updated erosion control plan with the following information:</td>
</tr>
<tr>
<td>Soil stockpiles have not been proposed to be fitted with sediment-trapping measures to prevent soil loss.</td>
<td>a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.</td>
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<td>Provisions have not been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.</td>
<td>b. Provide note that soil stockpiles have been proposed to be fitted with sediment-trapping measures to prevent soil loss.</td>
</tr>
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<td>Provisions have not been made for cleaning road surfaces where sediment is transported by the end of the day.</td>
<td>c. Provide a note that any sediment tracked onto the street from construction activities will be removed on a daily basis.</td>
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<tr>
<td></td>
<td>d. Provide a note that any sediment tracked onto the street from construction activities will be removed on a daily basis</td>
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</table>

**RECOMMENDATION:** Approve with 3 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide as-builts that the proposed culvert was installed at the approved elevations of 892.3’/892.4’ (DS/US) as referenced to the NAVD 88 Datum.
3. Provide updated erosion control plan with the following information:
   a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
   b. Provide note that soil stockpiles have been proposed to be fitted with sediment-trapping measures to prevent soil loss.
   c. Provide a note that any sediment tracked onto the street from construction activities will be removed on a daily basis.
   d. Provide a note that any sediment tracked onto the street from construction activities will be removed on a daily basis.