MEETING DATE: May 23, 2016
AGENDA NUMBER: 8
FILE NUMBER: 16-081
ITEM: Anoka County CR 60 Culvert Replacement

RECOMMENDATION: Table with 4 Stipulations

APPLICANT: Anoka County Hwy. Department
1440 Bunker Lake Blvd. NW
Andover, MN 55304

PURPOSE: Replacement of existing 84 inch CMP with twin 54 inch smooth walled corrugated plastic pipe

LOCATION: Near intersection of Constance Blvd. and Tippecanoe St. NE, Ham Lake MN
APPLICABILITY:
1) Bridges and culverts (1.06 sub 1)
2) Any work in or adjacent to wetlands, lakes or water courses.
3) Highly erodible soils

EXHIBITS:
1) Map showing location of culvert crossing by Anoka County; no date provided; received 5/11/2016
3) Construction Plan

HISTORY & CONSIDERATIONS: This is the first application for this site.

FINDINGS:
Ditches: There is a public ditch on the property. The public ditch is County Ditch 11 according to the public drainage map. County Ditch 11 was established in 1891. The ditch was last inspected in 2011. The ditch is not in need of repair. The project site is tributary to County Ditch 11.

The approved elevations and grades through this property are 891.42 ft NAVD 88 (D/S) and 891.45 ft NAVD 88 (U/S) and 0.03% slope. Existing elevations, slopes and condition of the ditch are fair and represent a 2.6 ft variance from the approved elevations. Alternatives to repair and additional drainage have been considered and reviewed.
The ditch is a fourth order stream. The ditch serves the primary role of
a. Agricultural drainage

The ditch serves approximately 244 acres of agricultural land.
Land use in the area is agriculture, single family residential and vacant.
There are flooding concerns upstream and downstream.

A 16.5 foot grass strip is required.
A 16.5 foot grass strip is present
The 16.5 foot grass strip has been inspected. (103E.075 subd 4)
The grass strip is not in need of repair or maintenance.

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

**Erosion and Sediment Control:** Soils affected by the proposal are Rifle. Stabilizing
vegetation is not proposed for disturbed areas within 7 days of rough grading. Adjacent
properties and stormwater ponds are protected from sediment deposition. Project site is
not greater than 1 acre, a NPDES permit is not required.

**Floodplain:** There is floodplain on the property according to the District model. The
project does propose to place fill within the floodplain. The total floodplain impact is
negligible. The proposed impact is within the flood fringe. Compensatory storage is not
provided. There are flooding concerns upstream and/or downstream.

**Groundwater:** Geotechnical information has not been submitted and is not needed.

**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 is Anoka County.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch
infiltration is not achieved and is not needed. Drainage sensitive uses exist downstream
from the proposed site.

**Water Quality:** The proposed project does not cause an exceedence 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 not 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 and drains to an Impaired Water. The Impaired Water is Coon Creek. Coon Creek is impaired for (Aquatic Life (Macro-invertebrates) / Aquatic Recreation (E. coli)). The major stressors of Total Suspended Solids (TSS) / Total Phosphorus (TP) / E.coli. There is not an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water.

The project does not propose site stabilization within 7 days after construction. The proposed stormwater system does not retain at least one inch of runoff from the project site.

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 needed.

**Wildlife:** The proposed project may include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

There are not Ground Water Dependent water resources on site.

No steps are proposed for avoiding or minimizing impacts.

**Performance Escrow:** $2,050.00

**Wetland Escrow:** N/A

There are not ditch liens on the property.

**FINDINGS/ISSUES/CONCERNS:**

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<th>ISSUE</th>
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<tr>
<td><strong>Soils &amp; Erosion Control:</strong></td>
<td>1. Provide erosion control plan stating that all disturbed areas will be stabilized within 7 days of rough grading.</td>
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<td><strong>Ditches:</strong></td>
<td>2. Alternative alignment and pipe sizes for this project need to be revisited to</td>
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<td>The ditch in this area is approximately 2.6 feet above its approved grade. The county is proposing to install the two 54 inch smooth lined</td>
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HDPE culvert(s) to replace the existing 84 inch CMP pipe. The county is proposing that the new pipes are installed at the approved grade with elevations 891.48 (upstream) and 891.42 (downstream) respectively. The proposed design is problematic because there are efficiency concerns due to sedimentation.

In early conversations with the County, the District discussed its desire to install a new 72 inch pipe at a diagonal connecting County Ditch 11 from the east side of Tippecanoe to the south side of Constance. This alignment would solve several drainage problems that exist currently in this system.

The District would like the County to investigate alternatives to this proposal including the desired diagonal alignment discussed above.

**Wildlife:** The proposed project has the potential to include the threatened Black Huckleberry (Gaylussacia baccata)

**Escrows:** $2,000 + (0.10 ac * $500/ac) = $2,050.00

**RECOMMENDATION:** Table with 4 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide erosion control plan stating that all disturbed areas will be stabilized within 7 days of rough grading.
3. Alternative alignment and pipe sizes for this project need to be revisited to meet the drainage requirements of the District.
4. Contact the DNR to have a DNR Natural Heritage Information System (NHIS) data review completed to determine if any records of state-protected species may be located within the boundary of this project.