COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 10, 2019
AGENDA NUMBER: 15
FILE NUMBER: 19-116
ITEM: Clover Leaf Parkway Area Street Reconstruction

RECOMMENDATION: Table with 6 Stipulations

APPLICANT: Stefan Higgins
10801 Town Square Drive NE
Blaine, MN 55449

PURPOSE: Reconstruction of the existing Clover Leaf Parkway and 93rd Ln NE corridors

LOCATION: Clover Leaf Parkway from Polk St NE to Hwy 65, and 93rd Ln NE from Hwy 65 to Goodhue St. NE, Blaine, 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
5. The lands and waters that have been, or may be covered by the regional flood.

EXHIBITS:
1. Construction Plan set (41 sheets); by Bolton & Menk, dated 4/15/19, received 5/28/19.
2. Project Summary Memorandum; by Bolton & Menk, dated 5/28/19, received 5/28/19.
3. Geotechnical Exploration and Engineering Review; by Northern Technologies, LLC., dated 12/21/18, received 5/31/19.
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 a public ditch on the property. The public ditch is County Ditch 17 according to the public drainage map. The existing elevations through this property at the culvert are 892.969 ft MSL at the downstream end and 892.899 ft MSL at the upstream end.

The ditch is a 4th order stream. The ditch serves the primary role of
a. Trunk drainage system

The ditch serves approximately 0 acres of agricultural land.
Land use in the area is toward residential/commercial.
There are flooding concerns upstream and/or downstream.
**Ditch Hydraulics:** A crossing of the ditch is already present. The existing crossing will not be disturbed.

**Erosion and Sediment Control:** Soils affected by the proposal are Isanti, Lino, Millervile, and Zimmerman.
- 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 and do not 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.
- 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 may exist on site. It is unknown if the project requires dewatering.

**Floodplain:** There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 902.0 feet. The project does not propose to place fill within the floodplain. The total floodplain impact is 0 acre-feet. 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 structures proposed.
**Groundwater:** Geotechnical information collected in December 2018 indicates long term groundwater elevation is present at 5 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 should be notified and acknowledge the changes proposed.

**Maintenance:** The owner of the Stormwater Management features and treatment practices is The City of Blaine. 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>SAFL Baffle</td>
<td>1</td>
<td>The City of Blaine</td>
</tr>
<tr>
<td>Sump Catch Basin</td>
<td>6</td>
<td>The City of Blaine</td>
</tr>
<tr>
<td>Sump Manhole</td>
<td>2</td>
<td>The City of Blaine</td>
</tr>
</tbody>
</table>

As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities.

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

**Stormwater & Hydrology:** Infiltration is allowed within the project area. However, due to site constraints the 1-inch infiltration volume cannot be achieved on-site. Off-site regional BMPs will be utilized in order to accommodate the required treatment volume. The BMPs are proposed to be constructed in 2020.

Drainage sensitive uses do not exist downstream from the proposed site. There is potential for the rate of post-development runoff from the site to exceed predevelopment rates. However, these rates would 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 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 are pretreated. 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 and drains to Impaired Water. The Impaired Water is County Ditch 17. County Ditch 17 is impaired for Aquatic Life (Macro-invertebrates) and Aquatic Recreation (E. coli). The major stressors are Total Suspended Solids (TSS), Total Phosphorus (TP), and 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. Wetlands have not been delineated. The wetland boundary has not been checked. Grading does not occur within the toe of the slopes.

The total proposed wetland impact is 0 square feet

**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 will occur.

**Performance Escrow:** $4,250
**Wetland Escrow:** $ N/A
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (4.5 ac * $500/ac = $4,250</td>
<td>1. Receipt of escrows.</td>
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</tbody>
</table>
Stormwater & Hydraulics: The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. The City of Blaine is working with CCWD to develop an agreement to implement off-site regional BMPs in order to accommodate the required treatment volume.

2. The City of Blaine is currently working with the Coon Creek Watershed District (CCWD) to develop a regional stormwater management plan in accordance with CCWD Rule 14.1 which will include stormwater management for this project as well as future projects and will allow this project to meet CCWD Rule 8.3. Guarantee that this project be included as part of the regional stormwater management plan and funding is secured.

3. Update construction plans to include details for the sump manholes and SAFL Baffle.

Soils & Erosion Control: District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity and to stabilize stockpiles within seven (7) days of inactivity.

It is unclear if dewatering is needed during the construction of the proposed project.

4. Update construction plans to stabilize vegetation within 7 days of rough grading or inactivity and to stabilize stockpiles within 7 days of inactivity.

5. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.

Water Quality: The sump manholes are not designed correctly for water quality treatment prior to discharge into a wetland or receiving water.

6. Provide the input parameters used in SHSAM calculations. Sumps should be appropriately sized to meet District removal rates of 80% TSS for OK110 particle size. A minimum of 4-foot sump depth is required to prevent resuspension of sediment.

RECOMMENDATION: Table with 6 Stipulations

Stipulations:
1. Receipt of escrows.
2. Provide agreement with CCWD that indicates how offsite BMPs will accommodate the required treatment volume.
3. Update construction plans to include details for the sump manholes and SAFL Baffle.
4. Update construction plans to:
a. Stabilize vegetation within 7 days of rough grading or inactivity.
b. Stabilize stockpiles within 7 days of inactivity.

5. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.

6. Provide the input parameters used in SHSAM calculations. Sumps should be appropriately sized to meet District removal rates of 80% TSS for OK110 particle size. A minimum of 4-foot sump depth is required to prevent resuspension of sediment.