**COON CREEK WATERSHED DISTRICT**  
**PERMIT REVIEW**

<table>
<thead>
<tr>
<th>MEETING DATE:</th>
<th>March 11, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGENDA NUMBER:</td>
<td>13</td>
</tr>
<tr>
<td>FILE NUMBER:</td>
<td>18-201</td>
</tr>
<tr>
<td>ITEM:</td>
<td>Andover 2019 Street Reconstruction</td>
</tr>
</tbody>
</table>

**RECOMMENDATION:** Approve with 4 Stipulations

**APPLICANT:** City of Andover  
Attn: Jason Law  
1685 Crosstown Blvd NW  
Andover, MN 55304

**PURPOSE:** Street Reconstruction and Storm Drainage Improvements

**LOCATION:** Gladiola Street NW, Andover, MN

![Map of Andover Street Reconstruction](image)

**APPLICABILITY:**  
1. Within 1 mile of an impaired waters.
2. Any work in or adjacent to wetlands, lakes or water courses
3. One or more cumulative acres of land disturbance
4. The lands and waters that have been or may be covered by the regional flood.
5. Highly erodible soils
6. 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. Construction Plan set (72 sheets); by City of Andover, dated 3/5/19, received 2/27/19.
2. Drainage Summary and HydroCAD Report; by City of Andover, dated 2/27/19,
   received 2/27/19.
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 not a public ditch on the property.

Ditch Hydraulics: Drainage improvements to the drainage system / ditch / wetland complex located between Crooked Lake Boulevard and Crooked Lake are proposed. The proposed improvements involve removal of an existing culvert and grading of an overflow outlet between Wetland 1 and 2b as well as the replacement of a culvert between Wetland 2a and Crooked Lake. The proposed culvert is of sufficient hydraulic capacity.

Erosion and Sediment Control: Soils affected by the proposal are Nymore and Rifle.
- Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading on the construction plans.
- Soil stockpiles have not been proposed to be fitted with sediment-trapping measures to prevent soil loss.
- Stabilization of soil stockpiles has not been proposed within 7 days of inactivity.
- Adjacent properties and stormwater ponds are not protected from sediment deposition. Double row of perimeter control at waterbodies/creeks/wetlands
• Construction schedules detailing when sediment trapping measures will occur; stabilization of earthen structures and the general timing of construction phases have been provided.
• Stormwater runoff does pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity.
• 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 not 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 tracking 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 not clearly located on the erosion and sediment control plan.
• The erosion and sediment control plan does not provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.
• Details for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.).

Dewatering: Shallow ground water may exist on site. The project will likely require dewatering.

Floodplain: There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 863.4 feet. The project does not propose to place fill within the floodplain.

High Water Flooding: Information has been provided but is not needed to substantiate low floor elevations as no new structures are proposed.

Groundwater: Geotechnical information was not provided.

The project site is not within the Emergency Response Area, 10 Year Well Head Protection Area, or Drinking Water Supply Management Area.

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 and treatment practices is the City of Andover. 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>Infiltration Basins</td>
<td>1</td>
<td>City of Andover</td>
</tr>
<tr>
<td>Sumps</td>
<td>3</td>
<td>City of Andover</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 include a ditch maintenance easement. A ditch maintenance easement is required. A maintenance access to all storm water management features is provided.

Stormwater & Hydrology: Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes multiple sumps and a single infiltration basin. Calculations have been provided that illustrate the 1-inch infiltration volume is achieved below outlet.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff into Crooked Lake does exceed predevelopment rates. The increase in rate of post-development runoff is proposed in order to improve flood protection of upstream properties and will not adversely impact downstream land. 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 and Crooked Lake are pretreated by sumps and an infiltration basin and are not designed correctly. Catch basin 302 is proposed with a 3-foot sump; a minimum of 4-foot depth is required to prevent resuspension. 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 Waters. The Impaired Waters are Crooked Lake and Coon Creek. Crooked Lake is impaired for Aquatic Consumption (Mercury). Coon Creek is impaired for Aquatic Life (Macro-
invertebrates) and Aquatic Recreation (E. coli). The major stressor to Crooked Lake is Mercury. The major stressors to Coon Creek are Total Suspended Solids (TSS), Total Phosphorus (TP), and E.coli. There is an EPA approved Total Maximum Daily Load (TMDL) for Crooked Lake. There is an EPA approved TMDL or Waste Load Allocation (WLA) for Coon Creek.

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 been delineated. The most recent delineation was approved on 12/18/18. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The total proposed wetland impact is 0.44 acres. The impact is through drainage in locations as shown below:

TEP members have not been notified with a complete plan and have not been requested to submit comments. The project is not wetland dependent.

The project is exempt. The project qualifies for the Utility Exemption 8420.0420 subp. 6. Excavation will occur in a type 1 wetland with spoil removed to an offsite location. The excavation qualifies for a no-loss and is not regulated under the scope of the WCA.
The applicant does need to contact the DNR area hydrologist and the Corps of Engineers.

**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:** $5,000

**Wetland Escrow:** $N/A

There are no ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrows:</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>$2,000 + (6 ac * $500/ac) = $5,000</td>
<td></td>
</tr>
</tbody>
</table>
**Soils & Erosion Control:** Provide SWPPP with Erosion Control Plan that satisfies District Requirements. Items noted in Drainage Summary will unlikely be seen by contractors doing work.

A dewatering permit will likely be required for construction of storm sewer improvements.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Provide SWPPP with Erosion Control Plan that includes the following:</td>
</tr>
<tr>
<td></td>
<td>a. Stabilize disturbed areas within seven (7) days of rough grading or inactivity.</td>
</tr>
<tr>
<td></td>
<td>b. Soil stockpiles will be fitted with sediment-trapping measures to prevent soil loss.</td>
</tr>
<tr>
<td></td>
<td>c. Soil stockpiles will be stabilized within 7 days of inactivity.</td>
</tr>
<tr>
<td></td>
<td>d. Show double row perimeter control around all water resources.</td>
</tr>
<tr>
<td></td>
<td>e. Provide note that precautions will be taken to contain sediment and stabilize the work area during construction.</td>
</tr>
<tr>
<td></td>
<td>f. Show rock construction entrances on plans.</td>
</tr>
<tr>
<td></td>
<td>g. Provide note that street sweeping will occur daily at end of day (EOD).</td>
</tr>
<tr>
<td></td>
<td>h. Provide note to repair and maintain all temporary and permanent erosion and sediment control practices.</td>
</tr>
<tr>
<td>3.</td>
<td>If dewatering will be required for storm sewer improvements provide statement on plans as well as provide well-field location, rates, discharge location, schedule and quantities. Apply for MnDNR Water Appropriation Permit.</td>
</tr>
</tbody>
</table>

**Water Quality:** All discharges into wetlands are pretreated by sumps. The drainage summary states that catch basins will include 4’ sumps; however, exhibits 10, 11, and 12 show sump depths of 5, 5, and 3-feet respectively. A 3-foot sump depth is not an approved design for water quality treatment prior to discharge into a wetland or receiving water.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Provide clarification of proposed sump depths. A minimum of 4-foot depth is required to prevent resuspension.</td>
</tr>
</tbody>
</table>
RECOMMENDATION: Approve with 4 Stipulations

Stipulations:

1. Receipt of escrows.
2. Provide SWPPP with Erosion Control Plan that includes the following:
   a. Stabilize disturbed areas within seven (7) days of rough grading or inactivity.
   b. Soil stockpiles will be fitted with sediment-trapping measures to prevent soil loss.
   c. Soil stockpiles will be stabilized within 7 days of inactivity.
   d. Show double row perimeter control around all water resources.
   e. Provide note that precautions will be taken to contain sediment and stabilize the work area during construction.
   f. Show rock construction entrances on plans.
   g. Provide note that street sweeping will occur daily at end of day (EOD).
   h. Provide note to repair and maintain all temporary and permanent erosion and sediment control practices.
3. If dewatering will be required for storm sewer improvements provide statement on plans as well as provide well-field location, rates, discharge location, schedule and quantities. Apply for MnDNR Water Appropriation Permit.
4. Provide clarification of proposed sump depths. A minimum of 4-foot depth is required to prevent resuspension.