COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE:      May 13, 2019
AGENDA NUMBER:    23
FILE NUMBER:      19-095
ITEM:            Catchers Creek East Utility and Street Improvements

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT:        City of Andover
                  Attn: Dave Berkowitz
                  1685 Crosstown Blvd NW
                  Andover, MN 55304

PURPOSE:          Construction of roadway, underground utilities associated
                  with Catchers Creek East development (PAN 17-208)

LOCATION:         SW of intersection of University Ave and Andover Blvd,
                  Andover, 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.
6. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
7. High water table, outwash and organic soils

EXHIBITS:
1. Construction Plan set (34 sheets); by WSB, dated 5/1/19, received 5/1/19.
PREVIOUS ACTION TAKEN: This is a new application. This application is associated with the Catchers Creek East development (PAN 17-208), which was approved at the April 8, 2019 meeting.

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 57 according to the public drainage map. The approved elevations through this property are 869.6ft MSL at the downstream end and 869.7ft MSL at the upstream end. Existing elevations, slopes and condition of the ditch are 871.1ft MSL at the downstream end and 870.9ft MSL at the upstream end and represent a 1.5-1.2ft variance from the approved elevations. The ditch is a 5th 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. There are no flooding concerns upstream or downstream. 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:** Soils affected by the proposal are Lino, Sartell, and Zimmerman.
- Erosion and sediment control plans have been prepared in accordance with the SWPPP submitted under PAN 17-208.
- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- 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.
- Provisions have been made to minimize transport of sediment (mud) by runoff or vehicle tracking onto the paved surface.
- 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, inlet protection, etc.)
- Detail not provided for concrete washout.

**Dewatering:** Shallow ground water does exist on site. Dewatering is not anticipated.

**Floodplain:** There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 880.6 feet on the east to 880.2 feet on the west. The 17-208 project does propose to place fill within the floodplain. The total floodplain impact is 0.23 acre-feet. The proposed impact is within the flood fringe.
Compensatory storage is provided under PAN 17-208. There are no flooding concerns upstream or downstream.

**High Water Flooding:** Information was provided under PAN 17-208 to substantiate low floor elevations associated with the development.

**Groundwater:** Geotechnical information collected in March 2014 indicates long term groundwater elevation is present at 6-31 feet below the surface.

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 include sites of historic or archeological significance. The sites have been evaluated by the state archeologist and delineated.

**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:** As indicated in information submitted under PAN 17-208, the Owner of the Stormwater Management features and treatment practices is City of Andover. The Stormwater Treatment Practices (STPs) consist of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
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<tbody>
<tr>
<td>Basins (A, B, C, E)</td>
<td>4</td>
<td>City of Andover</td>
</tr>
<tr>
<td>Sump</td>
<td>1</td>
<td>City of Andover</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 required and has been provided. Maintenance access to all stormwater management features is provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. Per information submitted under PAN 17-208, the 1-inch infiltration is achieved. The stormwater management system utilizes infiltration and a wet pond. Stormwater leaving the site is discharged into a well-defined receiving channel or pipe and routed to a public drainage system.
Basin B (16-P) is not properly drained.

Drainage sensitive uses do exist downstream from the proposed site. Per information submitted under PAN 17-208, the rate of post-development runoff from the site does exceed predevelopment rates. However, the rates are not expected to 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 infiltration basins 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 an Impaired Water. The Impaired Water is Coon Creek (County Ditch 57). Coon Creek 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 not 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:** Information on wetlands was submitted and evaluated under PAN 17-208. There are no changes to the previous evaluation.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and is not required.

**Wildlife:** Impacts to wildlife were evaluated under PAN 17-208. There are no changes to the previous evaluation.

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

**ISSUES/CONCERNS:**

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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td>Escrows</td>
<td>$2,000 + (4.5 ac * $500/ac = $4,250</td>
</tr>
</tbody>
</table>

2. Update plans to ensure proper drainage of Basin B (16P) and prevent standing water.

Soils & Erosion Control: No detail is included for concrete washout.

3. Update construction plans to include concrete washout detail.

RECOMMENDATION: Approve with 3 Stipulations

Stipulations:
1. Receipt of escrows.
2. Update plans to ensure proper drainage of Basin B (16P).
3. Update construction plans to include concrete washout detail.