COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 28, 2016
AGENDA NUMBER: 7
FILE NUMBER: 16 - 042
ITEM: Creekside Meadows - Utilities

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: Hakanson Anderson for the City of Andover
3601 Thurston Avenue
Anoka MN 55303

PURPOSE: Street construction and utilities

LOCATION: Between Public Ditch 57 and 143rd Ave NW just south of S Coon Creek Dr NW in 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. One or more cumulative acres of land disturbance.

EXHIBITS:
1. Construction Plan set (17 sheets) by Hakanson Anderson, dated 3/03/16, received 3/08/16.

HISTORY & CONSIDERATIONS:
Project grading was approved in 2014 and has since been done. This portion of the project is installation of sanitary sewer, storm sewer and bituminous for 143rd Avenue NW. Subgrade has been installed and approved.

FINDINGS:
Ditches: There is a public ditch next to the property. The public ditch is County Ditch 57 according to the public drainage map. County Ditch 57 was established in 1917. The ditch was last inspected in 2014. The ditch is not in need of repair.

The ditch is a 5 order stream. The ditch serves the primary role of a trunk drainage system.

Land use in the area is Agricultural, Residential, and Vacant Land. There are no flooding concerns upstream and/or downstream.
**Ditch Hydraulics:**
A crossing of the ditch is not proposed.

**Erosion & Sediment Control:** Soils affected by the proposal are Nymore. Stabilizing vegetation is proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. All wetlands, waterbodies, ponds, infiltration basins and water conveyance systems are protected from erosion and sedimentation. Project site is not greater than 1 acre; a NPDES permit is not required.

**Floodplain** There is floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 865.3 feet. The project does not propose to place fill within the floodplain.

**Groundwater:** Surficial ground water is present at an average depth of 863.5 feet. The site does not include groundwater sensitive areas. Information has been provided in the earlier site development plan to substantiate low floor elevations.

The site is not within a Drinking Water Supply Management Area (DWSMA).

**High Water Flooding:**
Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Andover; 3 ft above highest anticipated water table, 1 ft over 100 yr.

**Dewatering:**
The project does require dewatering. An assessment of risks to other water and related resources has not been conducted/submitted.

The proposed dewatering technique is unknown.

The intended commencement date is unknown. The dewatering duration is unknown, the proposed flow rate is unknown, and the frequency of dewatering discharge is unknown. The cone of depression is unknown from each well head. The total area of the cone of depression is unknown.

**Ground Water Dependent Water Resources:**
It is unknown if there are Ground Water Dependent water resources within the cone of depression.

It is unknown if the proposed dewatering is likely to result in:
- Loss of any existing environmental value linked to receiving waters
- Pose a significant threat to aquatic fauna or flora, especially groundwater-dependent ecosystems
- Soil erosion or local flooding
- Harm to native vegetation (via flooding or toxicity)
• Erosion of structures or services
• Sediment build-up in drains, waterways or wetlands
• Nuisance to the local community such as foul odors; harm to plants or property
• Hazard to human health or safety
• Loss or discernible reduction of flow in public or private water sources.

It is unknown what steps are proposed for avoiding or minimizing impacts. Those steps include:
• limiting the offsite influence of the dewatering, such as
• scheduling start of dewatering at the end of the dry season,
• sheet-piling,
• hydraulic barriers,
• grout curtains or
• establish buffer zones around the dependent ecosystems, within which no groundwater extraction will occur.

**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:** The Owner of the Stormwater Management features and treatment practices is the City of Andover. The City of Andover is an MS4 and is required to maintain the Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
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<tbody>
<tr>
<td>Infiltration Basin</td>
<td>1</td>
</tr>
<tr>
<td>Stormwater Catch Basin</td>
<td>5</td>
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As an MS4 the city will inspect and maintain the stormwater facilities. The city is expected to maintain in perpetuity the Stormwater Treatment Practices in accordance with the approved maintenance plans and in a manner that will permit the Practices to perform the purposes for which they were designed and constructed.

Easements: The proposed project does not include a ditch maintenance easement or utility line crossings.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system does utilize infiltration basin. 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.
**Water Quality:** Project does not include new impervious drainage areas greater than 1 acre. 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 by a sediment basin/water quality pond and are designed correctly. 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 and drains to an Impaired Water. The Impaired Water is County Ditch 57. County Ditch 57 is impaired for Aquatic Life and Aquatic Recreation. The major stressors for the impairments are Macro-invertebrates and E. coli. There is an EPA approved Total Maximum Daily Load (TMDL) for this water. The EPA approved TMDL is with the Upper Mississippi River Watershed.

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

**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 completed on August 8, 2014. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The project proposes to impact 2,500 sq. ft. of wetland which qualifies for de minimis.

**Wetland Replacement Plan:** A wetland replacement plan is not applicable for this project.

**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. No substantial adverse alteration or significant detrimental impact on a species food supply, security or reproductive cycle or the alteration or removal of a plant species will occur.

**Performance Escrow:** $4,200.00  
**Wetland Escrow:** $ N/A

There are not ditch liens on the property.

**FINDINGS/ISSUES/CONCERNS:**

<table>
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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<td>Groundwater: The project does require dewatering. An assessment of risks to other water and related resources has not been conducted or submitted.</td>
<td>1. Submit a written assessment of the risks to other water and related resources from the proposed volume and duration of dewatering</td>
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Escrow: $2,000 + (4.4 ac * $500/ac) = $4,200.00

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<th>2. Amend erosion control plan indicating site stabilization within 7 days after construction.</th>
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3. Receipt of escrows

**RECOMMENDATION:** Approve with 3 Stipulations

**Stipulations:**

1. Submit a written assessment of the risks to other water and related resources from the proposed volume and duration of dewatering including the wetland restoration project occurring to the south

2. Amend erosion control plan indicating site stabilization within 7 days after construction.

3. Receipt of escrows.