COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: February 12, 2018
AGENDA NUMBER: 31
FILE NUMBER: 17-169
ITEM: Winslow Cove

RECOMMENDATION: Table with 5 Stipulations

APPLICANT: C&W Family Farm
1159 Andover Blvd NW
Andover, MN 55304

PURPOSE: 77 Lots on 44 Acres

LOCATION: 150th Lane NW off Hanson Blvd NW, Andover, MN

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. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
6. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (33 sheets); by Pioneer Engineering, dated 1/12/18, received 1/19/18.
2. Stormwater Management Report; by Pioneer Engineering, dated 1/12/18, received 1/19/18.

PREVIOUS ACTION TAKEN: This is a new application.

FINDINGS:
Pre-application Meeting: The project as submitted has not received a general review during a pre-application meeting.

Ditches: There is not a public ditch on the property.

Ditch Hydraulics: A crossing of the ditch is not proposed.
Erosion and Sediment Control: Soils affected by the proposal are Isanti, Lino, Markey, Sartell and Zimmerman.

- Stabilizing vegetation is 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.
- Adjacent properties and stormwater ponds are not 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.
- 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 not 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 not 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.

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

Floodplain: There is no floodplain on the property according to the District model and FEMA.

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 mottled soils/groundwater, 2 ft over 100 yr.

Groundwater: Geotechnical information collected in March and May of 2014 indicates long term groundwater elevation is present at 893 (NAVD 88).

The project site is within the 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.

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 Andover. The Stormwater Treatment Practices (STPs) consisting 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</td>
<td>3</td>
<td>City of Andover</td>
</tr>
<tr>
<td>RainGuardians</td>
<td>2</td>
<td>City of Andover</td>
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<tr>
<td>Rain Gardens</td>
<td>2</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 not include ditch maintenance easement. 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 to the maximum extent practicable. The stormwater management system utilizes infiltration and wet ponds. 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. 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 the 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 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
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. 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 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 been delineated. The most recent delineation was completed on 8/25/17. The wetland boundary has been checked and approved. The wetland is not a DNR protected water.

The total proposed wetland impact is 9009 square feet. The impact is through fill in 3 locations as shown below:

TEP members have approved the replacement plan. The project is not wetland dependent. The project is not exempt. The applicant has contacted the DNR area hydrologist and the Corps of Engineers.

Two alternatives have been submitted. On-site sequencing does apply. The avoidance alternatives are considered good faith efforts. None of the avoidance alternatives are considered feasible and prudent.
The applicant suggests that avoidance is not reasonable because it is inconsistent with the City of Andover Comprehensive Transportation Plan, the Metropolitan Council Regional Development Framework, and accepted engineering standards and practice.

The applicant states that minimization occurs by routing the Xeon Street NW crossing over a relatively narrow part of Wetland 3 and limiting other wetland impacts to the smallest wetland in the project area, treating stormwater from impervious surfaces to remove sediment, and utilizing erosion control measures during construction.

**Wetland Replacement Plan:** A wetland replacement plan has been submitted and approved by the TEP. Replacement is proposed to be through purchasing wetland credits at a ratio of 2:1. The credits will be purchased through wetland bank #1537.

**Wildlife:** The proposed project does include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors. The endangered or threatened species, rare natural community identified are a bristleberry, sea beach needlegrass lance-leaved violet, and the St. Lawrence grapefern. The applicant has contacted the MDNR natural heritage or endangered species program and are working towards a Taking Permits.

**Performance Escrow:** $24,000.00
**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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<tr>
<td>Escrows: $2,000 + (44 ac * $500/ac) = $24,000.00</td>
<td>1. Receipt of escrows.</td>
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| Stormwater & Hydraulics: Details provided on sheet 22 for Pond 100, 200 and 300 are generally inconsistent with information provided in HydroCAD and/or on the construction plans storm sewer sheet. | 2. Updated HydroCAD/construction plans to provide consistent information with regards to the following items: 
  a. Outlet details for Pond 100, 200 and 300.
  b. P400 outlet
  c. Starting elevation for RG500
  d. Existing outlet for W400 |
  P400 is listed in both existing and proposed as having a 15” @ 892.5’ invert in HydroCAD but construction plans have an 18” @ 892.6. |
  RG500 has a starting elevation of 896.6 in the model but it should match the bottom elevation of 896.0 |
  3. Proposed infiltration rate for W200 and W300 should match existing infiltration rate of 0.5 in/hr |
W400 under proposed conditions has EOF of 896.2 but does not include the existing FES of 896.6.

For W200 and W300, the proposed model has an infiltration rate of 0.8 in/hr and the existing model has 0.5 in/hr. The values need to be consistent and should be at a maximum of 0.5 in/hr.

**Groundwater:** LFE should be set assuming no infiltration during spring runoff.

**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.

4. Provide model that has starting elevation equal to outlet and does not include infiltration to set LFEs.

5. Provide DNR Takings Permit.

**RECOMMENDATION:** Table with 5 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Updated HydroCAD/construction plans to provide consistent information with regards to the following items:
   a. Outlet details for Pond 100, 200 and 300.
   b. P400 outlet
   c. Starting elevation for RG500
   d. Existing outlet for W400
3. Proposed infiltration rate for W200 and W300 should match existing infiltration rate of 0.5 in/hr
4. Provide model that has starting elevation equal to outlet and does not include infiltration to set LFEs.
5. Provide Taking’s Permit from the MN Department of Natural Resources.