COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: September 25, 2017
AGENDA NUMBER: 10
FILE NUMBER: 17-113
ITEM: Deer Pond

RECOMMENDATION: Approve with 4 Stipulations

APPLICANT: Five Star Group, LLC
11651 Davenport St. NE
Blaine, MN 55449

PURPOSE: 8 Lots on 5.3 Acres

LOCATION: NW of 128th Ave 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.
6. High water table, outwash and organic soils
7. High infiltration soils
8. Highly erodible soils

EXHIBITS:
1. Construction Plan set (5 sheets); by Carlson McCain, dated 8/31/17, received 9/7/17.
2. Stormwater Management Report; by Carlson McCain, dated 8/31/17, received 9/7/17.
3. Geotechnical Report; by Haugo Geotechnical Services, dated 4/17/17, received 6/14/17.
5. Wetland Replacement Plan, by Kjolhaug Environmental Services, dated 7/14/17, received 8/11/17.

PREVIOUS ACTION TAKEN: The application was tabled at the August 28, 2017 meeting with 5 stipulations:
1. Receipt of escrows.
2. Provide consistent information between utility spreadsheet and HydroCAD model.
3. Include elevations and any additional pipes that are located at CBMH101 on the infiltration basin outlet details.
4. Erosion control measures need to be provided around infiltration basin after initial grading to prevent sedimentation and compaction.
5. Provide written permission from the land owner for off-site grading.
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 59-4 according to the public drainage map. The approved elevations through this property are 892.0 ft MSL at the downstream end and 892.2 ft MSL at the upstream end. The observed elevations through this property are 891.7 ft MSL at the downstream end and 893.5 ft MSL at the upstream end. Existing elevations of the ditch represent a 0.3-1.3 foot variance from the approved elevations. The ditch is a 2nd order stream. The ditch serves the primary role of storm water conveyance. The ditch serves approximately 0 acres of agricultural land. Land use in the area is toward single family residential. There are no flooding concerns upstream or downstream. The ditch has been inspected. Existing elevations, slopes and condition of ditch are good. 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 Isanti, Markey, 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 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 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 racking 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.
Dewatering: Shallow ground water does exist on site. The project will require dewatering.

Floodplain: There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 897.4 feet (as referenced to the NAVD 88 Datum). The project does propose to place fill within the floodplain. The proposed impact is within the floodway/flood fringe. Compensatory storage is provided by the on-site basin.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Blaine; 2 ft above mottled, 2 ft above 100 yr.

Groundwater: Geotechnical information collected in March 2016 indicates long term groundwater elevation is present at 7 feet below the surface.

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

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 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 been notified and acknowledge the changes proposed.

Maintenance: 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>Wet Basins</td>
<td>1</td>
<td>City of Blaine</td>
</tr>
<tr>
<td>Infiltration Basins</td>
<td>1</td>
<td>City of Blaine</td>
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</table>

As a requirement of the City’s MS4 program, the city will inspect and maintain the wet basin.
Easements: The proposed project does include 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 sedimentation basin 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.

Drainage sensitive uses do not 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 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 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 not within one (1) mile of an Impaired 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 5/26/16. The wetland boundary has been checked and approved.

The total proposed wetland impact is 2,641 square feet. The impact is through fill in 1 location as shown below:
TEP members have been notified with a complete plan. The project is wetland dependent and 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 there is no alternative. The applicant has made a good faith attempt in pursuing alternatives including reducing the size for the stormwater pond which would not provide necessary treatment or storage.

**Wetland Replacement Plan:** A wetland replacement plan has been submitted and reviewed and approved by the TEP. Replacement is proposed to be through purchase of wetland credits at a ratio of 2:1. The credits will be purchased through wetland bank 1409.

**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.

**Performance Escrow:** $4,400.00  
**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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<td>Escrows: $2,000 + (48 ac * $500/ac) = $4,400.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td>Stormwater &amp; Hydraulics: Infiltration basin may overtop curb at same elevation of proposed EOF (907.0).</td>
<td>2. Grade EOF to be 0.1 feet lower than top of curb at curb cuts and 10 feet wide to ensure water is directed toward proposed basin and not onto the roadway.</td>
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<td>Soils &amp; Erosion Control: Off-site grading is proposed near the rock construction entrance.</td>
<td>3. Provide written permission from the land owner for off-site grading.</td>
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<td>Wetlands: Wetland impacts are proposed.</td>
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