COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: January 14, 2018
AGENDA NUMBER: 20
FILE NUMBER: 18-211
ITEM: Blaine Activity Center

RECOMMENDATION: Table with 11 Stipulations

APPLICANT: City of Blaine
10801 Town Square Drive NE
Blaine, MN 55449

PURPOSE: Construct Activity Center with parking

LOCATION: 9150 Central Ave NE, Blaine, MN

APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. One or more cumulative acres of land disturbance
3. Endangered, Threatened or Special concern species, elements or communities

**EXHIBITS:**
1. Construction Plan set (6 sheets); by Solution Blue, dated 1/02/2019, received 1/02/2019.

**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: A crossing of the ditch is not proposed.

Erosion and Sediment Control: Soils affected by the proposal are 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.
- 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 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 Blaine; 2 ft above mottled, 2 ft above 100 yr.

Groundwater: Geotechnical information collected in December 2018 indicates long term groundwater elevation is present at 10-12 feet below the surface.

The project site is 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 be notified and acknowledge the changes proposed.

**Maintenance:** The owner of the Stormwater Management features and treatment practices is unknown. 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>Filtration Swale</td>
<td>1</td>
<td>Blaine</td>
</tr>
<tr>
<td>UG Filtration Chamber</td>
<td>1</td>
<td>Blaine</td>
</tr>
<tr>
<td>Treatment Manhole</td>
<td>1</td>
<td>Blaine</td>
</tr>
</tbody>
</table>

A maintenance plan has not been provided. 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 ditch maintenance easement is not required. A maintenance access to all storm water management features is provided.

**Stormwater & Hydrology:** Infiltration is not allowed within the project area due to it being located within a WPA and ERA. The 1.1-inch filtration is achieved. The stormwater management system utilizes filtration. Calculations have been provided that illustrate the 1.1-inch infiltration volume is achieved below outlet.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff 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/stormwater basins 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 of an Impaired Water. The Impaired Water is CD 17. CD 17 is impaired for Aquatic Life (Macro-invertebrates)/ Aquatic Recreation (E. coli). The major stressors are 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 not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey.

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

**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 applicant has contacted the MDNR natural heritage or endangered species program. The applicant has indicated that contact was made 11/30/18. MDNR has not responded to the applicant.

The project does not propose substantial adverse alteration or significant detrimental impact on a species or removal of a plant species.

**Performance Escrow:** $2,850  
**Wetland Escrow:** $ N/A  
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (1.7 ac * $500/ac) = $2,850</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> Utility plan not provided.</td>
<td>2. Provide utility plan.</td>
</tr>
<tr>
<td>Elevations on filtration swale detail are inconsistent with grading plan.</td>
<td>3. Update filtration swale detail to reflect the correct elevations.</td>
</tr>
</tbody>
</table>
Invert elevation of the 8” outlet pipe in the HydroCAD model is inconsistent with the invert elevation on the OCS detail. Clarification is needed on the detention chamber detail. Drain tile is not modeled as an outlet device for the detention chamber. Details needed to verify the required volume is provided below outlet. Discharging water offsite

4. Update the HydroCAD model or the OCS detail to reflect the correct invert elevation.

5. Update the detention chamber detail to include the underdrain and elevations.

6. Update the HydroCAD model to include drain tile as an outlet device for the detention chamber.

7. Provide stage-storage curve for the detention chamber.

8. Provide documentation from MnDOT that discharge to their pond is acceptable.

Soils & Erosion Control:
Detail not provided for rip rap at flared end section.

It is unclear if dewatering is needed during the construction of the proposed project.

9. Provide detail for rip rap at flared end section.

10. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.

Wildlife: The proposed project may include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

11. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors

**RECOMMENDATION:** Table with 11 Stipulations

**Stipulations:**
1. Receipt of escrows.
3. Update filtration swale detail to reflect the correct elevations.
4. Update the HydroCAD model or the OCS detail to reflect the correct invert elevation.
5. Update the detention chamber detail to include the underdrain and elevations.
6. Update the HydroCAD model to include drain tile as an outlet device for the detention chamber.
7. Provide stage-storage curve for the detention chamber.
8. Provide documentation from MnDOT that discharge to their pond is acceptable.
9. Provide detail for rip rap at flared end section.
10. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.
11. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.