COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 26, 2017
AGENDA NUMBER: 8
FILE NUMBER: 17-069
ITEM: Brians Meadows

RECOMMENDATION: Table with 4 Stipulations

APPLICANT: Mike Frazier
12851 Harpers Street
Blaine, MN

PURPOSE: 12 Single Family Lots on 5 Acres

LOCATION: Harpers St NE and 128th Ln NE in Blaine, Minnesota

APPLICABILITY:
1. One or more cumulative acres of land disturbance
2. High infiltration soils
3. Highly erodible soils
4. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (6 sheets); by Carlson McCain, dated 6/1/17, received 6/5/17.
2. Stormwater Management Report; by Carlson McCain, dated 6/14/17, received 6/14/17.

PREVIOUS ACTION TAKEN: This application was initially submitted on April 7, 2017.

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 Lino 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 does not 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 may meet the criteria for the City of Blaine; 2 ft above mottled, 2 ft above 100 yr.

Groundwater: Geotechnical information collected in March 2017 indicates long term groundwater elevation is present at 13-14 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.

Maintenance: The Owner of the Stormwater Management features and treatment practices is the City of Blaine.

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 allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes wet basin and infiltration basin. Stormwater leaving the site is discharged into existing wet basin off-site.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site does exceed predevelopment rates, or rates which would interfere with sensitive downstream land uses. Properties and waterways downstream from the project are not 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 an existing wet basin off-site. All on-site constructed storm water conveyance channels are constructed to withstand the expected velocity from a 2-year frequency storm without erosion.

There is an increase in rate and volume to an off-site existing basin to the south. Model updates are needed to determine impacts to existing off-site basin.

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. No discharges into wetlands are proposed. 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 and drains to an Impaired 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 endangered or threatened species, rare natural community is the Blanding’s Turtle. The applicant has contacted the MDNR natural heritage or endangered species program.

Performance Escrow: $4,500
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><strong>Escrows:</strong> $2,000 + (5 ac * $500/ac) = $4,500</td>
<td>1. Receipt of escrows.</td>
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**Stormwater & Hydraulics:** Model revisions provided have a change in drainage area and time of concentration that do not reflect the existing or proposed conditions.

1. Subcatchment in models
   a. Appear to double count portions of the project area (20S and 1S) in 50S and 51S.
   b. Drainage from the east (lots 5 and 6) appears to drain to existing basin based on existing contours.

2. Time of concentrations for 50S and 51S no longer reflect accurate drainage path.
   a. Sheet flow appears to be closer to 150 ft for 50S and the pipe flow included in the calculation is already accounted for in the 50P outlet.
   b. Sheet flow appears to be closer to 150 ft for 51S (from Jamestown St NE to basin along property boundary of Block 2, Lot 2)

2. Subcatchment in models:
   a. Update drainage areas in model.

3. Time of concentrations for 50S and 51S:
   a. Revise time of concentrations to reflect accurate flow paths and remove pipe length.
| **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. | 4. 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 4 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Subcatchment in models:
   a. Update drainage areas in model.
3. Time of concentrations for 50S and 51S:
   a. Revise time of concentrations to reflect accurate flow paths and remove pipe length.
4. 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.