COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE:       June 12, 2017
AGENDA NUMBER:     18
FILE NUMBER:       16-066
ITEM:              BNSF Grade Separation

RECOMMENDATION:    Approve with 4 Stipulations

APPLICANT:         Anoka County Highway Department
                    1440 Bunker Lake Blvd NW
                    Andover, MN 55304

PURPOSE:           2,765 LF Grade separation between Hanson Blvd and
                    BNSF RR

LOCATION:          Hanson Blvd NW between 106th Ave NW and 108th Lane
                    NW, Coon Rapids, MN

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

EXHIBITS:
1. Construction Plan set (176 sheets); by Anoka County Highway Department, undated, received 5/31/17.
4. Record of Meeting Memo; by SRF, dated 6/23/16, received 5/31/17.
5. Bidding Documents; by unknown, undated, received 5/31/17.

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 Duelm and Nymore.
- 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 been provided at the outlets of all storm sewer pipes.
- All storm sewer inlets are not protected from sediment-laden water during construction.
- All work adjacent to water or related resource has not 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 not 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: No structures proposed as part of the project.

Groundwater: Geotechnical information collected in April 2017 indicates long term groundwater elevation is present at greater than 20 feet below the surface.

The site is 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 have been notified.

Maintenance: The Owner of the Stormwater Management features and treatment practices is unknown at this time. 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>6</td>
<td></td>
</tr>
<tr>
<td>Sumps</td>
<td>2</td>
<td></td>
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The owner of the stormwater treatment practices is unknown at this time. As a requirement of the City’s MS4 program, the city will inspect the STPs.
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 must be treated prior to infiltration. The 1-inch infiltration is achieved. The stormwater management system utilizes sedimentation basin, infiltration, 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 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. No on-site constructed storm water conveyance channels are proposed as part of the project.

**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/infiltration basins are pretreated and 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 and drains to Impaired Waters. The Impaired Waters are Coon Creek and Mississippi River. Coon Creek is impaired for (Aquatic Life (Macro-invertebrates)/ Aquatic Recreation (E. coli) and the Mississippi River is impaired for Mercury and PCB. The major stressors are Total Suspended Solids (TSS)/ Total Phosphorus (TP)/ E. coli/ PCB and Mercury. There are EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for these waters.

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. There will be no wetland impacts.

**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. The endangered or threatened species, rare natural community is the Blanding’s Turtle (Emydoidea blandingii). The applicant should contact the MDNR natural heritage or endangered species program.
Performance Escrow: $8,850.00  
Wetland Escrow: $ N/A  
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (13.7 ac * $500/ac) = $8,850.00</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> The applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. A post construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained.</td>
<td>2. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin by filling the basin to a minimum depth of 6 inches with water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.</td>
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</table>
| **Soils & Erosion Control:** Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surround by erosion control measures to prevent the basin from clogging. Erosion details provided. However, no construction sheets show locations. | 3. Model Updates:  
   a. Device #5 for 3P should be 862.55 according to details.  
   b. Explain why 18” outlet culvert is multiplied by 0.5 in model for 11P and 12P |
| **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. Erosion Control needs:  
   a. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.  
   b. Provide location of erosion control measures such as silt fence and inlet protection. |
|  | 5. 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: Approve with 5 Stipulations

Stipulations:

1. Receipt of escrows.
2. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin by filling the basin to a minimum depth of 6 inches with water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
3. Erosion Control Updates:
   a. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
   b. Provide location of erosion control measures such as silt fence and inlet protection.
4. Model Updates:
   a. Device #5 for 3P should be 862.55 according to details.
   b. Explain why 18” outlet culvert is multiplied by 0.5 in model for 11P and 12P
5. 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.