COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: April 11, 2016
AGENDA NUMBER: 10
FILE NUMBER: 15-113
ITEM: Aberdeen St. Reconstruction from Constance Blvd. to 165th Ave.

RECOMMENDATION: Approve with 2 Stipulations

APPLICANT: City of Ham Lake
15544 Central Avenue NE
Ham Lake, MN 55304

PURPOSE: Street Reconstruction

LOCATION: Aberdeen Street from Constance Blvd. to 165th Ave in Ham Lake
APPLICABILITY:
1) Use or Appropriation of State protected waters
2) Any activity involving drainage, filling or alteration of wetlands (1.09)
3) Improvement of the bed, bank or shore of lakes and public drainageways (1.10)
4) Diversion of water, casting of dredge or dewatering for construction (1.14 sub 3)
5) Construction, removal or abandonment of a water impoundment (1.16 Sub 1)
6) Project site is not greater than 5 acres, an NPDES permit is not required

EXHIBITS:
1) Construction Plan Set (14 sheets) by City of Ham Lake (RFC Engineering); dated March 30, 2016; received March 30, 2016
2) Existing hydraulic model output (HydroCAD) prepared by RFC Engineering; dated March 29, 2016; received March 30, 2016
3) Proposed hydraulic model output (HydroCAD) prepared by RFC Engineering; dated March 29, 2016; received March 30, 2016
4) Existing and Proposed drainage area figures prepared by RFC Engineering; dated March 30, 2016; received March 30, 2016
5) SHSAM Calculations for Standard Sumps; dated March 29, 2016; received March 30, 2016
HISTORY & CONSIDERATIONS: This is a new application.

FINDINGS:

Ditches: There is not a public ditch on the property. The project site is tributary to County Ditch 58.

Ditch Hydraulics:
A crossing of the ditch is not proposed.

Erosion and Sediment Control: Soils affected by the proposal are Zimmerman Fine Sand and Marsh. Stabilizing vegetation is proposed for disturbed areas within two weeks (14 days) of rough grading. Adjacent properties and stormwater ponds are protected from sediment deposition. Project site is greater than 1 acre, an NPDES permit is required.

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

Groundwater: Geotechnical information has not been submitted.

The site is not within a Drinking Water Supply Management Area (DWSMA). The project site is not within the 10 Year Well Head Protection Area. The project site is not within the Emergency Response Area.

The proposal does not contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA).

The project does not propose to collect, handle, use store, transfer or dispose of solid or liquid material or wastes.

Storage and use of petroleum products exceeding fifty-five (55) gallons are not proposed on-site.

High Water Flooding:
Information has not been provided to substantiate low floor elevations and is not needed.

Dewatering:
The project does not require dewatering
An assessment of risks to other water and related resources has been conducted.

Ground Water Dependent Water Resources:
There are not Ground Water Dependent water resources within the cone of depression.

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 and acknowledge the changes proposed.

**Maintenance:** The Owner of the Stormwater Management features and treatment practices is the City of Ham Lake. The City of Ham Lake does agree to maintain the Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
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<tbody>
<tr>
<td>Manhole Sump</td>
<td>1</td>
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The owner has submitted a Maintenance Plan for each Stormwater Treatment Practice. The Maintenance Plan is consistent with District Maintenance standards for each STP.

The owner does agree to maintain in perpetuity the Stormwater Treatment Practices in accordance with the approved maintenance plans and in a manner that will permit the Practices to perform the purposes for which they were designed and constructed. The Owner has signed a District Operations and Maintenance Agreement for Stormwater Facilities

Easements: The proposed project does not include ditch maintenance easement. A maintenance access to all storm water management features is provided.

Inspection and maintenance of stormwater facilities will be the responsibility of the City of Ham Lake. A maintenance agreement has not been executed.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is not achieved. The stormwater management system utilizes wet ponds and manhole sumps. 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.

**Water Quality:** The proposed project does not cause an exceedence 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 and drains to an Impaired Water.

There are new impervious surfaces proposed as part of this project. A total of 0.1 acres of new impervious surface area will be added.

**Wetlands:** Wetland 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 August 15, 2015. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The total proposed wetland impact is 100 square feet. The impact is through fill in 1 location as shown below:

The de minimis is 2,500 sf. The proposed project results in wetland impact less than 2,500 sf over the de minimis. TEP members have been notified with a complete plan and have been requested to submit comments.

The project is exempt.
**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. No substantial adverse alteration or significant detrimental impact on a species food supply, security or reproductive cycle or the alteration or removal of a plant species will occur.

There are Ground Water Dependent water resources on site. The Ground Water Dependent Water Resources are wetlands. Those resources are not within the cone of depression.

**Performance Escrow:** $2,015.00  
**Wetland Escrow:** $ N/A

**FINDINGS/ISSUES/CONCERNS:**

<table>
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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td><strong>Water Quality:</strong> The sump manhole does not meet the 80% removal efficiency required by the Watershed. The sump depth shall be increased to increase the removal efficiency.</td>
<td>1. Applicant shall provide calculations showing added depth to the sump manhole meeting the 80% removal efficiency. Sump shall be made deeper up to a maximum of 6 feet deep or add device to improve sediment capture.</td>
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</table>

**Escrows:** $2,000 + (0.03 ac * $500/ac) = $2,015.00  
2. Receipt of escrows

**RECOMMENDATION:** Approve with 2 Stipulations  
**Stipulations:**  
1. Receipt of escrows.  
2. Removal efficiency of the sump manhole does not meet the 80% requirement. Provide calculations showing added depth to the sump manhole meeting the 80% removal efficiency. Sump shall be made deeper up to a maximum of 6 feet deep. Or provide SAFL Baffle or Preserver product to increase efficiency.