COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 28, 2013
AGENDA NUMBER: 9
FILE NUMBER: 12 - 077
ITEM: Nightingale Street NW Reconstruction

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: City of Andover
1685 Crosstown Blvd NW
Andover, MN  55304

PURPOSE: The project will consist of reclaiming the existing roadway, select utility upgrades trail construction and paving a new bituminous roadway surface.

LOCATION: Along Nightingale Street NW between Crosstown Boulevard NW and 161st Avenue NW. City of Andover, MN.
APPLICABILITY:
1. Any work within or adjacent to a Public ditch within the Watershed District.
2. Any work in or adjacent to wetlands, lakes or water courses
3. One or more cumulative acres of land disturbance
4. The lands and waters that have been, or may be covered by the regional flood.
5. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
6. High water table, outwash and organic soils
7. Excavation or filling or a combination of excavation and filling of sand or other excavation or fill material including the laying, repairing, replacing or enlarging of a culvert or an underground pipe or facility where it crosses a public ditch or waters of the state.

EXHIBITS:
2. Storm Water Pollution Prevention Plan, received 4/29/2013

HISTORY & CONSIDERATIONS: This project has not been reviewed by the Board.

FINDINGS:
Ditches and Drainage: There is a public ditch that crosses Nightingale Street NW south of 156th Avenue NW. The ditch is County Ditch 37. There are approximately 600 acres of existing agricultural land affected by this ditch. The project site is tributary to County Ditch 37. The trend in land use for this drainage area is toward agriculture and residential. There are no flooding concerns downstream. Alternatives to additional drainage considered and reviewed include retention.

Floodplain: There is no floodplain on the property according to FEMA. The District model predicts the 100-year elevation for the subwatershed at 894.9 feet. There is minimal floodplain fill. The total floodplain impact is 0.03 acre-feet, within the flood/fringeway. Compensatory storage is not needed.

Maintenance: The proposed project does include a ditch maintenance easement or utility line crossings for CD 37. That easement is not shown on the grading plans.

Groundwater: The Geotechnical Exploration and Engineering Review identified free groundwater at Borings 10 and 13 at approximately 2 to 9 feet below existing grades. The site does include groundwater sensitive areas. No new low floors are proposed.
**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.

**Soils & Erosion Control:** Soils affected by the proposal are Sartell, Markey, Lino, Isanti and Rifle. Stabilizing vegetation is proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. All wetlands, waterbodies, ponds, infiltration basins and water conveyance systems are protected from erosion and sedimentation. Project site is greater than 1 acre; an NPDES permit is required.

**Stormwater & Hydraulics:** The applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation off of new impervious. 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 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:** Project does not include new impervious drainage areas greater than 1 acre.

**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.

**Wetlands:** Wetlands exist on-site according to the 1987 Federal Manual and its associated supplement(s), NWI, and Soils Survey. Wetlands have been delineated. The wetland boundary has been approved.

The Wetland Permit Application states that 3,464 S.F. of wetland is proposed to be impacted in 5 locations. The grading plan clearly identifies the proposed impacts.

Three alternatives, plus the proposed project, have been submitted. All wetland impacts are related to public health safety and welfare along the corridor and bringing the site up to current safety standards.

The applicant is minimizing wetland impact with the preferred construction plans.

The project is not wetland dependent.
The impacts are not exempt.

Total Proposed Permanent Wetland impact quantities for project to date are:

<table>
<thead>
<tr>
<th>Wetland ID</th>
<th>Area of Proposed Fill (S.F.)</th>
<th>Proposed Area of No Loss Excavation (S.F.)</th>
<th>Wetland Type</th>
<th>Purpose of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>445</td>
<td>0</td>
<td>2</td>
<td>Road Slopes/Trail/Culvert Extension</td>
</tr>
<tr>
<td>4</td>
<td>584</td>
<td>0</td>
<td>2,6</td>
<td>Road slopes/Trail</td>
</tr>
<tr>
<td>5</td>
<td>1,160</td>
<td>0</td>
<td>2,6</td>
<td>Road slopes</td>
</tr>
<tr>
<td>6</td>
<td>601</td>
<td>0</td>
<td>4</td>
<td>Trail</td>
</tr>
<tr>
<td>8</td>
<td>674</td>
<td>0</td>
<td>2,6</td>
<td>Trail</td>
</tr>
<tr>
<td>Total Impacts (S.F.)</td>
<td>3,464</td>
<td>0</td>
<td></td>
<td>TOTAL FILL IMPACT = 3,464 S.F.</td>
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**Wetland Replacement Plan:**
Mitigation is proposed at a 2:1 ratio via the BWSR Road Bank. BWSR Staff has recommended that the mitigation be accepted to the BWSR Road Bank Program

The TEP has reviewed and approved the application and provided comments.

**Escrows:** $1500 + ($200*10 acres) + ($10 * 50 linear feet of ditch disturbance) = $4,500.00

<table>
<thead>
<tr>
<th>ISSUES/CONCERNS</th>
<th>Needs</th>
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<tr>
<td>Escrows: Escrows have not been paid.</td>
<td>Performance Escrow; $1500 + ($200*10 acres) + ($10 * 50 linear feet of ditch disturbance) = $4,500.00</td>
</tr>
<tr>
<td>Maintenance: The proposed project does include a ditch maintenance easement or utility line crossings for CD 37. That easement is not shown on the grading plans.</td>
<td>The applicant must acknowledge the Public Drainage easement over County Ditch 37</td>
</tr>
<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> There are concerns with the n value used for CB 107 and the P2 value used for FES 29 in Table B-2. These values differed from comparable design situations and were not clear if they were intended or were an error.</td>
<td>Correct inconsistencies found in labeling of pipes in plans versus Table B-2; discrepancies between the proposed utility details and Table B-5; and FES 35/36 and FES 50/51.</td>
</tr>
</tbody>
</table>
Also, pipe diameter and slope information on the proposed utility details provided on the plans do not match values used in Table B-5 for the storm drainage pipe design. Errors in these calculations could result in incorrectly sized culverts and storm sewers. Lastly, information was not provided on culverts FES 35/36 and FES 50/51.

**CONCLUSIONS:** This project does meet District standards. Performance Escrows, Maintenance and Stormwater & Hydraulics items must be submitted prior to issuance of a Permit.

**RECOMMENDATION:** Approve with 3 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Correct inconsistencies found in labeling of pipes in plans versus Table B-2; discrepancies between the proposed utility details and Table B-5; and FES 35/36 and FES 50/51.
3. Provide maintenance and utility easement on the drawings where Nightingale crosses CD-37.