COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 24, 2017
AGENDA NUMBER: 14
FILE NUMBER: 16-155
ITEM: The Woods at Crooked Lake

RECOMMENDATION: Table with 5 Stipulations

APPLICANT: Ramsay Development Corporation
217 Dean Ave East
Champlin, MN 55316

PURPOSE: Residential Development

LOCATION: 2928 129th Ave NW in Coon Rapids, Minnesota
APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. High infiltration soils
3. Highly erodible soils

EXHIBITS:
3) Infiltrometer Recording Chart by Haugo Geotechnical Services; undated, received 10/6/2016.
4) No wetland memo by Kjolhaug Environmental Services, Inc.; dated 9/26/16, received 10/3/16

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: Soil affected by the proposal is Nymore
  • Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
  • Soil stockpiles are not anticipated.
  • 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 not 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 not 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 not been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface.

Provisions have not been made for cleaning road surfaces where sediment is transported by the end of the day.

Construction entrance points are not clearly located on the erosion and sediment control plan.

The erosion and sediment control plan does not 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. Dewatering is not anticipated as part of the project.

Floodplain: There is no floodplain on the property according to the District model and FEMA. There are no flooding concerns upstream and/or downstream.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Coon Rapids; 2 ft over 100 yr.

Groundwater: Geotechnical information was not provided.

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 Homeowner. 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>Rain Gardens</td>
<td>1 per household (4 total)</td>
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Inspection and maintenance of stormwater facilities will be the responsibility of the Homeowner. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

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 not provided.

Stormwater & Hydrology: Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes rain gardens. 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. No increases in the volume, velocity and peak water flow rates of stormwater runoff are expected. Concentrated storm water leaving a 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 are pretreated by a sediment basin/water quality pond, and are designed correctly. All work adjacent to wetlands, waterbodies and water conveyance systems are not 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 and drains to an Impaired Water. The Impaired Water is Crooked Lake. Crooked Lake is impaired for Aquatic Life (Macroinvertebrates). The major stressors of mercury. 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 not include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

**Performance Escrow:** $2,634.50
**Wetland Escrow:** N/A
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
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<th>ISSUE</th>
<th>NEED</th>
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<td>Escrows: $2,000 + (1.27 ac * $500/ac) = $2,634.50</td>
<td>1. Receipt of escrows.</td>
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<tr>
<td>Stormwater &amp; Hydraulics: Project write-up indicates that runoff from front of house and driveway will be directed into rain gardens. However, grading plan shows drainage is toward the road.</td>
<td>2. Provide additional details on grading plan that illustrate how water will be directed into rain gardens. Provide note that driveways will be sloped to direct runoff into rain gardens.</td>
</tr>
<tr>
<td>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>3. 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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<td>Soils &amp; Erosion Control: District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.</td>
<td>4. Provide following items for erosion control:</td>
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<tr>
<td>Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surrounded by erosion control measures to prevent the basin from clogging.</td>
<td>a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.</td>
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<td>b. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</td>
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<td>c. Provide note that any tracked sediment onto the road will be</td>
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<td>Provision requiring any tracked sediment onto the road must be removed on a daily basis were not included.</td>
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<td><strong>Maintenance:</strong>  A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.</td>
<td>5. Provide an O&amp;M Agreement that meets District requirements.</td>
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**RECOMMENDATION:** Table with 5 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide additional details on grading plan that illustrate how water will be directed into rain gardens. Provide note that driveways will be sloped to direct runoff into rain gardens.
3. 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.
4. Provide following items for erosion control:
   a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
   b. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
   c. Provide note that any tracked sediment onto the road will be removed on a daily basis.
5. Provide an O&M Agreement that meets District requirements.