COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 22, 2017
AGENDA NUMBER: 10
FILE NUMBER: 17-072
ITEM: Coon Rapids Retail Center

RECOMMENDATION: Table with 7 Stipulations

APPLICANT: Xing Zhao
988 Maple Trail Ct
Eagan, MN 55123

PURPOSE: 15,885 SQ FT Building on 2.2 Acres

LOCATION: 3550 124th Avenue, Coon Rapids, MINNESOTA

APPLICABILITY:
1. One or more cumulative acres of land disturbance
2. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
PREVIOUS ACTION TAKEN: This is a new application.

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 needed.

Erosion and Sediment Control: Soils affected by the proposal are Hubbard, Lino, Isanti, Rifle and Zimmerman. SWPPP is not provided.
- Stabilizing vegetation is proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles have not 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 not been provided.
- Stormwater runoff does not 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 not 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:** It is unknown if shallow ground water exists on site. The project may require dewatering.

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

**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.

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 unknown. The Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infiltration trench</td>
<td>1</td>
<td>Unknown</td>
</tr>
<tr>
<td>Rain Garden</td>
<td>1</td>
<td>Unknown</td>
</tr>
<tr>
<td>Sump</td>
<td>4</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Inspection and maintenance of stormwater facilities will be the responsibility of unknown. 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 provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes infiltration trench and rain garden. 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 proposed as part of the project. Concentrated storm water leaving the site is not discharged directly into a well-defined natural or man-made off-site receiving channel or pipe. No on-site storm water conveyance channels are constructed 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 infiltration systems are not pretreated by a sediment basin/water quality pond. 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 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 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: $2,950.00
Wetland Escrow: $ N/A
There are not ditch liens on the property.

ISSUES/CONCERNS:

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (2.2 ac * $500/ac) = $3,100</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics:</td>
<td>2. Revise HydroCAD to use MSE-3 rainfall distribution.</td>
</tr>
<tr>
<td>Type II 24-hr distribution was used in the HydroCAD model with Atlas 14 rainfall.</td>
<td></td>
</tr>
<tr>
<td>Water Quality: Pretreatment is not provided for rain garden.</td>
<td>3. Rain Guardians or other pretreatment sediment capture BMP should be provided at curb cuts to ensure rain garden has long term functionality.</td>
</tr>
<tr>
<td>Soils &amp; Erosion Control: NPDES permit needs to be obtained for land disturbance area greater than 1 acre. SWPPP plan is required for erosion control.</td>
<td>4. Provide SWPPP plan.</td>
</tr>
<tr>
<td>Proposed rain garden is not protected from sedimentation during construction.</td>
<td>5. After grading, surround rain garden with silt fence to prevent sedimentation and compaction.</td>
</tr>
<tr>
<td>No geotechnical report is provided to indicate the 3-ft groundwater separation for infiltration practices.</td>
<td>6. Provide geotechnical report to determine the 3-ft groundwater separation for infiltration practices.</td>
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<td>Maintenance: It is unknown who will be responsible for the inspection and maintenance of stormwater facilities. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.</td>
<td>7. Provide an O&amp;M Agreement that meets District requirements.</td>
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RECOMMENDATION: Table with 7 Stipulations

Stipulations:
1. Receipt of escrows.
2. Revise HydroCAD to use MSE-3 rainfall distribution.
3. Rain Guardians or another pretreatment sediment capture BMP should be provided at curb cuts to ensure rain garden has long term functionality.
4. Provide SWPPP plan.
5. After grading, surround rain garden with silt fence to prevent sedimentation and compaction.
6. Provide geotechnical report to determine the 3-ft groundwater separation for infiltration practices and determine proper design infiltration rate. Provide infiltration test after grading to ensure 48-hour drawdown.
7. Provide an O&M Agreement that meets District requirements.