COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: September 11, 2017
AGENDA NUMBER: 15
FILE NUMBER: 17-163
ITEM: Lashinski Commercial Park

RECOMMENDATION: Table with 7 Stipulations

APPLICANT: Jim Lashinski
1244 Crosstown Blvd.
Ham Lake, MN 55304

PURPOSE: 2.1 Acres graded on 15 Acres

LOCATION: Intersection of Crosstown Blvd NE and State Hwy 65, Ham Lake, 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

**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 a public ditch on the property. The public ditch is County Ditch 58-6 according to the public drainage map. The approved elevations through this property are 898.0 ft MSL at the downstream end and 898.4 ft MSL at the upstream end. The observed elevations through this property are 899.1 ft MSL at the downstream end and 900.0 ft MSL at the upstream end. Existing elevations, slopes and condition of the ditch are 1.1-1.6 foot variance from the approved elevations. The ditch is a 1st order stream. The ditch serves the primary role of storm water conveyance. The ditch serves approximately 13 acres of agricultural land. Land use in the area is agriculture, single family residential and commercial. There are no flooding concerns upstream or downstream. The ditch has been inspected. Existing elevations, slopes and condition of ditch are fair. Alternatives to repair and additional drainage have been considered and reviewed. The ditch is not in need of repair.

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

Erosion and Sediment Control: Soils affected by the proposal are Markey, Lino, Isanti, Rifle and Zimmerman.
- 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 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 not 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 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 may exist on site. The project may require dewatering.

Floodplain: There is floodplain on the property according to the District model and FEMA. The District’s floodplain elevation is at 903.7 feet. The project does not propose to place fill within the floodplain. There are flooding concerns downstream.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations do not meet the criteria for the City of Ham Lake; 1 ft above mottled soil or 100 yr.

Groundwater: Geotechnical information collected in June 2017 indicates long term groundwater elevation is present at greater than 4 feet below the surface. Existing off-site wet basin indicates groundwater is present at 903.1 feet.

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 should be notified and acknowledge the changes proposed.

Maintenance: The Owner of the Stormwater Management features and treatment practices is the City of Ham Lake. 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>Basins</td>
<td>1</td>
<td>Ham Lake</td>
</tr>
</tbody>
</table>
As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities.

Easements: The proposed project does include ditch maintenance easement. A ditch maintenance easement is 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 regional ponding. 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. 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. 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 not within one (1) mile of an Impaired Water.

There are future 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. The most recent delineation was completed on May 12, 2017. The wetland boundary has been checked and approved. The wetland is not a DNR protected water. There are currently no proposed wetland impacts.

**Wetland Replacement Plan:** A wetland replacement plan 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: $3,050.00
### 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 + (2.1 ac * $500/ac) = $3,050.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: 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. Based on aerial images and adjacent wetlands, existing NWL appears to be closer to 904 feet. NWL of basin does not appear to be included in model as imperviousness.</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. 3. Confirm NWL of 903.1 through vegetation survey. If survey indicates a different NWL, adjust starting elevation in model. 4. Update surface area of basin at NWL to be impervious in Subcatchment ‘A’</td>
</tr>
<tr>
<td>Soils &amp; Erosion Control: Erosion Control plan does not meet District requirements.</td>
<td>5. Update erosion control plan with the following: a. Provide riprap at pipe outlet to the 900 contour within basin. b. Provide inlet protection at on-site catch basin. 6. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.</td>
</tr>
<tr>
<td>Maintenance: Proposed basin expansion does not have sediment collection.</td>
<td>7. It is advisable to include sediment collection at basin to reduce maintenance needs. Options include</td>
</tr>
</tbody>
</table>
RECOMMENDATION: Table with 7 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. Confirm NWL of 903.1 through vegetation survey. If survey indicates a different NWL, adjust starting elevation in model.
4. Update surface area of basin at NWL to be impervious in Subcatchment ‘A’
5. Update erosion control plan with the following:
   a. Provide riprap at pipe outlet to the 900 contour within basin.
   b. Provide inlet protection at on-site catch basin.
6. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.
7. It is advisable to include sediment collection at basin to reduce maintenance needs. Options include sump at upstream catch basin or riprap wall at downstream location of the three inlets.