COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: August 8, 2016
AGENDA NUMBER: 11
FILE NUMBER: 16-046
ITEM: Copart, Inc

RECOMMENDATION: Table with 13 Stipulations

APPLICANT: Copart, Inc
1526 Bunker Lake Blvd NE
Ham Lake, MN 55304

PURPOSE: Parking Lot Expansion

LOCATION: SE Corner of Hwy 65 and Bunker Lake Blvd in Ham Lake, Minnesota.
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. High infiltration soils
6. Highly erodible soils
7. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1) Construction Plan set by JPJ Engineering, Inc; dated 7/6/16, received 7/27/16.
2) Hydrology Report by JPJ Engineering, Inc. dated 7/26/16, received 7/27/16.
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 a public ditch on the property. The public ditch is County Ditch 59-1 according to the public drainage map. The observed ditch centerline elevations through this property are 894.8 ft MSL at the downstream end and 895.9 ft MSL at the upstream end. Alternatives to repair and additional drainage have been considered and reviewed. The ditch is a 1st order stream. The ditch serves the primary role of Storm water conveyance. The ditch serves approximately 0 acres of agricultural land. Land use in the area is toward commercial and industrial. There are no flooding concerns upstream or downstream. The ditch has not been inspected (2012). Existing elevations, slopes and condition of ditch are fair. 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 Lino, Isanti and Zimmerman.
- Stabilizing vegetation is not 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 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 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 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 not 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 does not exist on site. It is unknown if the project requires dewatering.
**Floodplain:** There is floodplain on the property according to the District model and FEMA. It is unknown if the project does proposes to place fill within the floodplain. The total floodplain impact is unknown, the elevation is 901.7 feet in the east wetland and 900.5 feet on the west wetland.

**High Water Flooding:** Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Ham Lake; 1 ft above mottled soil or 100 yr.

**Groundwater:** Geotechnical information collected in October 2002 indicates long term groundwater elevation is present at 898-899 feet in elevation.

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 may contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA).

It is unknown if the project proposes a containment system.

It is unknown if the project proposes a secondary containment system which is easily inspected and whose purpose it is to intercept any leak or release from the primary containment vessel or structure.

It is unknown if the project proposes storage and use of petroleum products exceeding fifty-five (55) gallons to be elevated and whether or not it will have a secondary containment system.

It is unknown if the project has an acceptable contingency plan for preventing hazardous materials from contaminating the shallow/surficial aquifer should flood, fire, wind or other natural catastrophe, equipment failure or releases occur.

**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.

It is unknown if 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 Copart, Inc. The Stormwater Treatment Practices (STPs) consisting of the following:
<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Detention Basin</td>
<td>3</td>
</tr>
<tr>
<td>Infiltration Basin</td>
<td>3</td>
</tr>
<tr>
<td>Sumps</td>
<td>1</td>
</tr>
</tbody>
</table>

Inspection and maintenance of stormwater facilities will be the responsibility of Copart, Inc. A maintenance agreement has not been executed. The applicant has submitted a blank Maintenance Plan for each Stormwater Treatment Practice. The Maintenance Plan is/are not consistent with District Maintenance standards for each STP.

Easements: The proposed project does not 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 may not be achieved. The stormwater management system utilizes sedimentation basin, wet ponds, and 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 not exist downstream from the proposed site. It is unknown if the rate of post-development runoff from the site exceeds predevelopment rates, or rates which would interfere with sensitive downstream land uses, the model needs to be updated. 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 cause an exceedance of State water quality standards. The project does contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into wetlands are not pretreated by a sediment basin/water quality pond, and are not designed correctly. All work adjacent to wetlands, waterbodies and water conveyance systems are not protected from erosion. The proposal will detrimentally affect the existing water quality of the receiving water. The proposal will 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 Coon Creek. Coon Creek is impaired for (Aquatic Life (Macro-invertebrates) / Aquatic Recreation (E. coli)). The major stressors are Total Suspended Solids (TSS) / Total Phosphorus (TP) / E.coli. There is not 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 exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. No wetland impacts are proposed.

Wetland Replacement Plan:  
A wetland replacement plan has not been submitted and is not required.

Wildlife:  
The proposed project does include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.  
The endangered or threatened species, rare natural community is the Black Huckleberry (*Gaylussacia baccata*).

The applicant has not contacted the MDNR natural heritage or endangered species program.

If the project is present, it is unknown if the project proposes substantial adverse alteration or significant detrimental impact on a species or removal of a plant species will occur.

Performance Escrow: $10,825.00  
Wetland Escrow: N/A  
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Escrows: $2,000 + (17.65 ac * $500/ac) = $10,825.00</td>
<td>1. Receipt of escrows.</td>
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<td>Floodplain: It is unclear if the project does propose to place fill within the floodplain. The total floodplain impact is unknown.</td>
<td>2. Provide information regarding possible floodplain impacts. The elevation is 901.7 feet in the east wetland and 900.5 feet on the west wetland.</td>
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<td>Groundwater: Geotechnical report provided indicates that seasonal high groundwater is present at 898-899 feet.</td>
<td>3. NE and NW ponds do not meet 3 foot groundwater separation.</td>
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<td>Stormwater &amp; Hydraulics: It is unknown if rate control is being met, changes to model are required.</td>
<td>4. Update the following issues with the model:</td>
</tr>
<tr>
<td>a. The model does not accurately represent tail water conditions.</td>
<td>a. Model the tail water conditions, use Dynamic Routing in HydroCAD</td>
</tr>
<tr>
<td>b. The drainage area is not accurate to the south.</td>
<td>b. The model needs to include the Ham Lake Professional Building Site on the south that drains into Pond 1.</td>
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<td>c. No utility plan was provided for stormsewer.</td>
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| d. | Subcatchments on drainage map are not consistent with catchments in model.  
  e. | Storm events for the 10- and 100-Yr were not provided for south-proposed.  
  f. | Starting elevations in model should match NWL shown on grading plan.  
| c. | Provide utility plan, including existing storm structures to ensure HydroCAD is correct.  
  d. | Provide consistent drainage areas/names between map and model.  
  e. | Provide 10 and 100-Yr storm events for south-proposed.  
  f. | Starting elevation should be NWL for wet basins/wetlands.  
| 5. | The NW infiltration basin needs to be modeled and the outlets need to be modified.  
| Soils & Erosion Control: | District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.  
|   | The NW infiltration basin is 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.  
|   | It is unclear if dewatering is needed during the construction of the proposed project.  
|   | It is unclear if the proposal contains a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA).  
| 6. | Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.  
| 7. | After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.  
| 8. | 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.  
| 9. | Provide statement whether the proposal contains land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA). If yes, provide necessary containment systems.  
| Water Quality: | All discharges into wetlands/water quality basins are not pretreated.  
| 10. | Pretreatment has not been provided.  

It is unknown if the applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. The NW infiltration basin is not modeled and the outlets are not designed correctly.
a. Swales have been proposed but do not provide sediment capture.
b. Calculations were not provided for proposed sump manholes. Additional sump is required downstream of proposed basin to meet 80% removal from entire drainage area.

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<th>Maintenance: The maintenance plan is not consistent with District Maintenance standards for each STP.</th>
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<td>There is a ditch on the property. A 50’ easement has not been provided.</td>
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<th>Wildlife: The proposed project may include the endangered or threatened species, Black Huckleberry (Gaylussacia baccata)</th>
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<td>13. Contact the DNR to have a DNR Natural Heritage Information System (NHIS) data review completed to determine if any records of state-protected species may be located within the boundary of this project.</td>
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**RECOMMENDATION:** Table with 13 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Provide information regarding possible floodplain impacts. The elevation is 901.7 feet in the east wetland and 900.5 feet on the west wetland.
3. NE and NW ponds do not meet 3 foot groundwater separation
4. Update the following issues with the model:
   a. Model the tail water conditions, use Dynamic Routing in HydroCAD
   b. The model needs to include the Ham Lake Professional Building Site on the south that drains into Pond 1.
   c. Provide utility plan, including existing storm structures to ensure HydroCAD is correct.
   d. Provide consistent drainage areas/names between map and model.
   e. Provide 10 and 100-Yr storm events for south- proposed.
   f. Starting elevation should be NWL for wet basins/wetlands.
5. The NW infiltration basin needs to be modeled and the outlets need to be modified.
6. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
7. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
8. 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.

9. Provide statement whether the proposal contains land use discouraged or prohibited
by the Safe Drinking Water Supply Act (SDSA). If yes, provide necessary
containment systems.

10. Pretreatment has not been provided:
    a. Provide correctly designed pretreatment for water quality basins.
    b. Provide calculations (SHASM can be used) to indicate sumps are
       appropriately sized to meet district removal rates of 80% TSS. A minimum of
       4 foot depth is required to prevent resuspension.

11. Provide O&M agreement consistent with District Maintenance standards for each
    STP.

12. The property contains a public ditch. A 50’ ditch maintenance is required.

13. Contact the DNR to have a DNR Natural Heritage Information System (NHIS) data
    review completed to determine if any records of state-protected species may be
    located within the boundary of this project.