COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: December 11, 2017
AGENDA NUMBER: 16
FILE NUMBER: 17-215
ITEM: Casey’s Ham Lake

RECOMMENDATION: Table with 10 Stipulations

APPLICANT: Casey’s General Store
Attn: Ryan Stevens
3305 SE Delaware Ave
Ankeny, IA 50021

PURPOSE: Gas Station with a 4,686 SQ FT Building on 1.9 Acre Lot

LOCATION: NE Corner of Johnson St NE and Bunker Lake Blvd NW, Ham Lake, MN
APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work in or adjacent to wetlands, lakes or water courses
3. One or more cumulative acres of land disturbance

EXHIBITS:
1. Construction Plan set (2 sheets); by Design Tree, dated 10/30/17, received 11/3/17.

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 proposed.

Erosion and Sediment Control: Soils affected by the proposal are Lino 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 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.
• 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 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 no floodplain on the property according to the District model and FEMA.

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

Groundwater: Geotechnical information was not provided and is not needed, no infiltration proposed.

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 contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA). Those uses include:
• Vehicle or equipment maintenance/fueling area
• Underground storage tanks
• Storage and use of petroleum products
• Storage and use of petroleum products exceeding fifty-five (55) gallons
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.

Underground storage tanks are proposed and it is unknown if they have double walls and inspectable sumps.

Storage and use of petroleum products exceeding fifty-five (55) gallons are proposed and it is unknown if they are to be elevated and 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.

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>
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<tbody>
<tr>
<td>Basins</td>
<td>1</td>
<td>City of Ham Lake</td>
</tr>
<tr>
<td>Hydrodynamic Separator</td>
<td>1</td>
<td>City of Ham Lake</td>
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</table>

As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities.

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 not allowed within the project area due to site activities. The stormwater management system uses a wet pond.

Drainage sensitive uses do not exist downstream from the proposed site. The rate of post-development runoff from the site does exceed predevelopment rates, or rates which
would interfere with sensitive downstream land uses. Properties and waterways downstream from the project may be protected from erosion due to increases in the volume, velocity and peak water flow rates of stormwater runoff. Concentrated storm water leaving the site is not 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 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 of 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 not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey.

**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:** $2970.00
**Wetland Escrow:** $ N/A
There are not ditch liens on the property.

**ISSUES/CONCERNS:**

<table>
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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td><strong>Escrows:</strong> $2,000 + (1.94 ac * $500/ac) = $2970.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> HydroCAD model uses outdated rainfall values and distribution.</td>
<td>2. Update model to use Atlas-14 rainfall values and either the local rainfall distribution from NOAA or MSE-3.</td>
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</table>
Drainage to the northeast appears to overland flow into adjacent property and may potentially impact existing structure.

Drainage to the north enters an existing swale off of the applicant’s property.

There is an increase in rate discharging off-site to the west adjacent ditch.

No detail provided for outlet control structure for stormwater pond.

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<tr>
<th>Soils &amp; Erosion Control: District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.</th>
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<td>It is unclear if dewatering is needed during the construction of the proposed project.</td>
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<th>Groundwater: It is unknown if the project has a containment system that meets District requirements.</th>
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<td>9. Provide documentation of proposed containment system to ensure groundwater is protected from potential spills and/or leaks on-site.</td>
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<th>Water Quality: Unclear where location of swale and hydrodynamic separator used in MIDS are on the construction plans.</th>
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<td>10. Provide location of swale and hydrodynamic separator on construction plans.</td>
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**RECOMMENDATION**: Table with 10 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Update model to use Atlas-14 rainfall values and either the local rainfall distribution from NOAA or MSE-3.
3. Provide additional drainage information to the northeast near adjacent structure to ensure drainage has a pathway to existing ditch along Hwy 65.
4. Provide written permission from the City that the increase in rate off-site to the west is acceptable.
5. Provide written permission that use of the swale off of the property on the north side is allowed.
6. Provide outlet control structure detail for stormwater pond.
7. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
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 documentation of proposed containment system to ensure groundwater is protected from potential spills and/or leaks on-site.
10. Provide location of swale and hydrodynamic separator on construction plans.