COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: June 24, 2019
AGENDA NUMBER: 13
FILE NUMBER: 19-124
ITEM: AutoZone Store #3949

RECOMMENDATION: Table with 11 Stipulations

APPLICANT: AutoZone, Inc.
123 South Front Street, Floor 3
Memphis, TN 38103

PURPOSE: Construction of new building and parking lot
7,150 SQ FT BUILDING ON 1.13 ACRE LOT

LOCATION: 15633 Highway 65 NE, Ham Lake
**APPLICABILITY:**
1. Within 1 mile of an impaired waters.
2. Any work in or adjacent to wetlands, lakes or water courses
3. The lands and waters that have been, or may be covered by the regional flood.
4. High infiltration soils
5. Highly erodible soils
6. 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 proposed.

Erosion and Sediment Control: Soils affected by the proposal are Isanti, Rifle and Zimmerman.
- 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 and do not have a note to stabilize within seven (7) days of inactivity.
- 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 not pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity. (Only applies if project is > 5 acres).
- Stabilization adequate to prevent erosion has not been provided at the outlets of all storm sewer pipes. Check outlets into stormwater practices. Into CD.
- 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 tracking 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 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.
- Details provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

Dewatering: Shallow ground water does not exist on site. The project is not expected to require dewatering.

Floodplain: There is no floodplain on the property according to FEMA and the district maps.
**Groundwater:** Geotechnical information collected in March 2019 indicates long term groundwater elevation is present at 7-14 feet below the surface.

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

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Inspection &amp; Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infiltration Basin</td>
<td>2</td>
<td>AutoZone</td>
</tr>
<tr>
<td>Rain Guardians</td>
<td>2</td>
<td>AutoZone</td>
</tr>
</tbody>
</table>

A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice. The Maintenance Plan(s) 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 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 two infiltration basins. Calculations have been provided that illustrate the 1-inch infiltration volume is achieved below outlet.

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. 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/stormwater basins are pretreated by a sediment basin/water quality pond, and are designed correctly. 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 Ham Lake. Ham Lake is impaired for Mercury. There is not an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water.

There are 22,026 square feet of 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 6/6/19. The wetland boundary has not been checked and is not needed. The wetland was already replaced and accounted for in the East Frontage Road Project (PAN 09-24).

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

If the project is present, the project does not propose substantial adverse alteration or significant detrimental impact on a species or removal of a plant species will occur.

**Performance Escrow:** $2,450
**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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</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (0.9 ac * $500/ac = $2,450</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: The applicant is meeting the volume management requirement equivalent to</td>
<td>2. Note was provided on the construction plans that a post construction test on the infiltration</td>
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</table>
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.

Drainage area maps are not provided with the submittal.

Atlas 14 precipitation was used for the HydroCAD model. However, the precipitation was not MSE Type III distribution. In the HydroCAD model, outlet to the north infiltration swale has an elevation of 901.7, but this is 901.58 in the plan. Update model and volume calculation to match the plan.

Existing and proposed conditions model both use HSG B soil for pervious areas.

| Soils & Erosion Control: Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surround by erosion control measures to prevent the basin from clogging. |
| Sediment tracked onto paved surfaces shall be removed before the end of day. |
| Stockpiles were not proposed to be surrounded by erosion control measures. |
| Seeding mixes and seeding rates were not specified in the plan. |
| 6. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging. |
| 7. Update erosion control notes to remove tracked sediment before the end of day. |
| 8. Update erosion control notes to provide adequate erosion control measures around stockpiles. |
| 9. Provide details of seeding mixes and seeding rate. |
The plan included details of riprap. However, sizing detail was not included.

<table>
<thead>
<tr>
<th>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.</th>
<th>10. Provide details of riprap sizing and quantity.</th>
</tr>
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<tr>
<td>11. Provide an O&amp;M Agreement that meets District requirements.</td>
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**RECOMMENDATION:** Table with 11 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Note was provided on the construction plans that a post construction test on the infiltration basin will be conducted. Add detail to the note to that infiltration test will be conducted 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. Provide maps showing the delineated existing and proposed drainage areas as reflected in the models.
4. Update HydroCAD model to use MSE 3 rainfall distribution. Update north infiltration swale outlet elevation in the model to match the plan and provide updated volume calculation.
5. Adjust the soil type down one HSG (B to C) for proposed conditions to reflect compaction by construction equipment or add notes to loosen/scarify the upper 1 foot of soil after grading and prior to seeding.
6. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
7. Update erosion control notes to remove tracked sediment before the end of day.
8. Update erosion control notes to provide adequate erosion control measures around stockpiles.
9. Provide details of seeding mixes and seeding rate.
10. Provide details of riprap sizing.
11. Provide an O&M Agreement that meets District requirements.