COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 14, 2019
AGENDA NUMBER: 14
FILE NUMBER: 19-180
ITEM: ABC Mini Storage Addition

RECOMMENDATION: Table with 7 Stipulations

APPLICANT: T Squared Storage
Attn: Travis Roche
7229 Comstock Lane N
Maple Grove, MN 55311

PURPOSE: Construct two new mini storage buildings with corresponding utilities and pavement

LOCATION: 13624 Hanson Boulevard, Andover, 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
4. High infiltration soils
5. Highly erodible soils
6. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (10 sheets); by Carlson McCain, dated 8/12/19, received 10/2/19.
2. Stormwater Management Report; by Carlson McCain, dated 8/12/19, received 10/2/19.
3. Geotechnical Report; by Haugo, dated 10/1/19, received 10/2/19.

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: Soil affected by the proposal is Sartell.
- 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 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 is not required to pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity as the project is less than 5 acres.
• Stabilization adequate to prevent erosion has 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 tracking 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.
• Details provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

**Dewatering:** Shallow ground water does not exist on site. The project does not anticipate 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 meet the criteria for the City of Andover; 3 ft above mottled soils/groundwater, 2 ft above 100 yr.

**Groundwater:** Geotechnical information collected in August 2019 indicates long term groundwater elevation is present at 12 to 15 feet below the surface corresponding to elevations of 882.50 to 884.50.

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:** It is unknown if 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 not been notified or 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>Inspection &amp; Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-Cell Infiltration Basin</td>
<td>1</td>
<td>Unknown</td>
</tr>
<tr>
<td>Sump</td>
<td>1</td>
<td>Unknown</td>
</tr>
<tr>
<td>Forebay</td>
<td>1</td>
<td>Unknown</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 is 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 not achieved. The stormwater management system utilizes a sump manhole, forebay, and two-cell infiltration basin. 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 sump and forebay 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 an Impaired Water. The Impaired Water is Coon Creek (CD 57). Coon Creek (CD 57) is impaired for Aquatic Life (Macro-invertebrates) and Aquatic Recreation (*E. coli*). The major stressors are Total Suspended Solids (TSS), Total Phosphorus (TP), and *E.coli*. There is 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 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:** $2,950

**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 + (1.9 ac * $500/ac) = $2,950</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Local Planning &amp; Zoning: It is unknown if there are concerns from the city.</td>
<td>2. Confirm the city has received an application for review.</td>
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<tr>
<td>Note: The proposed project discharges to city property.</td>
<td></td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: The 1-inch infiltration is not achieved.</td>
<td>3. Remove 2-foot clay liner from Infiltration Basin detail.</td>
</tr>
</tbody>
</table>
| Note: The Infiltration Basin detail shows a 2-foot clay liner. A clay liner will prevent infiltration. | 4. Erosion Control Items:  
    a. Update Note 5 under “During Construction” section of SWPPP to stabilize disturbed areas with vegetation within 7 days of rough grading or inactivity.  
    b. Update Note 3 under “During Construction” section of SWPPP to stabilize soil stockpiles within 7 days of inactivity.  
    c. Show inlet protection for all inlets on Erosion Control Plan.  
    d. Show silt fence around the perimeter of the infiltration basin on Erosion Control Plan. |
| Soils & Erosion Control: Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.  
    Soil stockpiles have not been proposed to be stabilized within seven (7) days of inactivity.  
    All storm sewer inlets are not protected from sediment-laden water during construction.  
    Silt fence is shown cutting through the infiltration basin. | Water Quality: It is unknown if the pretreatment sump and forebay are designed correctly. |
| Water Quality: It is unknown if the pretreatment sump and forebay are designed correctly. | 5. Pretreatment:  
    a. Provide calculations demonstrating that the pretreatment sump and forebay achieve 80% TSS removal for the areas routed through the proposed storm sewer.  
    b. Provide detail for forebay that meets MPCA guidance. |
| 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.  
    Infiltration practices are being installed within a Northern States Power Company easement. It is unclear if the applicant is allowed to install infiltration practices within easement Northern States Power Company easement. | 6. Provide an O&M Agreement and/or D&U easement that meets District requirements.  
7. Provide documentation that there are no encumbrances to install the infiltration basins within the existing utility easement. |
**RECOMMENDATION:** Table with 7 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Confirm the city has received an application for review.
3. Remove 2-foot clay liner from Infiltration Basin detail.
4. Erosion Control Items:
   a. Update Note 5 under “During Construction” section of SWPPP to stabilize disturbed areas with vegetation within 7 days of rough grading or inactivity.
   b. Update Note 3 under “During Construction” section of SWPPP to stabilize soil stockpiles within 7 days of inactivity.
   c. Show inlet protection for all inlets on Erosion Control Plan.
   d. Show silt fence around the perimeter of the infiltration basin on Erosion Control Plan.
5. Pretreatment:
   a. Provide calculations demonstrating that the pretreatment sump and forebay achieve 80% TSS removal for the areas routed through the proposed storm sewer.
   b. Provide detail for forebay that meets MPCA guidance.
6. Provide an O&M Agreement and/or D&U easement that meets District requirements.
7. Provide documentation that there are no encumbrances to install the infiltration basins within the existing utility easement.