COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 23, 2016
AGENDA NUMBER: 11
FILE NUMBER: 16-079
ITEM: North Metro Storage Expansion

RECOMMENDATION: Table with 9 Stipulations

APPLICANT: Pine Ridge Capital - North Metro Storage
4530 West 77th St, Suite 345
Edina, MN 55435

PURPOSE: Expand existing storage facility

LOCATION: Southeast quadrant of Hwy 65 and 143rd Ave NE
APPLICABILITY:
1) Any building within the floodplain of any natural water course (1.07 sub 1)
2) Development of land not authorized by the municipal drainage plan (1.04)
3) Construction, removal or abandonment of a water impoundment (1.16 Sub 1)
4) Construction of 1 acre or greater of impervious surface. a NPDES permit is required
5) Any land alteration within 1 mile of an impaired water

EXHIBITS:
1) Construction Plan set by Plowe Engineering, dated 4/20/16, received 5/11/16.
2) Hydrology Report by Plowe Engineering, dated 5/10/16, received 5/11/16.

HISTORY & CONSIDERATIONS: This is a new application.

FINDINGS:
Ditches: There is a public ditch on the property. The public ditch is County Ditch 59-1 according to the public drainage map. County ditch 59 was established in 1918. The ditch was last inspected in 2012. The ditch is in need of repair.
The approved elevation and grade at 143rd Ave are 880.6 ft MSL and 0.3% slope. Existing elevations, slopes and condition of the ditch are 882.9 to 884.2 ft MSL and represent a 1.6 to 2.1 foot variance from the approved elevations. Alternatives to repair and additional drainage have been considered and reviewed.

The ditch is a 2nd order stream. The ditch serves the primary role of storm water conveyance.

The ditch serves 0 acres of agricultural land. Land use in the area is commercial, single family residential and vacant. There are flooding concerns upstream and downstream.

A 16.5 foot grass strip is required. A 16.5 foot grass strip is present. The 16.5 foot grass strip has been inspected. (103E.075 subd 4) The grass strip is not in need of repair or maintenance.

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

**Erosion and Sediment Control:** Soils affected by the proposal are Lino, Seeleyville and Zimmerman. Stabilizing vegetation is proposed for disturbed areas within one week (7 days) of rough grading. Adjacent properties and stormwater ponds are not protected from sediment deposition. Project site is greater than 1 acre, a NPDES permit is required.

**Floodplain:** There is floodplain on the property according to the District model but not FEMA. It is unknown if the project proposes to place fill within the floodplain or what the impacts are, additional information is needed. There are flooding concerns upstream and downstream.

**Groundwater:** Geotechnical information has been submitted. Geotechnical information collected in April 2016 indicates long term groundwater elevation is present at 4.5 to 6 feet below the surface.

The site is not within a Drinking Water Supply Management Area (DWSMA). The project site is not within the 10 Year Well Head Protection Area. The project site is not within the Emergency Response Area.

The proposal does not contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA).

The project is not within the 10 Year Well Head Protection Area.

Storage and use of petroleum products exceeding fifty-five (55) gallons are not proposed on-site.
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).

Dewatering:  
It is unknown if the project requires dewatering.

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 have been notified and acknowledge the changes proposed.

Maintenance: The Owner of the Stormwater Management features and treatment practices is Pine Ridge Capital. Pine Ridge Capital has not agreed to maintain the Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infiltration Basins</td>
<td>1</td>
</tr>
<tr>
<td>Detention Basin</td>
<td>2</td>
</tr>
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</table>

The owner has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

The owner has not agreed to maintain in perpetuity the Stormwater Treatment Practices in accordance with the approved maintenance plans and in a manner that will permit the Practices to perform the purposes for which they were designed and constructed. The Owner has not signed a District Operations and Maintenance Agreement for Stormwater Facilities.

Easements: The proposed project does include ditch maintenance easement. A maintenance access to all storm water management features is provided.

Inspection and maintenance of stormwater facilities will be the responsibility of Pine Ridge Capital. A maintenance agreement has not been executed.

Stormwater & Hydrology: Infiltration is allowed within the project area. The 1-inch infiltration is achieved to the maximum extent practicable. The stormwater management system uses sedimentation basin, wet ponds. 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. The rate of post-development runoff from the site does not exceed predevelopment rates, or rates which would interfere with sensitive downstream land uses.
**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 not 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 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 M-IBI and E.coli. There is not an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water.

The project does propose site stabilization within 7 days after construction. The proposed stormwater system does retain at least one inch of runoff from the project site to the maximum extent practicable.

There is new impervious surfaces proposed as part of this project.

**Wetlands:** Wetland 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 needed.

**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. No substantial adverse alteration or significant detrimental impact on a species food supply, security or reproductive cycle or the alteration or removal of a plant species will occur.

There are not Ground Water Dependent water resources on site.

**Performance Escrow:** $3,935.00  
**Wetland Escrow:** N/A  
There are not ditch liens on the property.

**FINDINGS/ISSUES/CONCERNS:**

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td>Elevations for project are not in NAVD 1988 coordinates. All projects in the CCWD must be in the NAVD 1988</td>
<td>1. Construction plans and associated documentation needs to be in NAVD 1988 datum.</td>
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<tr>
<td>Coordinate System</td>
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<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> The west basin does not meet the infiltration separation requirements.</td>
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<td>2. The west infiltration basin has high groundwater at 791.6 ft. To meet three foot separation requirements, the bottom of the basin needs to be raised to at least 794.6 ft. The soil borings also indicate Type B soils, an infiltration of 0.45 in/hr should be used in the model. A post construction infiltration test will be required to verify infiltration rate.</td>
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<tr>
<td>3. Proposed bituminous appears to overlap with proposed southern basin on the northern end. Please clarify that proposed bituminous location is outside of proposed basin.</td>
<td></td>
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| Soils & Erosion Control: | **Stormwater & Hydraulics:** The west basin does not meet the infiltration separation requirements. |
|-------------------------|-------------------------------------------------------------------------------------------------
| Soils & Erosion Control: | The plans do not provide erosion control measures around the construction site to protect adjacent property and ditches. |
| 4. Erosion Control: | a. Provide erosion control measures around construction site to protect adjacent property and ditches. |
| b. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging. |

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<td>b. Provide riprap at northern edge to contain sediment runoff from parking lot.</td>
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<td>a. Provide 50 foot ditch easement centered along CD 59-1.</td>
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<td>b. Provide O&amp;M agreement for proposed basins (three).</td>
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**Floodplain:** It is unknown if the project will require floodplain fill proposed below the flood elevation of 888.5’.

7. Floodplain is at 888.6 ft (NAVD 88). Provide calculations showing proposed fill volume impacts and compensatory storage if needed.

**Groundwater:** It is unknown if the project requires dewatering.

8. Clarify if dewatering will take place as part of the project.

**Escrows:** $2,000 + (3.87 ac * $500/ac) = $3,935.00

9. Receipt of escrows

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**RECOMMENDATION:** Table with 9 Stipulations

**Stipulations:**

1. Receipt of escrows.

2. Construction plans and associated documentation needs to be in NAVD 1988 datum.

3. The applicant must acknowledge that they will conduct a post construction test on the infiltration basins 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.

4. Raise the bottom of the west basin to 3 feet above groundwater to meet infiltration separation requirements.

5. Erosion Control:
   a. Provide erosion control measures around construction site to protect adjacent property and ditches.
   b. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.

6. Southern Basin:
   a. Clarify edge of proposed bituminous at northern side
   b. Provide riprap at northern edge to contain sediment runoff from parking lot.

7. Maintenance:
   a. Provide 50 foot ditch easement centered along CD 59-1.
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