COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: September 9, 2019
AGENDA NUMBER: 17
FILE NUMBER: 18-172
ITEM: Paulno Estates

RECOMMENDATION: Approve with 4 Stipulations

APPLICANT: Rob Paulno
6776 Lake Drive, Suite 110
Lino Lakes, MN 55014

PURPOSE: Subdivide and develop Paulno Estates into 4 lots
on a 3.29 acre lot

LOCATION: Located on 125th Lane, north of Main Street NW and west
of Shenandoah Blvd NW in Coon Rapids, Minnesota.
APPLICABILITY:
1. Any work in or adjacent to wetlands, lakes or water courses
2. One or more cumulative acres of land disturbance
3. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)
4. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Site Drainage Narrative and Calculations; by PLOWE Engineering, dated August 26, 2019, received August 26, 2019.
2. Grading, Drainage and Erosion Control Plan; by PLOWE Engineering, Dated August 26, 2019, received August 26, 2019.
6. SWPPP, by PLOWE Engineering, dated 7/9/19, Received 7/10/19.
PREVIOUS ACTION TAKEN: The original application submitted July 10, 2019 was not complete and was not reviewed by the Board at the July 22, 2019 Board meeting. The subsequent application submitted on July 26, 2019, was not complete and was not reviewed by the Board at the August 12, 2019 Board meeting. The following issues were identified in the review:
1. Receipt of escrows.
2. The applicant must provide a soil boring in each Stormwater Treatment Practice to ensure adequate groundwater separation and to determine infiltration rates.
3. Update model or plans so that both are reflecting the same areas and volumes.
4. Include justification where proposed discharge rates exceeding existing.
5. Provide an erosion and sediment control plan and construction plan to show the work and the installation of erosion and sediment control BMPs.
6. Provide an O&M Agreement(s) that meets District requirements.
7. At the time of custom grading for each lot a permit application is required to confirm the proposed grading, BMP O&M and erosion control.
8. The plans must include provisions for the protection of Blanding’s turtles as outlined in the 2016 Wetland Decision.

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.

Erosion and Sediment Control: Soils affected by the proposal are Sartell and Rifle.
- The Applicant did provide a plan showing locations of erosion and sediment control product installations.
- Stabilizing vegetation is 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 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.
- 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 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.
• Details not provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

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

Floodplain: There is no floodplain on the property according to the District model and FEMA.

Groundwater: Geotechnical investigation report is provided. No groundwater noted in borings completed to 8 feet deep, corresponding to elevation 868. Soil reported is primarily fine sand (SP) and fine sand with silt (SP-SM).

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 not 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 not known. 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>Basins</td>
<td>4</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(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 provided.

Stormwater & Hydrology: Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes rain gardens.
Calculations have been provided that illustrate the 1-inch infiltration volume is achieved below outlet.

Drainage sensitive uses exist downstream from the proposed site. The rate of post-development runoff from the excess 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 the site is discharged directly into a well-defined 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 not pretreated by a sediment basin/water quality pond. 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). 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 0.32 acres 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 approved on 11/2/16. The wetland boundary has been checked.

The wetland is not a DNR protected water.
Wetland Replacement Plan: A wetland replacement plan has not been submitted and is not required.

Wildlife: The proposed project may 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 and does not need too.

If the project is present, the project may propose substantial adverse alteration or significant detrimental impact on a species or removal of a plant species will occur.

Performance Escrow: $2,840.00
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>Escrows: $2,000 + (1.68 ac * $500/ac) = $2,840.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Soils &amp; Erosion Control: Unable to discern all the line work on the plans.</td>
<td>2. Provide legend to identify and clarify erosion control features.</td>
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<tr>
<td></td>
<td>a. Provide downstream inlet protection</td>
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<td></td>
<td>b. Provide details for erosion and sediment control items.</td>
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<td></td>
<td>c. After initial grading, completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: The applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first 1.0 inches of precipitation. A post construction test on the rain garden will be required to verify the assumed infiltration rates are obtained.</td>
<td>3. The applicant must provide a note on the construction plans that a post construction test on the rain garden 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.</td>
</tr>
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<td>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.</td>
<td>4. At the time of custom grading for each lot, a permit application is required to confirm the proposed grading, BMP, O&amp;M, and erosion control.</td>
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**RECOMMENDATION:** Approve with 4 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Provide legend to identify and clarify erosion control features.
   a. Provide downstream inlet protection
b. Provide details for erosion and sediment control items.

c. After initial grading, completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.

3. The applicant must provide a note on the construction plans that a post construction test on the rain garden 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.

4. At the time of custom grading for each lot, a permit application is required to confirm the proposed grading, BMP, O&M, and erosion control.