COON CREEK WATERSHED DISTRICT  
PERMIT REVIEW

MEETING DATE: July 28, 2014  
AGENDA NUMBER: 10  
FILE NUMBER: 14-028  
ITEM: Spiral Manufacturing

RECOMMENDATION: Approve with 5 Stipulations

APPLICANT: Tom Menth  
11419 Yellow Pine Street  
Coon Rapids MN 55448

PURPOSE: Building and parking lot addition

LOCATION: 11419 Yellow Pine Street, Coon Rapids MN
APPLICABILITY:
1. One or more cumulative acres of land disturbance.
2. High water table, outwash and organic soils.
3. High infiltration soils.
4. Highly erodible soils.
5. Any land alteration within 1 mile of an impaired water

EXHIBITS:
1. Plan Set by Hakanson Anderson, dated 4/15/14, received 4/16/14.
2. Letter to Tim Kelly from Hakanson Anderson, dated 4/15/14, received 4/16/14.
6. Updated Plan Set by Hakanson Anderson, dated 6/24/14, received 7/2/14
7. Revised Stormwater Management Plan by Hakanson Anderson, dated 6/24/14, received 7/2/14
8. Response to comments by Hakanson Anderson, dated 6/24/14, received 7/2/14
9. Project memo by Paul Stone, Stone Construction, no date, received 7/2/14

HISTORY & CONSIDERATIONS:
The proposed project is an addition to the building and parking lot.

FINDINGS:
Ditches and Drainage: There is not a public ditch on the property. Alternatives to additional drainage considered and reviewed include underground storage, additional infiltration basins, and cisterns, however none of them were deemed feasible by the applicant. The project is near the end of Ditch 54 and Coon Creek.

Floodplain: There is no floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed at 850.6 feet.

Groundwater: Surficial ground water is present at 3.5 feet or 860.5. A drain tile system is used extensively under the proposed parking. The site does include groundwater sensitive areas. Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Coon Rapids (3 ft above mottled soil elevation, 2 ft above 100-year) because the building is slab-on-grade construction. However, the lowest part of the loading dock is within the groundwater table but is connected to the drain tile system.
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.

Maintenance: The proposed project does not include a ditch maintenance easement or utility line crossings. A drainage and utility easement is not provided for the storm water/infiltration ponds shown on the drainage plan.

Soils & Erosion Control: Soils affected by the proposal is Fill. Stabilizing vegetation is not proposed for disturbed areas within two weeks of rough grading. Adjacent properties are not protected from sediment deposition. Project site is greater than 1 acre; an NPDES permit is required.

Stormwater & Hydraulics: The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. The applicant has stated that this is due to the high ground water and the applicant has already tried to meet the volume and rate control requirements through one infiltration basin and small diameter roof drains to slow the runoff rate and increase evaporation. 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 exceed predevelopment rates, or rates which would interfere with sensitive downstream land uses.

Water Quality: Project does not include new impervious drainage areas greater than 1 acre, however, the site will have more than 1 acre (1.16 acres) of impervious surface after the addition of the building and parking lot addition. The site currently has 0.57 acres of impervious surface.

Wetlands: Wetlands do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey.

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: $2,550.00

ISSUES/CONCERNS:

<table>
<thead>
<tr>
<th>Stormwater &amp; Hydraulics:</th>
<th>1. Place water tolerant plants in the bottom of the infiltration basin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The applicant is not meeting the volume or rate management requirements. However, the applicant has demonstrated an attempt</td>
<td></td>
</tr>
</tbody>
</table>

3
to meet the minimum requirements to the maximum extent practicable.

It is recommended that drain tile is installed in the proposed basin sloped to drain to the existing tile lines. Noting that there will be approximately 6 inches of standing water in the basin, it is recommended that water tolerant plants are added to the basin.

<table>
<thead>
<tr>
<th>Soils &amp; Erosion Control:</th>
<th>2. Consider using a sediment trap such as the Anoka Conservation District’s “Rain Guardian,” or a depressed riprap trap at the curb cut location as an alternate form of pre-treatment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grass filter strips are not great pretreatment for infiltration/filtration basins. It is recommended that the Anoka County Conservation District’s “Rain Guardian” or similar is used prevent sedimentation in the pond.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water Quality:</th>
<th>3. Add a water quality unit in CBMH #4 such as a sumped manhole with SAFL Baffle, EcoStorm Plus, or equivalent inline device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since there is no rate, volume or water quality treatment on site, the District would like to see a water quality unit like a sump manhole with a SAFL Baffle installed at CBMH #4.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maintenance:</th>
<th>4. Provide an exhibit for the stormwater features on the site to be part of Operations &amp; Maintenance Agreement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>An exhibit showing the stormwater features must be completed as part of the Operations and Maintenance Agreement.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Escrow:</th>
<th>5. Receipt of escrows.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,000 + (1.1 acres x $500/acre) = $2,550.00</td>
<td></td>
</tr>
</tbody>
</table>

**RECOMMENDATION:** Approve with 5 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Add a water quality unit in CBMH #4 such as a sumped manhole with SAFL Baffle, EcoStorm Plus, or equivalent inline device.
3. Place water tolerant plants in the bottom of the infiltration basin.
4. Consider using a sediment trap such as the Anoka Conservation District’s “Rain Guardian,” or a depressed riprap trap at the curb cut location as an alternate form of pre-treatment.
5. Provide an exhibit for the stormwater features on the site to be part of Operations & Maintenance Agreement.