COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: July 14, 2014
AGENDA NUMBER: 13
FILE NUMBER: 14 - 066
ITEM: Oak Meadows Addition Residential Development

RECOMMENDATION: Table with 10 Stipulations

APPLICANT: Steve Bona
Oak Meadows Land Holdings, LLC
14015 Sunfish Lake Blvd
Ramsey MN 55303

PURPOSE: Oak Meadows Addition Residential Development of 27 lots

LOCATION: South of 130th Ave NE between Radisson Road (52) and Central Ave NE (65)
APPLICABILITY:
1. Any work within or adjacent to a Public Ditch within the Watershed District.
2. Any work in or adjacent to wetlands, lakes or water courses.
3. One or more cumulative acres of land disturbance.
4. High water table, outwash and organic soils.
5. High infiltration soils.
6. Highly erodible soils
7. Endangered, Threatened or Special concern species, elements of communities.

EXHIBITS:
1. Water quality and volume control calculations from John Oliver & Associates dated 6-11-14, received 6-11-14.
2. Plat, Grading, SWPPP, and Sewer plans from John Oliver & Associates dated 6-11-14, received 6-11-14.
3. Hydrologic calculation from John Oliver & Associates dated 6-11-14, received 6-11-14.

HISTORY & CONSIDERATIONS:
Development of 27 lots in the City of Blaine.

FINDINGS:
Ditches and Drainage: There is a public ditch on the property. The ditch is County Ditch 60. The ditch has been inspected. The project site is tributary to County Ditch 60. The trend in land use for this drainage area is toward commercial. There are flooding concerns downstream. Alternatives to additional drainage considered and reviewed include storage and retention.

Floodplain: There is no floodplain on the property according to FEMA. The District Atlas 14 model predicts the 100-year elevation for the subwatershed is at 900.3 feet.

Groundwater: Information has not been provided to substantiate low floor elevations. Low floor elevations do not meet the criteria for the City of Blaine (2 ft above mottled soil elevation, 2 ft above 100-year). The 100-year elevation is 900.3 and one of the lots (Lot 3, Outlot B) has a low floor elevation at 902.1 ft.

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 include a ditch maintenance easement or utility line crossings. A drainage and utility easement is provided for the storm water/infiltration ponds shown on the drainage plan. Property owners affected by changes in drainage have been notified and have acknowledged the changes proposed.
Soils & Erosion Control: Soils affected by the proposal are Lino, Isanti, Sartell and Zimmerman. Stabilizing vegetation is proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. All wetlands, water bodies, ponds, infiltration basins and water conveyance systems are not protected from erosion and sedimentation. 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. Stormwater leaving the site is discharged into a well-defined receiving channel or pipe and routed to a public drainage system. Drainage sensitive uses exist downstream from the proposed site. The rate of post development runoff from the site does exceed rates which would interfere with sensitive downstream land uses.

Water Quality: Project does include new impervious drainage areas greater than 1 acre. All discharges into wetlands are pretreated by a sediment basin/water quality pond and are designed correctly. 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.

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

Wildlife: The proposed project includes the threatened Swamp Blackberry (*Rubus semisettesosus*). Staff contacted the DNR. The last siting was in 1953 so the DNR is not concerned about impacts to the species.

Performance Escrow: $5,750.00

**ISSUES/CONCERNS:**

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<th>Stormwater &amp; Hydraulics:</th>
<th>1. Reconfigure the storm sewer/stormwater pond/infiltration area configuration to address the District’s rate and volume control rules.</th>
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<td>The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. All projects in the Coon Creek Watershed District must meet this requirement. Currently, the infiltration BMPs are sized to infiltrate the first 0.5 inches of runoff. The current configuration of the infiltration areas only captures runoff from backyards and rear rooftops. This is not acceptable by the District as it will be too hard to</td>
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- Maintain the infiltration areas even if runoff from impervious surfaces could get to them.

There is also concern that there may be low floor issues with the Carrara East subdivision to the North.

Lastly, with the current configuration, stormwater will short circuit pond 2 and the infiltration basins. The applicant’s engineer needs to reconfigure the sediment pond/infiltration basins to attempt to meet the volume management requirement, which is 1” of rain in 24 hours over impervious surfaces. The District suggests eliminating one or two of the lots to make room for an appropriately sized basin/infiltration area.

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<td>2.</td>
<td>Address short circuiting of pond 2 and infiltration areas</td>
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<td>3.</td>
<td>Provide low floor elevations of the Carrara East properties</td>
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<td>4.</td>
<td>Show that property owners to the north in the Carrara East sub development have been notified of the drainage changes.</td>
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<td>5.</td>
<td>Provide pretreatment to all infiltration areas</td>
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The applicant must acknowledge that they will conduct a post construction test on the infiltration basin 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.

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<th>Groundwater: The grading, drainage, and erosion control plan shows soil borings, however, a geotechnical report has not been provided. Please provide the geotechnical report, showing a 3 ft. separation between the bottom of the infiltration basins and the seasonally high groundwater elevation.</th>
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<td>7. Provide soil borings showing a 3ft. separation between seasonally-high groundwater and the bottom of the infiltration basins.</td>
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<td>8. Raise the bottom of all low floor openings to at least 2ft above the 100-yr elevation of 900.3ft and 2 ft above mottled soils elevations from the soils report.</td>
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<th>Soils &amp; Erosion Control: All infiltration basins must be completely surrounded by erosion control measures and have adequate pre-treatment to avoid sedimentation.</th>
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<td>9. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</td>
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<th>Escrow: $2,000 + (7.5 ac * $500/ac) = $5,750</th>
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<td>10. Receipt of escrow</td>
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**RECOMMENDATION:** Table with 10 Stipulations

**Stipulations:**

1. Receipt of escrows.
2. Reconfigure the storm sewer/stormwater pond/infiltration area configuration to address the District’s rate and volume control rules.
3. Address short circuiting of pond 2 and infiltration areas
4. Provide low floor elevations of the Carrara East properties
5. Show that property owners to the north in the Carrara East sub development have been notified of the drainage changes.
6. Provide pretreatment to all infiltration areas
7. The applicant must acknowledge that they will conduct a post construction test on the infiltration basin by filling the basin to a minimum depth of 6 inches with water and
water and monitor the time necessary to drain. The Coon Creek Watershed District shall be notified prior to the test to witness the results.

8. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.

9. Provide soil borings showing a 3ft. separation between seasonally-high groundwater and the bottom of the infiltration basins.

10. Raise the bottom of all low floor openings to at least 2ft above the 100-yr elevation of 900.3ft and 2 ft above mottled soils elevations from the soils report.