COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: July 25, 2016
AGENDA NUMBER: 11
FILE NUMBER: 16-049
ITEM: The Preserve at Oak View

RECOMMENDATION: Table with 5 Stipulations

APPLICANT: Metrowide Development LLC
15356 Yukon St. NW
Andover, MN 55304

PURPOSE: Development of 14 custom graded lots with individual septic systems

LOCATION: Crosstown Blvd. North of ½ mile north and east of Constance Blvd., Andover MN
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. The lands and waters that have been, or may be covered by the regional flood.
5. Appropriation and use of groundwater
6. High infiltration soils
7. Highly erodible soils

EXHIBITS:
1) Plan set by Landform; Dated 7/12/2016; received 7/13/2016
2) Stormwater Narrative Part 1 and 2 by Landform; Dated 6/29/2016, revised 7/12/2016; received 7/13/2016
3) Wetland Delineation Report by Kjolhaug Environmental Services Inc, dated 6/29/16; received 7/5/16
PREVIOUS ACTION TAKEN: This application was initially submitted on 6/29/2016. The application was considered incomplete and a letter was sent to the applicant on 7/6/2016 with the following 11 stipulations:

1. Receipt of escrows.
2. Provide the District a statement acknowledging that a post construction test will be performed with District staff present.
3. Indicate on plans where curb cuts will be. Include details of curb cuts in detail sheets. Insure that the curb cuts can handle the expected velocities in order to maintain volume control on site.
4. Provide calculations of the expected velocity in drainage swales for the 2-year event.
5. Describe how the drain tile is incorporated and where it is directed.
6. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.
7. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
8. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide well-field location, rates, discharge location, schedule and quantities.
9. Provide description of how stormwater is pretreated prior to entering infiltration basins or modify plans so that there is clear pretreatment such as check dams in the swale, rain guardians at curb cuts, etc.
10. The wetland delineation report must be reviewed and approved by the TEP.
11. Wetland impacts must be reviewed and approved by the TEP.
FINDINGS:
Pre-application Meeting: The project as submitted has not received a general review during a pre-application meeting.

Ditches: There is a public ditch on the property. The public ditch is County Ditch 58-7-3 according to the public drainage map.

The approved/as-built elevations through this property are 893.1 ft (NAVD-88) at the downstream end and 892.5 ft (NAVD-88) at the upstream end. Existing elevations, slopes and condition of the ditch are good and represent a 3ft variance from the as-built elevations. Alternatives to repair and additional drainage have not been considered and reviewed.

The ditch is a first order stream. The ditch serves the primary role of
  a. Collector system

The ditch serves approximately 16.498 acres of agricultural land.
Land use in the area is toward open space.
There are no flooding concerns upstream and/or downstream.

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

Erosion and Sediment Control: Soils affected by the proposal are Lino, Isanti, Zimmerman and Marsh soils within the wetland areas.
  • 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.
  • 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 does pass through a sediment basin or other sediment trapping BMP with equal or greater storage capacity.
  • Stabilization adequate to prevent erosion has been provided at the outlets of all storm sewer pipes.
  • 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 racking 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 not provide for the repair and maintenance of all temporary and permanent erosion and sediment control practices.

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

**Floodplain:** There is floodplain on the property according to the Atlas 14 District model and FEMA, showing a floodplain elevation of 889.0 feet. However, the project does not propose to place fill within the floodplain. Compensatory storage is not needed. There are no flooding concerns upstream and/or downstream.

**High Water Table Flooding:**
Information has been provided to substantiate low floor elevations. Low floor elevations do not meet the criteria for the City of Andover; 3 ft above the highest anticipated water tables, 2 ft over 100 yr.

**Groundwater:** Geotechnical information collected in June, 2016 indicates long term groundwater elevation is present between 5 and 15 feet below the surface.

The site is not within a Municipal Drinking Water Supply Area (DWSMA).

**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 unknown. The Stormwater Treatment Practices (STPs) consisting of the following:

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<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
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<tr>
<td>Infiltration Basins</td>
<td>4</td>
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Inspection and maintenance of stormwater facilities will be the responsibility of unknown for the infiltration basins. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.

**Easements:**
The proposed project does include ditch maintenance easement. However, as proposed it only illustrates an 80’ easement. A 100’ easement is required. A ditch maintenance
easement is required but not shown on the plan set. Maintenance access to all storm water management features is provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is not achieved. The stormwater management system utilizes filtration, and wet ponds. Stormwater leaving the site is not 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.

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. Infiltration basin pretreatment is proposed through the use of grass filter strips within the roadway boulevard. Sheet flow is routed over flat ribbon curb and through a 10.5-foot wide grass filter strip. Grade of flat ribbon strip is to match pavement grade. The project does not contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into wetlands are pretreated by an infiltration basin 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 not within one (1) mile and drains to an Impaired Water.

There are 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 completed on 6/29/16. The wetland boundary has been checked.

One of the seven wetlands is a DNR protected water (DNR wetland 424-W).

The project is not wetland dependent. The project is not exempt.

**Wetland Replacement Plan:**
A wetland replacement plan has not been submitted. It appears that wetland impacts may occur with the future road extension based on the location of the cul-de-sac and ghost
platted road. Applicant must provide alternatives to the current road design to avoid and minimize future wetland impacts.

**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:** $16,900.00  
**Wetland Escrow:** N/A  
There are not ditch liens on the property.

### ISSUES/CONCERNS:

<table>
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<td>1. Correct low floor elevations to meet criteria for the City of Andover</td>
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<td><strong>Stormwater &amp; Hydraulics:</strong> The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation.</td>
<td>2. The summary tables for the majority of the subcatchments in the HydroCAD model in Part 2 of the Stormwater Narrative for the 24-hr. 1-yr rainfall event and the Proposed Drainage Map in Part 1 of the Stormwater Narrative do not match– specifically the square foot of pervious area, impervious area. Provide information that matches.</td>
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<td><strong>Escrows:</strong> $2,000 + (29.8 ac * $500/ac) = $16,900.00</td>
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