COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: April 25, 2016
AGENDA NUMBER: 13
FILE NUMBER: 16 – 038
ITEM: Hideaway of Blaine

RECOMMENDATION: Table with 9 Stipulations

APPLICANT: Ann Hoemberg
1749 118th Ave NE
Blaine, MN 55449

PURPOSE: Construction of 8 new single family lots

LOCATION: 1,500 feet West of Aberdeen St between 118th and 119th Ave NE in Blaine, Minnesota.
APPLICABILITY:
1) Any activity involving drainage, filling or alteration of wetlands (1.09)
2) Development of land not authorized by the municipal drainage plan (1.04)
3) Any land alteration within 1 mile of an impaired water
4) Project site is not greater than 5 acres, a NPDES permit is not required

EXHIBITS:
2. HydroCAD model by Plowe Engineering, Inc.; dated 3/1/16, received 3/2/16.
3. Wetland Application by Bald Eagle Builders; dated 3/2/16, received 3/2/16.

HISTORY & CONSIDERATIONS: This is a new application.

FINDINGS:
Ditches: There is not a public ditch on the property.

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

Erosion and Sediment Control: Soils affected by the proposal are Isanti and Zimmerman. Stabilizing vegetation is proposed for disturbed areas within two weeks (14 days) of rough grading. Adjacent properties and stormwater ponds are protected from sediment deposition. Project site is greater than 1 acre, a NPDES permit is required.
**Floodplain:** There is no floodplain on the property according to the District model and FEMA.

**Groundwater:** Geotechnical information has been submitted. Geotechnical information collected in February 2016 indicates long term groundwater elevation is present at an average of 13.7 feet below the surface. Some borings show groundwater as high as 8.5 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).

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 Blaine; 1 ft above mottled, 2 ft above 100 yr.

**Dewatering:**
The project does not require 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 City of Blaine. Blaine is a MS4 and is required to maintain the Stormwater Treatment Practices (STPs) consisting of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
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<tr>
<td>Infiltration Basin</td>
<td>1</td>
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Inspection and maintenance of stormwater facilities will be the responsibility of the City of Blaine. As a requirement of the City’s MS4 program, the city will inspect and maintain the stormwater facilities.
Easements: The proposed project does not 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 City of Blaine. A maintenance agreement has not been executed and is not needed.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system does utilize overland flow. 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 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 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 not within one (1) mile of 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 April 14, 2016. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The total proposed wetland impact is 1,953 square feet. The impact is through fill in 1 location as shown below:
The de minimis is 2500 sf. The proposed project results in wetland impacts less than 10,000 sf over the de minimis. TEP members have been notified with a complete plan and have been requested to submit comments.

The project is not wetland dependent.

The project is exempt.

The applicant does not need to contact the DNR area hydrologist and the Corps of Engineers.

0 alternatives have been submitted and are not required. On-site sequencing does not apply.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and is not required.
**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 Ground Water Dependent water resources on site. The Ground Water Dependent Water Resources are:
- lakes, streams, and wetlands

The project is proposing the conversion of an existing wetland into an infiltration basin.

The proposed project does not result in:
- Loss of any existing environmental value linked to receiving waters
- Pose a significant threat to aquatic fauna or flora, especially groundwater-dependent ecosystems,
- Soil erosion or local flooding
- Harm to native vegetation (via flooding or toxicity)
- Erosion of structures or services
- Sediment build-up in drains, waterways or wetlands
- Nuisance to the local community such as foul odors; harm to plants or property
- Hazard to human health or safety
- Loss or discernible reduction of flow in public or private water sources.

No Steps are proposed for avoiding or minimizing impacts, and are not needed.

**Performance Escrow:** $2,300.00  
**Wetland Escrow:** $ N/A

There are not ditch liens on the property.

**FINDINGS/ISSUES/CONCERNS:**

<table>
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<tr>
<th>ISSUE</th>
<th>NEED</th>
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<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> Proposed development plan set is for concept grading only, lots will be custom graded when sold. The custom grading will need to be consistent with concept drainage areas.</td>
<td>1. Provide as-builds to ensure drainage consistencies.</td>
</tr>
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</table>
| Memo states that rate control is met by regional basin. However, it is unclear which basin is being used. | 2. Show regional basin on a map.  
Provide documentation from City that existing pipes can handle the increase in flow from site. |
<p>| Model has an overflow weir of 899.1 for infiltration basin. However, that 899.1 existing weir is only at property boundary. The contours off site to the east indicate | 3. The model will need to be updated to ensure low floor separation is being met and that adjacent properties are not affected by |</p>
<table>
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<td>that the basin will not outlet until 900.0’.</td>
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<td>The plans do not show a drainage map indicating the entire drainage path from the basin to the City storm sewer</td>
<td>4. A map showing drainage of basin off site needs to be provided. The map should indicate the entire drainage path from the basin to the City storm sewer.</td>
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<td>Soils &amp; Erosion Control: Infiltration basins are not protected from erosion and sedimentation during construction.</td>
<td>5. After initial grading the District requires that infiltration basins be completely surrounded by erosion control measures to prevent the basin from clogging. Also, add note on grading plans that limits construction vehicle activity in infiltration area at all times</td>
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<td>Stormwater &amp; Hydraulics: The applicant is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. A post construction test on the infiltration basin will be required to verify the assumed infiltration rates are obtained. 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.</td>
<td>6. 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.</td>
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<td>Maintenance: A drainage and utility easement is not provided for the infiltration pond shown on the drainage plan.</td>
<td>7. A D&amp;U easement needs to be provided for infiltration basin.</td>
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<td>It is unknown if property owners affected by changes in drainage have been notified and have acknowledged the changes proposed.</td>
<td>8. Provide documentation that adjacent properties owners are aware of proposed changes.</td>
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<td>Escrows: $2,000 + (4.6 ac * $500/ac) = $2,300.00</td>
<td>9. Receipt of escrows.</td>
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RECOMMENDATION: Table with 9 Stipulations

Stipulations:
1. Receipt of escrows.
2. Provide as-builts to ensure drainage consistencies.
3. Show regional basin on a map. Provide documentation from City that existing pipes can handle the increase in flow from site.
4. The model will need to be updated to ensure low floor separation is being met and that adjacent properties are not affected by project.
5. A map showing drainage of basin off site needs to be provided. The map should indicate the entire drainage path from the basin to the City storm sewer.
6. 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.
7. After initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging. Add note to construction plans that limits construction activities in infiltration areas at all times.
8. Provide drainage and utility easement for infiltration area.
9. Provide documentation that adjacent property owners are aware of proposed project.