COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: July 28, 2014
AGENDA NUMBER: 13
FILE NUMBER: 14 - 077
ITEM: Villas in the Lakes

RECOMMENDATION: Table with 5 Stipulations

APPLICANT: Hedberg Homes Inc.
4247 117th Avenue NE
Blaine, MN 55449

PURPOSE: 15 Lot Residential Development

LOCATION: NE quadrant of Intersection of Harpers St and Lakes Pkwy NE, Blaine MN
APPLICABILITY:
1. Any work in or adjacent to wetlands, lakes or water courses.
2. One or more cumulative acres of land disturbance.
3. The lands and water that have been, or may be covered by the regional flood.

EXHIBITS:
2. Large Set of Plans – Sheets 1-9, Dated 5/7/2014 and 5/9/2014, Received 6/13/2014
3. Large Set of Plans - Sheets 1-8, Dated 5/7/2014 and 5/9/2014, Received 7/16/2014

HISTORY & CONSIDERATIONS:
The applicant is proposing a 15 Lot residential subdivision. The area for the proposed development is in the Lakes subdivision. The Lakes was approved by the CCWD in 2004 for mass grading. The original Lakes model for the subwatershed has a Curve Number of 87.4.

FINDINGS:
Ditches and Drainage: There is not a public ditch on the property. The project site is tributary to County Ditch 41-6. The trend in land use for this drainage area is toward residential. There are no flooding concerns downstream. There were no alternatives to additional drainage considered and reviewed.

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 898.5 feet.

Groundwater: The applicant did not submit a geotechnical report. The ground water elevation is unknown. The site does include groundwater sensitive areas. Information has not been provided to substantiate low floor elevations. It is unknown if low floor elevations meet the criteria for the City of Blaine (2 ft above mottled soil elevation, 2 ft above 100-year).

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 utility line crossings. A drainage and utility easement is provided for the storm sewer between lots 5 and 6. A drainage and utility easement is not provided for the depressional area on Lots 10 and 11 shown on the grading plan. Property owners affected by changes in drainage have not been notified and have not acknowledged the changes proposed.
Soils & Erosion Control: Soils affected by the proposal are Markey, Isanti and Rifle. Stabilizing vegetation is proposed for disturbed areas within two weeks of rough grading. Adjacent properties are protected from sediment deposition. It is unclear if all wetlands, waterbodies, ponds, infiltration basins and water conveyance systems are 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 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, however regional ponds for the Lakes Area development addresses rate control.

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 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: $4,300

ISSUES/CONCERNS:

| Groundwater: The Applicant did not submit a geotechnical report and therefore the ground water elevation is unknown. In addition the plans do not show the low floor elevations. | 1. Provide the proposed low floor elevations of the residential development.  
2. Provide geotechnical report to substantiate low floor elevations. |
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<td>Stormwater &amp; Hydraulics: 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. If applicants cannot meet this requirement due to site constraints in its entirety, they</td>
<td>3. Add additional infiltration or filtration areas to increase the volume management from the development. Provide stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff</td>
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| Stormwater & Hydraulics: 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. If applicants cannot meet this requirement due to site constraints in its entirety, they | 3. Add additional infiltration or filtration areas to increase the volume management from the development. Provide stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff |
must meet it to the greatest extent practical and explain why it cannot be met.  

from the first inch of precipitation. If it cannot be met, meet the requirement to the greatest extent practical and explain why it cannot be met.

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<th>Provide BMPs to the greatest extent practical, a post construction test on infiltration basins 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.</th>
<th>4. If the depression area on Lots 10 and 11 are a filtration area, 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. Put this note on the plans.</th>
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| The depression on lots 10 and 11 should be a filtration basin with drain tile to draw water downs so lawns in the backyards are not saturated. Additional filtration basins could be located throughout the development to help achieve volume management requirements. Any additionally proposed filtration basins should utilize drain tile. | 5. Provide additional information on the depression area on Lots 10 and 11.  
  a. Add drain tile to the bottom of the depression area to ensure drawdown and that lawns are not saturated at the surface.  
  b. If it is a filtration area, provide a HydroCAD model to show HWL.  
  c. If it is a filtration area, provide on the plans a drainage and utility easement which encompasses the HWL of the modeled depression area. |
| **Soils & Erosion Control:** If the depression on the grading plans is a proposed infiltration basin, the infiltration basin is not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging. | 6. If the depression area on Lots 10 and 11 are a filtration area, after initial grading completely |

the depression area on Lots 10 and 11 are a filtration area, 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. Put this note on the plans.
surrounded by erosion control measures to prevent the basin from clogging.

| Escrows: $2,000 + (4.6 ac * $500/ac) = $4,300 | 7. Receipt of escrows. |

**RECOMMENDATION:** Table with 7 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Provide the proposed low floor elevations of the residential development.
3. Provide geotechnical report to substantiate low floor elevations.
4. Provide additional information on the depression area on Lots 10 and 11.
   a. Add drain tile to the bottom of the depression area to ensure drawdown and that lawns are not saturated at the surface.
   b. If it is a filtration area, provide a HydroCAD model to show HWL.
   c. If it is a filtration area, provide on the plans a drainage and utility easement which encompasses the HWL of the modeled depression area.
5. If the depression area on Lots 10 and 11 are a filtration area, 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. Put this note on the plans.
6. If the depression area on Lots 10 and 11 are a filtration area, after initial grading completely surrounded the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
7. Add additional infiltration or filtration areas to increase the volume management from the development. Provide stormwater runoff calculations that show the site is meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. If it cannot be met, meet the requirement to the greatest extent practical and explain why it cannot be met.