COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: February 13, 2017
AGENDA NUMBER: 13
FILE NUMBER: 17-018
ITEM: Springbrook Development – Phase I

RECOMMENDATION: Approve with 4 Stipulations

APPLICANT: Capstone Homes
14015 Sunfish Lake Boulevard
Suite 400
Ramsey, MN 55303

PURPOSE: Single Family Housing Development

LOCATION: West of Harpers Street NE and North of 128th Ave NE, Blaine MN

![Map of Springbrook Development]
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 water that have been, or may be covered by the regional flood.
5. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Uses)
6. Excavation or filling or a combination of excavation and filling of sand or other excavation or fill material including the laying, repairing, replacing or enlarging of a culvert or an underground pipe or facility where it crosses a public ditch or waters of the state.
7. Endangered, Threatened or Special concern species, elements of communities.

EXHIBITS:
1. Stormwater Management Plan by Loucks; dated 1/11/2017, received 1/11/2017
2. Construction Plan set by Loucks; dated 1/27/2017, received 1/11/2017

PREVIOUS ACTION TAKEN: This development was initially submitted and approved as PAN 14-085. The applicant withdrew the application. There was minimal design change since the 14-085 approval.
**FINDINGS:**

**Pre-application Meeting:** The project as submitted has received a general review during a pre-application meeting.

**Ditches:** There are several public ditches on the property. The public ditches are County Ditch 59-4, 59-8 and 59-4-B according to the public drainage map. The Ditch 59 system was last inspected in 2012. The public ditches throughout this property were privately excavated to the approved elevation and grade in 2014. The approved elevations through this property are Ditch 59-4 891.1 ft MSL downstream and 892.0 ft MSL upstream, Ditch 59-8 891.5 ft MSL downstream and 891.9 ft MSL upstream, and Ditch 59-4-B 891.4 ft MSL downstream and 891.6 ft MSL upstream. The ditches are all 3rd order streams. The ditches serve the primary role of storm water conveyance. The ditches serve approximately 0 acres of agricultural land. Land use in the area is toward single family residential. There are no flooding concerns upstream or downstream. Existing elevations, slopes and condition of ditch are good. Alternatives to repair and additional drainage have been considered and reviewed. The ditch is not in need of repair.

**Ditch Hydraulics:** A crossing of the ditch is proposed. The proposed crossing involves the installation of a culvert. The proposed culvert is of sufficient hydraulic capacity.

**Erosion and Sediment Control:** Soils affected by the proposal are Isanti, Millerville, Markey and Zimmerman.

- Stabilizing vegetation is 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 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 may require dewatering.

Floodplain: There is floodplain on the property according to the District model and FEMA. The project does propose to place fill within the floodplain. The total floodplain impact is 0.14 acre-feet. The proposed impact is within the flood fringe. Compensatory storage is provided. There are no flooding concerns upstream and/or downstream.

High Water Flooding: Information has been provided to substantiate low floor elevations. Low floor elevations do meet the criteria for the City of Blaine; 2 ft above mottled, 2 ft above 100 yr.

Groundwater: Geotechnical information collected in November 2014 indicates long term groundwater elevation is present at 5.4-13.7 feet below the surface.

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

The project site is not within the Emergency Response Area/10 Year Well Head Protection Area/Drinking Water Supply Management Area.

The proposal does not contain a land use discouraged or prohibited by the Safe Drinking Water Supply Act (SDSA).

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:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
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<tbody>
<tr>
<td>Wet Basins</td>
<td>2</td>
</tr>
<tr>
<td>Filtration Basins</td>
<td>1</td>
</tr>
</tbody>
</table>
Inspection and maintenance of stormwater facilities will be the responsibility of unknown. 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. A ditch maintenance easement is required. A maintenance access to all storm water management features is provided.

**Stormwater & Hydrology:** Infiltration is not allowed within the project area due to high groundwater. The 1-inch infiltration is achieved. The stormwater management system utilizes wet detention and filtration. 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 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. 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 cause an exceedance of State water quality standards. The project does contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into wetlands are pretreated by a sediment basin/water quality pond, 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 May 28, 2014. The wetland boundary has been checked.

The wetland is not a DNR protected water.

The total proposed wetland impact is 0.25 acres. The impact is through fill in 2 locations as shown below:
The de minimis is 400 sf. The proposed project results in wetland impacts greater 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 not exempt.

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

Two or more alternatives, plus the proposed project, have been submitted. On-site sequencing does apply. The avoidance alternatives are considered good faith efforts.

1. The applicant suggests that avoidance is not reasonable because there is no alternative. No alternative exists because:
   1) The basic purpose of the project cannot reasonably be accomplished at an alternative site, alternative sites are not available, alternative sites are not practical/prudent;
   2) The applicant has made a good faith attempt in pursuing alternatives;
   3) The applicant has demonstrated that the activity will minimize wetland impacts through:
      a. modifying the size, scope, configuration, and density of the project, 
      b. attempted to remove or accommodate site constraints including zoning, infrastructure, access, or natural features, and c) otherwise minimize wetland impacts.
2. The applicant suggests that avoidance is not reasonable because sequencing flexibility applies citing that:

   1) The site of the impacted wetland, should it be preserved, would result in an inability to function or provide values because of surrounding land uses and could not be reasonably maintained through other land use controls or mechanisms.

   2) The applicant suggests that avoidance is not reasonable because there is a compelling public need/interest. There is a compelling public need/interest because

      a. The wetland impact is minimized and proposed to be mitigated;
      b. the proposed wetland replacement is certain to provide equal or greater functions and public values to the District than the wetland to be impacted; and
      c. The public need for the connecting roadway is essential to the public welfare of the general area.

**Wetland Replacement Plan:**
A wetland replacement plan has been submitted.
A replacement plan application has been submitted.
The wetland replacement plan has been sent to TEP members for comment.
Replacement is proposed to be through purchasing credits of 0.37 acres through wetland bank #159 in Morrison County.

The TEP has approved the wetland mitigation plan

**Wildlife:**
The proposed project does include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

The endangered or threatened species, rare natural community are threatened Bristleberry (*Rubus fulleri*) and the threatened Blanding’s Turtle (*Emydoidea blandingii)*.

The applicant has contacted the MDNR natural heritage or endangered species program.

The DNR requested compensatory mitigation for the plant in the amount of $20,000. The applicant agreed to this and the DNR has issued the applicant a takings permit.

If the project is present, the project does propose removal of a plant species.

**Performance Escrow:** $11,100.00 - PAID

**Wetland Escrow:** N/A

There are not ditch liens on the property.
**ISSUES/CONCERNS:**

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<th>ISSUE</th>
<th>NEED</th>
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<tbody>
<tr>
<td><strong>Escrows:</strong> $2,000 + (18.2 \text{ ac} \times 500/\text{ac}) = 11,100.00</td>
<td>1. Receipt of escrows. - PAID</td>
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<tr>
<td><strong>Erosion and Sediment Control:</strong> It is unknown if the project will require dewatering.</td>
<td>2. 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.</td>
</tr>
<tr>
<td><strong>Maintenance:</strong> It is unknown who will be responsible for the inspection and maintenance of stormwater facilities. A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.</td>
<td>3. Provide an O&amp;M Agreement that meets District requirements.</td>
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<td><strong>Wetland:</strong> Wetlands are proposed to be replaced through wetland bank.</td>
<td>4. Provide proof of purchase of wetland credits.</td>
</tr>
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**Stipulations:**
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