COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: October 23, 2017
AGENDA NUMBER: 12
FILE NUMBER: 17-193
ITEM: Kiekbusch Home

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: Norgaard Homes
Attn: Jay Norgaard
1521 94th Lane NE
Blaine, MN 55449

PURPOSE: 2100 SQ FT Residence on 2 Acre Lot

LOCATION: Intersection of Shenandoah St NE and Vickers St NE, Ham Lake, MN

APPLICABILITY:
1. Any work within or adjacent to a Public ditch within the Watershed District.
2. The lands and waters that have been, or may be covered by the regional flood.
3. Activities upstream from land that is dependent upon removal of water from the soil profile for their continued use (Drainage Sensitive Land Uses)

EXHIBITS:

PREVIOUS ACTION TAKEN: This is a new application.

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 59-6 according to the public drainage map. The approved elevations through this property are 890.7 ft MSL at the downstream end and 890.8 ft MSL at the upstream end. The 2012 existing elevations through this property are 893.6 ft MSL at the downstream end and 893.2 ft MSL at the upstream and represent a 2.9-2.4 ft variance from the approved elevations. The ditch is a 3rd order stream and serves the primary role of storm water conveyance. The ditch serves approximately 17.3 acres of agricultural land. Land use in
the area is toward residential. There are no flooding concerns upstream or downstream. The ditch has been inspected. Existing elevations, slopes and condition of ditch are fair. 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 not proposed.

**Erosion and Sediment Control:** Soils affected by the proposal are Markey and Lino.
- Stabilizing vegetation is not proposed for disturbed areas within seven (7) days of rough grading.
- Soil stockpiles are not anticipated as part of the project.
- 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 not been provided at the outlets of all storm sewer pipes.
- All storm sewer inlets are not 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 not 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. The District’s floodplain elevation is at 896.2 feet. The project does not propose to place fill within the floodplain. There are flooding concerns downstream.

**High Water Flooding:** Low floor elevations meet the criteria for the City of Ham Lake; 1 ft above mottled soil or 100 yr.

**Groundwater:** Geotechnical information collected in August 2017, indicates groundwater elevation is present at 2.5 to 5.3 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.

**Maintenance:** No Stormwater Management features or treatment practices are proposed.

Easements: The proposed project already includes a ditch maintenance easement. A ditch maintenance easement is required.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved to the maximum extent possible. The stormwater management system utilizes overland flow. 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; however, based on proposed project type, no adverse impacts are anticipated as the result of this project. 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. No on-site constructed storm water conveyance channels are proposed.

**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 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 not been delineated however the building pad already exists and an easement is in place. The wetland is not a DNR protected water.

**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:** $2,020.00
**Wetland Escrow:** $ N/A
There are not ditch liens on the property.

### ISSUES/CONCERNS:

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (0.04 ac * $500/ac) = $2,020.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td><strong>Soils &amp; Erosion Control:</strong> District requires all stabilization vegetation be within seven (7) days of rough grading or inactivity.</td>
<td>2. Update Erosion Control plan with the following:</td>
</tr>
<tr>
<td>All storm sewer inlets are not protected from sediment-laden water during construction.</td>
<td>a. Stabilize vegetation in 7 days of rough grading or inactivity.</td>
</tr>
<tr>
<td>Provisions have not been made to minimize transport of sediment (mud) by runoff or vehicle racking onto the paved surface or the cleaning road surfaces where sediment is transported by the end of the day.</td>
<td>b. Provide inlet protection for CB 12, the inlet located southeast of the driveway.</td>
</tr>
<tr>
<td>It is unclear if dewatering is needed during the construction of the proposed project.</td>
<td>c. Provide a note for the minimizing of sediment transport onto paved surfaces and the cleaning of sediment (mud) by runoff or vehicle tracking onto the paved surface by the end of the day.</td>
</tr>
</tbody>
</table>

### RECOMMENDATION:
Approve with 3 Stipulations

**Stipulations:**
1. Receipt of escrows.
2. Update the Erosion Control plan with the following:
a. Update construction plans to stabilize vegetation in 7 days of rough grading or inactivity.

b. Provide inlet protection for CB 12, the inlet located southeast of the driveway.

c. Provide a note for the minimizing of sediment transport onto paved surfaces and the cleaning of sediment (mud) by runoff or vehicle tracking onto the paved surface by the end of the day.

3. 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.