COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: May 13, 2019
AGENDA NUMBER: 19
FILE NUMBER: 19-056
ITEM: Arroyo Villas

RECOMMENDATION: Approve with 3 Stipulations

APPLICANT: Jon Blattman, Hedburg Homes, Inc.
4297 117th Ave. NE
Blaine, Mn 55449

PURPOSE: Residential Development
22 Lots on 5.3 Acres

LOCATION: West of Ulysses St. NE and south of 116th Ave. NE, Blaine

APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work within or adjacent to a Public ditch within the Watershed District.
3. Any work in or adjacent to wetlands, lakes or water courses
4. One or more cumulative acres of land disturbance
5. The lands and waters that have been or may be covered by the regional flood.
6. High water table, outwash and organic soils
7. High infiltration soils
8. Highly erodible soils

EXHIBITS:
1. Construction Plan set (6 sheets); by Carlson McCain, dated 3/13/19, received 3/13/19
3. Response Letter

PREVIOUS ACTION TAKEN: The application was tabled at the 04/08/2019 meeting with 6 stipulations:
1. Receipt of escrows.
2. District will update floodplain model and provide information to applicant. Compensatory storage may be required. (District has updated floodplain model for the area, no compensatory storage is required).
3. Provide an O&M Agreement that meets District requirements.
4. Provide Calculations showing the project is meeting rate control requirements.
5. Applicant must meet the volume management requirement. If the applicant cannot meet the volume management requirement due to site constraints in its entirety, they must meet it to the greatest extent practical and explain why it cannot be met.
6. 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.

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 41 (Sand Creek) according to the public drainage map. The approved elevations through this property are 885.5 ft MSL at the downstream end and 885.7 ft MSL at the upstream end. The existing conditions through this property are 886.3 ft MSL at the downstream end and 885.1 ft MSL at the upstream end and 0.8-0.6 ft variance from the approved elevations. The ditch is a 4th order stream. The ditch serves the primary role of trunk drainage system. The ditch serves approximately 0 acres of agricultural land. Land use in the area is toward commercial and residential. There are flooding concerns downstream. The ditch has been inspected. Existing elevations, slopes and condition of ditch are good condition. The ditch is not in need of repair. Alternatives to repair and additional drainage have been considered and reviewed.

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

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

- 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 tracking 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.
• Details provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

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 District’s floodplain elevation is at 892.8 feet. The project proposes to place negligible amount of fill within the floodplain. There are flooding concerns downstream.

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

Groundwater: Geotechnical information collected in January 2018 indicates long term groundwater elevation is present at 888.3 feet below the surface.

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 should be 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>
<th>Inspection &amp; Maintenance Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basins</td>
<td>2</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
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 allowed within the project area but not feasible due to high groundwater. The 1-inch filtration is achieved to the maximum extent practical. The stormwater management system utilizes filtration. Calculations have been provided that illustrate the 1-inch infiltration volume is achieved below outlet.

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. 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 the 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. The project does not contribute to the adverse impact of wetlands through inundation or volume of flow. All discharges into wetlands/stormwater basins 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 within one (1) mile of and drains to an Impaired Water. The Impaired Water is Sand Creek. Sand Creek is impaired for (Aquatic Life (Macro-invertebrates)/ Aquatic Recreation (E. coli). The major stressors are Total Suspended Solids (TSS)/ Total Phosphorus (TP)/E.coli. There is an EPA approved Total Maximum Daily Load (TMDL) or Waste Load Allocation (WLA) for this water.

There are new impervious surfaces proposed as part of this project.

**Wetlands:** Wetlands do not exist on-site according to the 1987 Federal manual, NWI, PWI and Soil Survey. CCWD issued a Notice of Decision on 1/22/18

**Wetland Replacement Plan:** A wetland replacement plan 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.

Performance Escrow: $4,450.00

Wetland Escrow: $N/A

There are ditch liens on the property.

ISSUES/CONCERNS:

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrows: $2,000 + (4.9 ac * $500/ac = $4,450.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>Maintenance: 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>2. Provide an O&amp;M Agreement that meets District requirements.</td>
</tr>
<tr>
<td>Stormwater &amp; Hydraulics: Verbal discussion with the City indicates they do not anticipate additional drainage to the area.</td>
<td>3. Written statement from the City that no future developments will drain to these basins.</td>
</tr>
</tbody>
</table>

RECOMMENDATION: Approve with 3 Stipulations

Stipulations:
1. Receipt of escrows.
2. Provide an O&M Agreement that meets District requirements.
3. Written statement from the City that no future developments will drain to these basins.