COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE:       February 10, 2020
AGENDA NUMBER:      10
FILE NUMBER:        19-175
ITEM:               Dollar General

RECOMMENDATION:     Table with 6 Conditions and 2 Stipulations

APPLICANT:          Village Bank
                    9298 Central Ave NE
                    Blaine, MN 55434

PURPOSE:            Construct a 9100 square foot building on a 2.38 acre lot

LOCATION:           16248 Central Ave NE, Ham Lake MN

APPLICABILITY:
1. Any work in or adjacent to wetlands, lakes or water courses
2. One or more cumulative acres of land disturbance
3. High water table, outwash and organic soils
4. High infiltration soils
5. Highly erodible soils
6. Endangered, Threatened or Special concern species, elements or communities

EXHIBITS:
1. Construction Plan set (6 sheets); by Overland Engineering LLC, Geotechnical Report; by PSI, dated 1/20/2020, received 01/24/2020.
2. Alta Survey (2 sheets); by Farnsworth Group, dated 8/20/19, received 10/11/19.
3. Stormwater Drainage Report; by Overland Engineering, dated 01/20/2020, received 01/24/2020
4. Phase 1 ESA; by Nova Consulting, dated 11/11/19, received 01/24/2020.
5. Geotechnical Report; by PSI, dated 9/03/19, received 01/24/2020.
6. Addendum to the Geotechnical Report; by PSI, dated 12/23/19, received 01/24/2020.
7. Natural Heritage Review; by Minnesota DNR; dated 01/21/2020, received 01/24/2020.

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 not a public ditch on the property.

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

Erosion and Sediment Control: Soils affected by the proposal are Lino 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 and do have a note to stabilize within seven (7) days of inactivity.
  - Adjacent properties and stormwater ponds are not adequately protected from sediment deposition. A double row of perimeter control at the wetland is needed.
  - 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 not pass through a sediment basin or other sediment trapping and does not need to due to project size.
  - 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 have been provided for ESC (riprap, perimeter control, concrete washout, inlet protection, etc.)

Dewatering: Shallow ground water may exist on site. The project is not expected to require dewatering.

Floodplain: There is not floodplain on the property according to the District model. There is floodplain on the property according to FEMA. The FEMA floodplain is
approximate Zone A and does not have an assigned elevation. The project does not propose to place fill within the floodplain. The total floodplain impact is 0 acre-feet. The proposed impact is not within the floodway/flood fringe. Compensatory storage is not needed. There are no flooding concerns upstream and/or downstream.

**High Water Flooding:** Information has not been provided to substantiate low floor elevations. The proposed building is constructed at 913.0, with more than 3 feet of fill above existing ground surface, so the low floor elevations meet the criteria for the City of Ham Lake; 1 ft above mottled soil or 100 yr.

**Groundwater:** Groundwater was noted in the soil borings at depths of approximately 6 to 10 feet below ground surface. The borings are not referenced to elevation datums provided in the plans.

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 not consistent with local planning and zoning. There is an approved local water plan.

**Maintenance:** The owner of the Stormwater Management features and treatment practices is Dollar General. 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>Infiltration Basin</td>
<td>1</td>
<td>Dollar General</td>
</tr>
<tr>
<td>Sump Manhole With ADS Barracuda</td>
<td>1</td>
<td>Dollar General</td>
</tr>
</tbody>
</table>

A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice. The Maintenance Plan is not consistent with District Maintenance standards for each STP.

Easements: The proposed project does not include ditch maintenance easement. A ditch maintenance easement is not required. A maintenance access to all storm water management features is provided.

**Stormwater & Hydrology:** Infiltration is allowed within the project area. The 1-inch infiltration is achieved. The stormwater management system utilizes an infiltration basin.
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 not 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 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 sump manhole, and may be 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 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 approved on 11/21/19. The wetland boundary has been checked.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted and is not required.

**Wildlife:** The proposed project may include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors. The applicant should contact the MDNR natural heritage or endangered species program.

If the project is present, the project does not propose substantial adverse alteration or significant detrimental impact on a species or removal of a plant species will occur.

**Performance Escrow:** $2,695.00

**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 + (1.339 ac * $500/ac = $2,695.00</td>
<td>1. Receipt of escrows.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Groundwater:</strong> Geotechnical Report does not provide soil borings at site datum. The infiltration basin may not have required 3-foot separation from seasonally high groundwater.</td>
<td>2. Provide ground and groundwater elevations for soil borings relative to a datum.</td>
</tr>
<tr>
<td><strong>Stormwater &amp; Hydraulics:</strong> The stormwater calculations assume an infiltration rate of 1.5 inches per hour and the soil types presented in the Geotechnical Addendum are classified as SM. The Minnesota Stormwater Manual recommends infiltration rate of 0.45 inches per hour for SM soil. Unclear how the 6’ curb inlet opening will collect surface water and route to the pre-treatment manhole.</td>
<td>3. Change calculations to include infiltration rate of 0.45 inches per hour or provide further analysis of soil infiltration rates. 4. Provide a detail for the 6’ curb inlet opening. Provide clarification on how it will collect surface water and route it to the pre-treatment manhole.</td>
</tr>
<tr>
<td><strong>Soils &amp; Erosion Control:</strong> Infiltration basins are not protected from erosion and sedimentation during construction. After initial grading the District requires that infiltration basins be completely surrounded by erosion control measures to prevent the basin from clogging.</td>
<td>5. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.</td>
</tr>
<tr>
<td><strong>Maintenance:</strong> A maintenance agreement has not been executed. The applicant has not submitted a Maintenance Plan for each Stormwater Treatment Practice.</td>
<td>6. Provide an O&amp;M Agreement that meets District requirements.</td>
</tr>
</tbody>
</table>

**RECOMMENDATION:** Table with 6 conditions and 2 Stipulations

**Conditions:**
1. Receipt of escrows.
2. Provide ground and groundwater elevations for soil borings.
3. Change calculations to include infiltration rate of 0.45 inches per hour or provide further analysis of soil infiltration rates.
4. Provide a detail for the 6’ curb inlet opening. Provide clarification on how it will collect surface water and route it to the pre-treatment manhole.
5. After initial grading completely surround the proposed infiltration basins with erosion control measures to prevent the basin from clogging.
6. Provide an O&M Agreement that meets District requirements.

**Stipulations:**
1. Submittal of as-builts for infiltration basin and pretreatment manhole.
2. Completion of post construction infiltration tests on Infiltration Basin by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.