COON CREEK WATERSHED DISTRICT
PERMIT REVIEW

MEETING DATE: March 9, 2020
AGENDA NUMBER: 11
FILE NUMBER: 19-189
ITEM: Menards Coon Rapids Stormwater Remodel

RECOMMENDATION: Approve with 2 Conditions and 2 Stipulations

APPLICANT: Tyler Edwards
Menards, Inc.
5101 Menard Drive
Eau Claire, WI 54703

PURPOSE: Reconstruction of Underground Infiltration Chambers

LOCATION: 3045 Main Street, Coon Rapids, MN
NW of the Ramp of Main Street and MN Highway 10 in Coon Rapids
APPLICABILITY:
1. Within 1 mile of an impaired waters.
2. Any work in or adjacent to wetlands, lakes or water courses
3. One or more cumulative acres of land disturbance
4. Highly erodible soils

EXHIBITS:
1. Stormwater Model Report; by SEH, dated 02/18/2020, received 02/25/2020.
2. Construction Plan Set; by SEH, dated 02/13/2020, received 02/25/2020.

PREVIOUS ACTION TAKEN: This application was tabled at the December 9, 2019, board meeting with the following 5 stipulations.
1. Receipt of escrows.
2. Confirm the city has received an application for review.
3. Confirm designed infiltration rates with double ring infiltrometer tests during construction.
4. Provide redundant sediment control such as double row of silt fence between construction area and wetlands.
5. Execute the Maintenance Plan after review and approval by the District.

FINDINGS:

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

Ditches: There is not a public ditch on the property.

Erosion and Sediment Control: Soils affected by the proposal are Nymore and Hubbard.

- 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 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.
- Stabilization adequate to prevent erosion has 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 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 not exist on site. The project does not require dewatering.
**Floodplain:** There is no floodplain on the property according to the District model and FEMA.

**Groundwater:** Geotechnical information collected in March 2007 and November 2019 indicates long term groundwater elevation is present at 18-20 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 applicant has applied to the City. The City has completed its review of the plans.

The City has no water resource issues or concerns with the project at this time.

**Maintenance:** The owner of the Stormwater Management features and treatment practices is Menards, Inc. The Stormwater Treatment Practices (STPs) consist of the following:

<table>
<thead>
<tr>
<th>Stormwater Treatment Practices</th>
<th>Number</th>
<th>Inspection &amp; Maintenance Responsibility</th>
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</thead>
<tbody>
<tr>
<td>Sumps</td>
<td>4</td>
<td>Menards, Inc.</td>
</tr>
<tr>
<td>Underground Infiltration Chamber</td>
<td>2</td>
<td>Menards, Inc.</td>
</tr>
</tbody>
</table>

Inspection and maintenance of stormwater facilities will be the responsibility of Menards, Inc. A maintenance agreement has been provided but has not been executed. The applicant has submitted a Maintenance Plan for each Stormwater Treatment Practice. The Maintenance Plan is 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 underground storage systems. Project is within the City of Coon Rapids which has adopted the MIDS performance standard. The 1.1-inch infiltration is achieved. Calculations have been provided that illustrate the 1.1-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. No on-site constructed storm water conveyance channels proposed as part of the project.

**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. 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 Coon Creek. Coon Creek is impaired for Aquatic Life and Aquatic Recreation. The major stressors are Total Suspended Solids (TSS), Total Phosphorus (TP) and E.coli. There is an EPA approved Total Maximum Daily Load (TMDL) and 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. Wetlands have not been delineated.

**Wetland Replacement Plan:** A wetland replacement plan has not been submitted. and 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:** $3,350.00
**Wetland Escrow:** $ N/A

There are not ditch liens on the property.

**ISSUES/CONCERNS:**

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<tr>
<td>Stormwater &amp; Hydraulics: The HydroCAD report uses 8.33 inches per hour infiltration rates, which is the maximum allowable infiltration rate by MPCA stormwater manual. The geotechnical report suggests a hydraulic conductivity of 36.0 to 46.4 inches per hour. The applicant has provided an</td>
<td>1. Provide details for approach to reducing infiltration rate, such as amendment materials, mixing methods and depths, compaction and other relevant information.</td>
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</table>
 counties must approach to reduce the infiltration rate if it exceeds 8.33 inches/hour.

| **Maintenance:** The applicant has submitted a draft Maintenance Plan for each Stormwater Treatment Practice. | 2. Execute the Maintenance Plan after review and approval by the District. |

**RECOMMENDATION:** Approve with 2 Conditions and 2 Stipulations

**Conditions:**
1. Provide details for approach to reducing infiltration rate, such as amendment materials, mixing methods and depths, compaction and other relevant information.
2. Execute the Maintenance Plan after review and approval by the District.

**Stipulations:**
1. Submittal of as-builts for stormwater features; including but not limited to utility inverts, sump depth, OCS, and UGS volumes.
2. Confirm designed infiltration rates in the north and south underground infiltration systems with double ring infiltrometer tests to ASTM standards during construction that the proposed systems have an infiltration rate of 8.33 in/hr or less. The Coon Creek Watershed District shall be notified prior to the test to witness the results. Confirm infiltration rates with a post construction infiltration test. The Coon Creek Watershed District shall be notified prior to the test to witness the results.