Streams/Creeks Specific Conditions of the DNR Permit

Waterway Conditions- General:

- No straightened or change the course of any navigable waterway.
- Citizens shall have safe portage with signage around restricted areas of the Project area within navigable waterways.
- Large woody debris resulting from clearing activities shall not be deposited in waterways.

Horizontal Directional Drilling (HDD) Conditions:

- No grading or trenching shall occur in waterways or wetlands along the bore drill path, unless required to install a temporary bridge; containing an inadvertent release (IR) of drilling mud from reaching wetlands, waterways, or to immediately remove drilling mud.
- No drilling mud shall be discharged into wetlands/waterways/ sensitive areas
- If an IR of drilling mud to waterways/ wetlands occurs during the Project's HDD or direct bore construction all drilling operations shall immediately cease, including pump shut down, containment of the discharge and disposal of the discharged drilling mud at an authorized location.
- The clearing width of 30-feet max of vegetation is allowed along the permanent corridor in wetlands and waterways as part of the boring drill path, excluding the Tyler Forks waterway crossing, which shall be limited to 50-feet of vegetation
- Vacuum trucks must be available on site at all times during boring operations, with at least one vacuum truck available per drill path.

Dewatering Conditions:

- At no time shall the dewatering discharge cause a violation of Bad River Band of Lake Superior Chippewa water quality standards at the point that the discharge enters the Reservation
- Where dewatering discharges to wetlands or waterways, if the discharge is cloudy dewatering must immediately stop.
- Dewatering structures shall be placed in uplands and not in wetlands and shall utilize secondary containment measure. They shall not be located on or discharge over bare or disturbed soil but place in graveled or vegetated areas.

Dredging:

- Unless the waterway is completely dry for the entire duration working below the Ordinary High Water Mark (OHWM), including for rain events during construction, trenching in the waterway shall be completed using a work zone isolation system or flow bypass system, to isolate the in-water work zone from the waterway.
- If standing or flowing water becomes present in the waterway materials must be on site to isolate the in-water work zone.
- The amount of dredging and timeframe shall be limited to prevent erosion and minimize the amount of sediment.
- The upper foot of streambed material during excavation must be separated to properly restore the streambed. backfill of the trench shall consist of the originally removed bed material with backfilling no later than 48 hours after completion of pipeline installation. Any remaining native fill shall be removed from the waterway and disposed of in an upland area or at an authorized facility.

Specific Erosion Control Measures:

- Erosion and sediment control practices shall be used to reduce impacts to adjacent portions of wetlands and waterways.
- If more than ½ inch of rain is forecasted within 24 hours and unvegetated wetland spoils are located on slopes exceeding 5%, erosion control is necessary to control sediment discharge.
- Use of natural fiber only, without any synthetic mesh or netting that contains strands that are able to move independently.
- The removal of vegetative cover and exposure of bare ground shall be restricted to the minimum necessary for construction.
- In-water work shall not begin within 24 hours of forecasted rain events exceeding ½ inch and restoration shall be completed prior to any such event.
- Removal of trees, shrubs, and bank vegetation shall be minimized. If woody vegetation is cleared outside of the trench line, the stumps and root structures shall remain intact

*Beaver Dams in Waterway*s:

- If needed to facilitate safe construction, beaver dams may be removed slowly by draining water in a slow manner to minimize silt flushing and channel erosion downstream. Workers may not use explosives, dredging , drive on the bed, or place structures or fill below the High Water Mark.

Driving on the Bed:

- Except for the existing ford crossing at Tyler Forks near access road AR-085 and during dry stream bed conditions within the boundaries of the trenchline, workers shall not drive any vehicles on the bed of any navigable waterway. Signs should be installed on both banks

Temporary Clear Span Bridges (TCSB)/ Work Zone Isolation Systems and Flow Bypass Systems):

- This permit does not authorize the placement of any permanent bridges.
- Installation and removal of the TCSB shall be conducted to minimize the removal of trees, other shoreline vegetation and prevent sediment and debris from entering the waterway.
- TCSB shall be anchored and completely span the waterway without supports. No bridge approach fill shall be placed below the OHWM of any waterway.
- Equipment/vehicles shall not enter or operate on the bed of the waterway.
- Pump intakes and discharges shall be placed to prevent the disturbance/removal of bed material and prevent impacts to aquatic organisms, wildlife, their habitat and long-term impacts.
- Sheet pilings shall not be installed to a depth that would intersect known artesian aquifers. If new ground water flow is observed, it shall be reported immediately to the Independent Monitor and reported within 24 hours to the Department. Workers will notify IEMs at least 24 hours in advance of sheet pile driving between Mile Post (MP) 10 to MP 18 and MP 37 to MP 40.

Permanent Bank Stabilization Structures:

- Installation of permanent bank stabilization structures shall be completed immediately after pipe installation to minimize waterway disruption. https://watchline5.com/report-violations/ https://watchline5.com/report-violations/ https://watchline5.com/report-violations/
- Species native to the Watershed shall be used as part of stabilization.