MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**BENTONITE PLUGS**

BAY:BWS 1 of 1 APPR:DMG:NJM:03-12-21

**a. Description.** This work consists of placing bentonite plugs at the end of excavated sewer trenches in areas of known contamination as shown on the plans.

**b. Materials.** Provide bentonite manufactured from high-swelling sodium montmorillonite clay. Use bentonite chips in the 3/8-inch size range to construct the bentonite plugs in accordance with this special provision. Provide a general certification that the material supplied meets the project specifications. Ensure materials are approved by the Engineer prior to use.

**c. Construction.** Place the bentonite in the sewer or water main trench in accordance with the manufacturer’s specifications for the intended application.

Place bentonite plugs independent of other backfilling operations by a separate installation. Take appropriate precautions to prevent the migration of contamination to uncontaminated areas.

Fill the end points of the trenches in the areas of known contamination with bentonite plugs. Bentonite plugs must begin at the bottom of the excavation and extend upward to within one foot of the ground surface or as otherwise directed by the Engineer. Ensure the plugs are at least three feet in the longitudinal direction of the trench. The plugs may vary in vertical and transverse directions as required to completely fill the trench as shown on the plans, standard plans or as directed by the Engineer. Hydration of the bentonite will be required in accordance with the manufacturer’s recommendations for this application.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

**Pay Item Pay Unit**

Bentonite Plugs Each