MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**POLYVINYL CHLORIDE LINER, SPECIAL**

BRG:CFO 1 of 1 APPR:RWS:DMG:08-19-21

**a. Description.** This work consists of furnishing and installing a PVC liner of the thickness shown on the plans, including geotextile liner if shown on the plans, to function as a water-proofing membrane. Install the PVC liner in accordance with the manufacturer’s published guidelines, the plans, and this special provision.

**b. Materials.** The resin used to manufacture the PVC liner must be 100 percent first quality virgin PVC. Ensure the PVC liner is resistant to UV degradation, construction damage and to all forms of biological and chemical degradation normally encountered in highway construction applications. Certify the following physical properties as minimum values in accordance with the specified test method:

|  |  |  |
| --- | --- | --- |
| Property | Test Method | Requirement |
| Thickness Tolerance | *ASTM D1593* | ±5 % |
| 100 % Modulus | *ASTM D882* | 1000 psi |
| Elongation @ Break | *ASTM D882* | 300 % |
| Dimensional Stability, % change (maximum) | *ASTM D1204* (212 °F, 15 minutes) | 5 % |

Furnish a manufacturer’s certification with each PVC liner material shipment and include a certified report of quality control test results obtained from the lot(s) of material in the shipment. Label each unit of material to provide product identification sufficient for field identification and correlation to certified test results. Ensure the specified physical properties are certified as *Minimum Average Roll Values* (MARV).

**c.** **Construction.** Place the PVC liner, free of wrinkles, on prepared areas at the locations shown on the plans. Do not operate construction equipment or vehicles of any kind directly on the PVC liner. The Contractor may place the PVC liner as a single piece or weld multiple pieces together to ensure watertight seams. Shingle-lapping the PVC liner is not acceptable.

**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**

Liner, PVC, \_\_ mil, Spec Square Yard

**Liner, PVC, \_\_ mil, Spec** will be measured in place by area in square yards, without credit for laps or wasted material. **Liner, PVC, \_\_ mil, Spec** includes welding PVC liner seams and geotextile liner if shown on the plans.