

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
PIPE ALTERNATE FOR CULVERT CLASSES

STM:MLO

1 of 1

APPR:DMG:BDZ:04-25-24
FHWA:APPR:05-01-24

a. Description. This work consists of the use of polypropylene pipe (PPP) at locations shown on the plans. Complete this work in accordance with subsection 401.03 of the Standard Specifications for Construction, except as modified herein. PPP is an acceptable alternative to corrugated polyethylene (CPE) pipe for Culvert Class A, B and F applications.

b. Materials. Furnish PPP in accordance with *AASHTO M330, Type S*. PPP with diameters up to 24 inches will be tested for acceptance at a rate of one sample per diameter of pipe size supplied on the project. PPP with diameters greater than 24 inches up to 30 inches will be tested for acceptance at the rate of one sample for every 1000 feet of pipe.

For PPP diameters up to 24 inches, a sample consists of one 10-foot-long piece, one 6-foot-long piece, and one coupling. PPP with diameters greater than 24 inches, a sample must come from a single 20-foot-long section of pipe and must include three pieces with a length equal to or greater than the diameter, one piece at least 60 inches long, and the necessary pieces to assemble a joint with at least 6 inches of pipe protruding from each end of the joint. Mark all pieces of each sample so that they can be identified as coming from the same section of pipe.

PPE with diameters less than 30 inches may require additional testing if the initial acceptance testing did not meet specifications, or at the request of the Engineer. The Engineer may require the Contractor to furnish additional samples at no cost to the contract.

PPP with diameters greater than 30 inches up to 36 inches will be accepted by Test Data Certification in accordance with subsection 2.01.03 of the *MQAP Manual*.

Use a single manufacturer's complete system of pipe and joint, including the gasket. Below is a product that the Department is aware of that meets the required criteria:

Advanced Drainage Systems HP Storm Polypropylene Pipe

PPP material is allowed for culvert use in Class A and F applications for pipe 36 inches in diameter and less, and in Class B applications for pipe 12 to 24 inches in diameter.

c. Construction. Construct PPP in accordance with the requirements for CPE pipe in subsection 401.03 of the Standard Specifications for Construction.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the pay items defined in subsection 401.04 of the Standard Specifications for Construction.