

**KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 2015 EDITION**

Add a new SECTION to DIVISION 1911:

SECTION 1911

STEEL REINFORCED POLYETHYLENE PIPE

1911.1 DESCRIPTION

This specification covers steel reinforced polyethylene (SRPE) pipe with external spirally formed ribs for use in storm sewers and culverts.

1911.2 REQUIREMENTS

a. Steel Reinforced Polyethylene Pipe. Provide SRPE pipe for storm sewers and culverts that comply with AASHTO M 335 or ASTM F 2562, Class 1. Do not use pipe having a reduced pipe stiffness and thus intended for installations utilizing improved installation methods. Rotational molded joints, fittings and couplings will not be permitted.

b. Joints. To obtain soil tight joints, manufacture the pipe joints to comply with the following:

- Maximum opening is 1 inch.
- For non-cohesive backfills, provide an opening no greater than 3-1/3 times D_{85} for medium to fine sand and 5 times D_{85} and for uniform sand. D_{85} is the sieve size that 85% of the backfill material is smaller than.
- For openings over 1/8-inch, provide a channel length at least 4 times the size of the opening. Channel length is the length of the path that the soil must infiltrate.

c. End Sections. Provide only corrugated metal or precast concrete end sections that comply with the sizes and dimensions in the Contract Documents, and applicable **SECTION 1902** or **1904**. Connect the dissimilar materials using a soil-tight connection approved by the Engineer.

d. Deflection. Maximum deflection (reduction of the barrel base inside diameter) is 5%. Measurement will be made using a mandrel or other method as approved by the Engineer not less than 30 days following the installation. Deflections in excess of 5% may require the pipe be removed and reinstalled or replaced if permanently deformed or damaged in any way.

1911.3 TEST METHODS

Test materials in accordance with the ASTM standard cited in **subsection 1911.2a**.

1911.4 PREQUALIFICATION

None Required.

1911.5 BASIS OF ACCEPTANCE

Receipt and approval of a Type A certification as specified in **DIVISION 2600**. Test results shall clearly show actual tested values and the specification requirement.

Visual inspection for condition, dimensional requirements and product markings. Product markings must include the ASTM designation as well as the pipe stiffness class.

Successful deflection testing with a mandrel as outlined above and in **subsection 817.3e**.