

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

Delete SECTION 1909 and replace with the following:

SECTION 1909

POLYVINYL CHLORIDE (PVC) PIPE

1909.1 DESCRIPTION

This specification covers polyvinyl chloride pipe (PVC) for storm sewers and culverts.

1909.2 REQUIREMENTS

a. Polyvinyl Chloride Pipe. Provide polyvinyl chloride (PVC) for storm sewers and culverts that comply with one of the following:

(1) AASHTO M 304 (Profile Wall) with the following additions or exceptions:

- Seamless construction will be required; spiral wound pipe will not be allowed.
- ASTM D 1784, use only Cell Classification of 12454C.

(2) AASHTO M 278 (Smooth wall), or ASTM F 679 (Large Diameter Sewer Pipe).

- ASTM D 1784, use only Cell Classification of 12454.

- **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.

1909.3 TEST METHODS

Test materials in accordance with the AASHTO and ASTM standards cited in subsection 1909.2a.

1909.4 PREQUALIFICATION

Follow the instructions on the AASHTO National Transportation Product Evaluation Program's (NTPEP) website to participate in the audit program for polyvinyl chloride (PVC) pipe plants.

Forward an official copy of the latest NTPEP certificate of compliance, final audit report, quality control plan, and split sample results report to the Bureau Chief of Construction and Materials for evaluation.

Producing plants that have successfully met the requirements of the NTPEP audit program and are listed on the NTPEP website as "compliant" will be prequalified.

In order to maintain prequalified status, send a copy of the annual NTPEP certificate of compliance, as well as the related audit report and split sample test results as soon as they are received or published. Plants that fail to achieve a yearly NTPEP Certificate of Compliance will be removed from prequalified status.

Plants that fail to provide the annual documents described above may be removed from prequalified status.

1909.5 BASIS OF ACCEPTANCE

Prequalification as specified in **subsection 1909.4**.

Receipt and approval of a Type C certification as specified in **DIVISION 2600**.

Visual inspection for condition and dimensional requirements.

Successful testing with a mandrel as outlined in **subsection 817.3b**.

7-28-16 C&M (CFN)

Dec-16 Letting