

SECTION 120

DRAINAGE PIPE MATERIALS

120.1 DESCRIPTION

A. General: Drainage and culvert piping material shall conform to the following specifications. Pipe materials and minimum sizes allowed for Public Works Construction are determined by the Engineer, Infrastructure Design Criteria Manual, and City policy.

B. Related Work:

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| Section 11 | Utility Excavation and Backfill |
| Section 54 | Drainage Pipe Installation |
| Section 58 | Concrete Box Culvert |
| Section 62 | Drop Inlets |
| Section 63 | Storm Sewer Junction Boxes and Manholes |
| Section 203 | Submittals |

120.2 MATERIALS

A. Reinforced Concrete Pipe: Shall conform to the requirements of AASHTO M170, M206 and M207, and Section 50 Precast Concrete. The pipe and fittings shall be manufactured at a pre-cast facility that is certified by the American Concrete Pipe Association and is approved for supplying products to the South Dakota Department of Transportation. Pipe joints shall conform to ASTM C443.

Flexible watertight gaskets shall conform to ASTM C1619 or ASTM C1628.

B. RCP Tie Rods/Pipe Ties/Tie Bolts: Shall conform with ASTM F1554 Grade 36 or ASTM A36, with heavy hex nuts conforming to ASTM A563, and washer conforming to ASTM F436. Adjustable eye bolts shall be galvanized in accordance with ASTM A153.

C. Polypropylene (PP) Pipe: Shall be Type S dual wall pipe with corrugated exterior and smooth interior. Pipe, couplings, and fittings shall conform to the requirements of AASHTO M 330 and ASTM F2881 / F2881M.

D. PVC Pipe: Shall conform to the requirements of Section 9.

E. Bituminous Coated Corrugated Metal Pipe: Bituminous coated corrugated metal pipe shall conform to AASHTO M 190, except the pipe shall conform to AASHTO M 36 or AASHTO M 196 before coating.

F. High Density Polyethylene (HDPE) Pipe: High density polyethylene pipe shall be

Type S dual wall pipe with corrugated exterior and smooth interior. Pipe, couplings, and fittings shall conform to the requirements of AASHTO M 294 and ASTM F2306 / F2306M.

120.3 METHOD OF MEASUREMENT

Measurement shall be as called for in Sections 54.

120.4 BASIS OF PAYMENT

Payment shall be as called for in Sections 54.

END OF SECTION