

SECTION 721 -- DRIVEWAY CULVERT PIPE

721.01 -- Description

This work shall consist of furnishing and installing new pipe culverts, typically in round, pipe-arch, or elliptical shapes, of the various types at the locations shown in the plans or designated by the Engineer.

721.02 -- Material Requirements

The pipe furnished shall conform to the requirements in Table 721.01.

Table 721.01

Material Requirements	
Applicable Materials	Section
Corrugated Metal Pipe	1035
Reinforced Concrete Culvert Pipe	1037
Plastic Pipe	1038

721.03 -- Construction Methods

1. The Contractor shall not order or deliver the pipe until a list of sizes and lengths are furnished by the Engineer.

2. The corrugated metal pipe and reinforced concrete pipe for driveways shall be installed by the Contractor in accordance with the applicable portions of Sections 718, 719, and 720. Plastic pipe for driveways shall be installed by the Contractor in accordance with the plans, ASTM D 2321, and the manufacturer's recommendations.

3. a. When plastic pipe is used or when corrugated metal pipe 48 inch (1200 mm) and larger is used, the Contractor shall periodically check for pipe deflection during pipe installation and again not less than 30 days following completion of the roadway embankment. The internal diameter of plastic pipe shall not be reduced by more than 5 percent of its design diameter. The internal diameter of corrugated metal pipe shall not be reduced by more than 7.5 percent of its design diameter. If the installation does not meet these requirements, the pipe shall be removed and replaced at no additional cost to the Department.

b. Optional devices for deflection testing include electronic deflectometers, calibrated television or video cameras, or properly sized "go, no-go" mandrel. Deflection measurements can be made directly with extension rulers or tape measures at 10 feet (3 m) increments in pipes that allow safe entry. To ensure accurate measurements, the lines should be cleaned before testing.

4. Granular bedding and backfill will not be required for driveway culvert pipe unless called for in the plans.

5. When polymer pre-coated pipe is used, in order to protect the coated pipe, the Contractor shall use padded or nonmetallic slings and padded straps when handling the pipe. This includes unloading, moving and installation.

721.04 -- Method of Measurement

All driveway culvert pipe will be measured as described in Subsection 718.04.

721.05 -- Basis of Payment

1. Pay Item	Pay Unit
____inch (mm) Driveway Culvert Pipe, Type____	Linear Foot (LF) [meter (m)]
____inch (mm) Round Equivalent Driveway Culvert Pipe, Type____	Linear Foot (LF) [meter (m)]

2. Excavation and backfilling for driveway culvert pipe will not be measured for payment, but shall be considered subsidiary to the appropriate pipe bid item.

3. Payment is full compensation for all work prescribed in this Section.