

SECTION 521 CORRUGATED STEEL PIPE CULVERTS

521.1 Description

- (1) This section describes furnishing and installing corrugated steel culvert including pipe, pipe arch, and pipe cattle pass as well as associated steel apron endwalls and other components.

521.2 Materials

- (1) Furnish corrugated steel culvert pipe, steel apron endwalls, and other components conforming to AASHTO M 36 and the plan.

521.3 Construction

- (1) Construct as specified for pipe culverts in 520.3. Repair damaged coating on cuts according to AASHTO M 36.

521.4 Measurement

- (1) The department will measure the Culvert Pipe Corrugated Steel bid items, the Pipe Arch Corrugated Steel bid items, and Pipe Cattle Pass Corrugated Steel acceptably completed as specified for pipe culverts in 520.4.
- (2) The department will measure the Apron Endwalls bid items acceptably completed under this section as specified for apron endwalls in 520.4.

521.5 Payment

- (1) The department will pay for measured quantities at the contract unit price under the following bid items:

| <u>ITEM NUMBER</u> | <u>DESCRIPTION</u> | <u>UNIT</u> |
|--------------------|--|-------------|
| 521.0100 - 0299 | Culvert Pipe Corrugated Steel (size) | LF |
| 521.0300 - 0499 | Apron Endwalls for Culvert Pipe Sloped Cross Drains Steel (size) | EACH |
| 521.0500 - 0699 | Apron Endwalls for Pipe Arch Sloped Cross Drains Steel (size) | EACH |
| 521.0700 - 0899 | Pipe Arch Corrugated Steel (size) | LF |
| 521.1000 - 1199 | Apron Endwalls for Culvert Pipe Steel (size) | EACH |
| 521.1200 - 1399 | Apron Endwalls for Pipe Arch Steel (size) | EACH |
| 521.1500 - 1699 | Apron Endwalls for Culvert Pipe Sloped Section Steel (size) | EACH |
| 521.1700 - 1899 | Apron Endwalls for Pipe Arch Sloped Section Steel (size) | EACH |
| 521.1900 | Pipe Cattle Pass Corrugated Steel | LF |

- (2) Payment for the Culvert Pipe Corrugated Steel bid items, the Pipe Arch Corrugated Steel bid items, or Pipe Cattle Pass Corrugated Steel is full compensation for providing, hauling, and placing the pipe or pipe arch, including bands and concrete walkway for pipe cattle pass; for all excavating, including foundation, or bed, and any associated dewatering; for providing and placing granular backfill or graded aggregate for granular foundation or cushion; for backfilling unless granular backfill is specified; for maintaining temporary drainage; and for replacing damaged installations. The department will pay separately for cast-in-place concrete and alternate endwall installations under the Concrete Masonry Endwalls bid item as specified in 504.5 and other associated bid items.
- (3) Payment for the Apron Endwalls bid items is full compensation for providing, transporting, and installing the apron endwalls, including bands or connectors.
- (4) The department will pay for backfilling with granular backfill as specified in 520.5.