ITEM 472

INLETS

472.1 Description. This Item shall govern for furnishing and installing inlets of the type designated on the plans including but not limited to all frames, plates, grates and covers.

472.2 Materials. Reinforcing steel shall conform to the Item 440 "Reinforcing Steel". Concrete shall conform to the Item 421 "Structural Concrete". Precast concrete inlets shall be manufactured in accordance with the Item 420 "Concrete Structures".


Cast iron for frames, plates, covers, l-beams and grates shall be in accordance with ASTM A48 “Standard Specification for Gray Iron Castings”, Class 30 and shall be free from sand, blow holes or other defects. Frames, plates, grates and covers shall have machined bearing surfaces and conform to the Standard Civil Drawings.

472.3 Construction. All sections of the inlets will be constructed of reinforced concrete.

Prior to setting and/or casting of the inlet, the Contractor shall provide a base/bedding of 6 inch thick cement stabilized sand.

After construction/installation of the inlet, backfill with a minimum thickness of 12 inches of cement stabilized sand that completely circumvents the outside wall of the inlet, up to the elevation of the pavement. Then complete the backfill of the excavated hole, with material that's in accordance with Item 430 “Construction of Underground Utilities”.

Inlets that are constructed/installed adjacent to and flush to the elevation of concrete pavement shall be constructed with a minimum 3/4 inch expansion joint material, that is in accordance with Item 360 “Concrete Pavement”.

Use non-shrink grout (applied per manufacturers recommendation) to attain a water tight seal at the wall opening of the inlet with the pipe.

For box culvert and arch pipe (all non-circular applications) connections, use non-shrink grout to ensure a water tight seal.
Neatly cut off inlet leads at inside face of inlet wall and point up with mortar. Shape floor with mortar as shown on the applicable Standard Civil Drawings for inlets.

**472.4 Measurement.** Measure depth of inlets as the vertical distance from the flow line of inlet lead to the top of curb or top of grate.

For inlets constructed with 24 inch leads, the standard depth is 6 feet deep.

Any portion of the inlet exceeding the above depth is to be measured per vertical foot of depth.

**472.5 Payment.**

A. **Payment for Standard Type Inlets.**
   Payment for inlets with a standard depth shall be made at the contract unit price for each individual standard type inlet (includes non-shrink grout, cement stabilized sand backfill, & expansion joint material).

B. **Payment for Inlets with an Additional Depth Greater Than 6 Feet.**
   When the depth of the inlet specified is greater than the standard depth by more than 6 feet, payment shall be at the contract unit price for each individual inlet (includes non-shrink grout, cement stabilized sand backfill, & expansion joint material) as follows:

   - “Type B Inlet with an Additional Depth Greater than 6 Feet”
   - “Type B-B Inlet with an Additional Depth Greater than 6 Feet”
   - “Type C Inlet with an Additional Depth Greater than 6 Feet”

There are line code(s), description(s), and unit(s) for this Item.

**NOTE:** This Item requires Standard Civil Drawings that shall be incorporated into the contract documents.

**NOTE:** This Item requires other Standard Specifications.

Item 360 "Concrete Pavement"
Item 420 "Concrete Structures"
Item 421 "Structural Concrete"
Item 430 "Construction of Underground Utilities"
Item 440 "Reinforcing Steel"

END OF ITEM 472