

Special Specification 4175

Recessed Inlets



1. DESCRIPTION

Construct recessed inlets including furnishing and installing frames, grates, rings, and covers.

2. MATERIALS

Furnish materials in accordance with the details included in the plans under City of Haslet Storm Drain Details.

Cast-in-place inlets and appurtenances are acceptable unless otherwise shown. Alternate designs for cast-in-place items must be acceptable to the Engineer and must conform to functional dimensions and design loading. Alternate designs must be designed and sealed by a licensed professional engineer.

- 2.1. **Concrete.** Furnish concrete per DMS-7305 for formed and machine-made precast inlets. Furnish Class C concrete for cast-in-place inlets unless otherwise shown on the plans.
- 2.2. **Mortar.** Furnish mortar conforming to [DMS-4675](#), "Cementitious Grouts and Mortars for Miscellaneous Applications."
- 2.3. **Timber.** Provide sound timber that is a minimum of 3 in. nominal thickness and reasonably free of knots and warps for temporary covers when used with Stage I construction (see Article XXX.3., "Construction.")
- 2.4. **Manhole Covers.** Shall be per City of Haslet Storm Drain Inlets and shall reference City of Haslet.
- 2.5. **Other Materials.** Use commercial-type hardware as approved.

3. CONSTRUCTION

- 3.1. **Precast Inlets.** Construct formed and machine-made precast inlets in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures" and the Contract Plans, except as otherwise noted in this Item.

Multi-project fabrication plants as defined in Item 424 "Precast Concrete Structural Members (Fabrication,)" that produce inlets will be approved by the Materials and Tests Division in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures." The Department's MPL has a list of approved multi-project fabrication plants.

- 3.1.1. **Marking.** Clearly mark each precast inlet unit with the following information:
- name or trademark of fabricator and plant location;
 - product designation;
 - ASTM designation (if applicable:);
 - date of manufacture;
 - designation "TX" for precast units fabricated per DMS-7305;
 - designated fabricator's approval stamp for each approved unit; and
 - designation "SR" for product meeting sulfate-resistant concrete plan requirements (when applicable.)
- 3.1.2. **Storage and Shipment.** Store precast units on a level surface. Do not ship units until design strength requirements have been met.

- 3.2. **Excavation, Shaping, Bedding, and Backfill.** Excavate, shape, bed, and backfill in accordance with Item 400, "Excavation and Backfill for Structures." Immediate backfilling is permitted for all inlet structures where joints consist of rubber boots, rubber gaskets or bulk, or preformed joint sealant. Take precautions in placing and compacting the backfill to avoid any movement of inlets. Remove and replace inlets damaged by the Contractor at no expense to the Department.
- 3.3. **Inlets for Precast Concrete Pipe Storm Drains.** Construct inlets for precast concrete pipe storm drains before completion of storm drain lines into inlet. Neatly cut all storm drains at the inside face of the walls of inlet.
- 3.4. **Inlets for Box Storm Drains.** Place bases or risers of inlets for box storm drains before or in conjunction with placement of the storm drain. Backfill the inlet and storm drain as a whole.
- 3.5. **Inverts.** Shape and route floor inverts passing out or through inlet as shown on the plans. Shape by adding and shaping mortar or concrete after the base is placed or by placing the required additional material with the base.
- 3.6. **Finishing Complete Inlets.** Complete inlets in accordance with the plans. Backfill to original ground elevation in accordance with Item 400, "Excavation and Backfill for Structures."
- 3.7. **Inlet Units.** Install cast iron or steel inlet units in conjunction with the construction of concrete curb and gutter. Set the inlet units securely in position before placing concrete for curb and gutter. Form openings for the inlets and recesses in curb and gutter as shown on the plans. Place and thoroughly consolidate concrete for curb and gutter adjacent to inlets and around the inlet castings and formed openings and recesses without displacing the inlet units. Inlet covers shall be per City of Haslet's requirements.

4. MEASUREMENT

All inlets satisfactorily completed in accordance with the plans and specifications will be measured by each inlet, complete, or by each inlet completed.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for as follows.

- 5.1. **Complete Inlets.** Payment for inlets will be made at the unit price bid for "Inlet (Complete,)" of the type specified.