ITEM NO. 858
CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS

858.1 DESCRIPTION: This item shall govern the placement of concrete encasements, cradles, saddles, collars on either existing or proposed water/sewer mains, when specified in the contract documents, or as directed by the Engineer or Inspector.

858.2 MATERIALS: All concrete shall conform to the provisions of Item No. 300, "Concrete (Class B)," or as noted otherwise in the contract documents.

858.3 CONSTRUCTION:

1. Concrete Encasement: When concrete encasement is shown in the contract documents, or when directed by the Engineer or Inspector, the trench shall be excavated and fine graded to a depth conforming to details and sections shown therein, or as per Standard Drawings DD-858-01 or DD-858-02. The main shall be supported by precast concrete blocks of the same strength as the concrete for encasement and securely tied down to prevent floatation. Encasement shall then be placed to a depth and width conforming to the details and sections shown in the contract documents or per the referenced standard drawings.

2. Concrete Cradles: When concrete cradles are shown in the contract documents or when called for by the Engineer or Inspector, the trench shall be prepared and the main supported in the same manner as described in Paragraph 858.3.1, of this specification and shall be constructed in accordance with details and sections shown in the contract documents. Straps/Tie Downs shall be a minimum of No. 4 diameter rebar.

3. Concrete Saddles: When shown in the contract documents or when directed by the Engineer or Inspector, the main to receive concrete saddles shall be backfilled in accordance with Item 804, "Excavation, Trenching and Backfill" to the spring line and concrete placed for a depth and width conforming with details and sections shown in the contract documents.

4. Concrete Collars: When shown in the contract documents or when directed by the Engineer or Inspector, concrete collars shall be constructed in accordance with details and sections shown in the contract documents.

858.4 MEASUREMENT: Concrete Encasement, Cradles, Saddles, and Collars will be measured by the cubic yard of accepted work, complete in place. Reinforcing, if required by the Engineer or Inspector, shall not be measured for payment.
PAYMENT: Concrete Encasement, Cradles, Saddles and Collars will be paid for at the unit price bid per cubic yard, which price shall be full compensation for furnishing and placing all materials, manipulation, labor, tools, equipment and incidentals necessary to complete the work. Payment for concrete encasement shall consist of 6 inches of concrete around the pipe where required (as per Standard Drawings DD-858-01 or DD-858-02), minus manholes, structures, etc.

- End of Specification -
Notes:
1) All concrete encasement shall be poured at a plane 6" above the pipe between excavated trench walls.
2) All pipe with less than 3" of cover to subgrade shall be concrete-encased.
3) All Force mains shall be provided with thrust blocks, where changes in direction occur, at Tees, Bends, Crosses, changes in size, stops, or as directed by SAWS.
After centering pipe ends, wrap joints with 3" wide polyvinyl tape or rubber adapter, Can-Tex.1-70A or equal.

Pipe sections to be blocked and supported similar to the encasement detail shown below (subject to approval).

Note:
All concrete encasement shall be poured at a plane 6" above the pipe between excavated trench walls.

CONCRETE JOINTING COLLAR

TYPICAL CONCRETE SADDLE

CONCRETE COVER FOR FLEXIBLE PIPE

To be used wherever trench width is greater than two feet (2') plus O.D.

Note: All details apply to both water or sewer pipe.