# SAN ANTONIO RIVER AUTHORITY UTILITIES DEPARTMENT

# SECTION 33-05-63 CONCRETE ENCASEMENT, CRADLES, SADDLES AND COLLARS

#### PART 1 GENERAL

## 1.1 DESCRIPTION:

#### A. RELATED WORK SPECIFIED ELSEWHERE:

Section 01-33-00 – Submittals Section 33-05-05 - Sewer Excavation, Trenching and Backfilling SAWS ITEM NO. 300 Concrete (Natural Aggregate) SAWS ITEM NO. 301 Reinforcing Steel SAWS ITEM NO. 307 Concrete Structures

#### B. SCOPE:

This item shall govern for placing concrete encasements, cradles, saddles and collars, when called for by the plans, or as directed by the OWNER.

#### **PART 2 PRODUCTS**

## 2.1 CONCRETE:

A. All concrete shall conform to the provisions of *SAWS ITEM NO. 300 Concrete (Class B)* or shall be of the class as noted on the plans. Backfill on top of concrete shall not begin until concrete has achieved eighty percent (80%) of the minimum design strength.

# **PART 3 EXECUTION**

## 3.1 CONCRETE ENCASEMENT

- A. When concrete encasement is shown on the plans or when directed by the OWNER, the trench shall be excavated and fine graded to depth conforming to details and sections shown on the plans.
- B. The pipe shall be supported by precast concrete blocks of the same strength as the concrete for encasement and securely tied down to prevent floatation.
- C. Encasement shall then be placed with a minimum concrete thickness of six inches (6") in any direction from the outside diameter of the pipe.

## 3.2 CONCRETE CRADDLES

- A. When concrete cradles are shown on the plans or when called for by the OWNER, the trench shall be prepared, and the pipe supported in the same manner as described in this specification and shall be constructed in accordance with details and sections shown on the plans.
- B. Straps/Tie Downs shall be of No. 4 rebar diameter minimum or better as determined by the OWNER.

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## 3.3 CONCRETE SADDLES

When shown on the plans or when directed by the OWNER, pipe to receive concrete saddle shall be backfilled in accordance with *Section 330505 - Sewer Excavation, Trenching and Backfilling* to the spring line and concrete placed for a minimum depth and width clearance of six inches (6") around the pipe.

## 3.4 CONCRETE COLLARS:

When shown on the plans or when directed by the OWNER, concrete collars shall be constructed with a minimum concrete thickness of six inches (6") in any direction from the outside diameter of the pipe and with a minimum length of two feet (2'), unless otherwise specified in the construction drawings.

# PART 4 MEASUREMENT AND PAYMENT

Except when said items are subsidiary to other pay items, this pay item will be measured by the unit price bid per cubic yard of accepted work, complete in place. Reinforcing, if required, shall not be measured for payment.

No separate payment will be made for any items of work, materials, parts, equipment, supplies, or related items required to perform and complete the requirements of this section for construction of cradles, saddles, and collars. The costs for all such items required shall be considered subsidiary to other items of this contract and shall not be paid for separately.

END OF SECTION

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