SECTION 33 12 13

WATER SERVICES

(Sentences and/or paragraphs that are double underlined indicate revisions that were made from the 2009 specification.)

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section describes the manufacture, construction, and installation of water services for ordinary waterworks service.

1.2 MEASUREMENT AND PAYMENT

A. Services shall be categorized as "long" if over 15-feet in length or "short" if 15-feet or shorter and measured as "EACH" or as provided in the Bid Proposal Form.

B. Payment will be made at the unit price bid per each for furnishing and installing services. This unit bid price will include all costs for the complete service installation, including all appurtenances, bedding, marking, testing, and disinfection.

1.3 SUBMITTALS

A. Submit manufacturer's data on materials furnished, indicating compliance with the specifications regarding dimensions, thickness, weights, and materials.

B. Submit manufacturer's "Certificate of Compliance", stating that the materials furnished comply with this specification.

PART 2 – PRODUCTS

2.1 MATERIALS

All materials shall be as shown on the details. Service saddles for PVC and Ductile Iron shall be ~~Smith Blair No. 317 stainless steel, Ford S70/S90 hinged, or Cambridge 800 series~~ as shown on the table below. All standard service lines shall be Type 'K' Copper. Tapped tee connection shall be ductile iron C153 MJ fitting.

Service Saddles

Description	Bryan	COCS
Smith Blair 317 SS	Approved	
Cambridge 800 Series		Approved
Ford S70/S90		Approved

The components for service connections shall be as listed in the following table.

Description	1-inch service	1.5-inch service	2-inch service
Corporation Stops	FB-1000-4*	FB-1000-6*	FB-1000-7*
Ball Straight Stops	B11-444-W	B11-666-W	B11-777-W
**Angle Ball Curb Stops (for City of Bryan only)	BA~~13~~11-444-W*	BA11-666-W	BA11-777-W
Angle Ball Curb Stops (for City of College Station only)	BA43-444W	FV43-666W	FV43-777W

Wye for double service to be Y44-264*; Part numbers listed are Ford part numbers.
*City of Bryan requires Quick Grip fittings (Q); City of College Station requires Pack Joint fittings
**Angle stops may be used for new construction if finished elevation is known. The stop must be installed 10-12" below the finished elevation.

~~**Service Saddles**~~

~~**Description**~~	~~**Bryan**~~	~~**COCS**~~
~~Smith Blair 317 SS~~	~~Approved~~	
~~Cambridge 800 Series~~		~~Approved~~
~~Ford S70/S90~~		~~Approved~~

PART 3 – EXECUTION

3.1 GENERAL

A. INSTALLATION

Information supplied by the manufacturers on any and all appurtenances should be reviewed in detail by the Contractor before installation of the service. At the job site, prior to installation, the material should be visually inspected and any foreign material in the interior portion of the service should be removed. A detailed inspection of the service should be performed prior to installation.

Service connections shall be tapped tees in curved sections of pipe.

B. The services should be bedded in a fashion similar to bedding main lines as shown on the details.

END OF SECTION