

San Antonio Water System Standard Specifications for Construction

**ITEM NO. 860
VERTICAL STACKS**

860.1 DESCRIPTION: This item shall govern the construction of vertical stacks from the sewer main to the horizontal position of lateral heading towards the right of way.

860.2 REFERENCED STANDARDS: Reference standards cited in this Specification Item No. 860 refer to the current reference standard published at the time of the latest revision date logged at the end of this Specification Item No. 860, unless a date is specifically cited.

1. San Antonio Water System (SAWS):
 - a. Specifications for Water and Sanitary Sewer Construction
 - b. SAWS Materials Specifications
2. City Of San Antonio (COSA) Standard Specifications for Construction
3. Texas Commission of Environmental Quality (TCEQ)
 - a. Chapter 217 Design Criteria for Domestic Wastewater Systems
 - b. Chapter 213 ("Edwards Aquifer")
4. American Society for Testing and Materials (ASTM) International:
 - a. ASTM D 1784 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
 - b. ASTM D 3034 - Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
 - c. ASTM D 3212 - Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
 - d. ASTM F 477 – Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe

860.3 SUBMITTALS: Contractor shall submit manufacturer's product data, instructions, and recommendations

860.4 MATERIALS:

1. Pipe: Pipe and fittings shall conform to the requirements of Item Nos. 848, "Sanitary Sewers," and 854, "Sanitary Sewer Laterals."
2. Concrete Encasement: Concrete encasement shall conform to the requirements of Item No. 858, "Concrete Encasement, Cradles, Saddles and Collars."

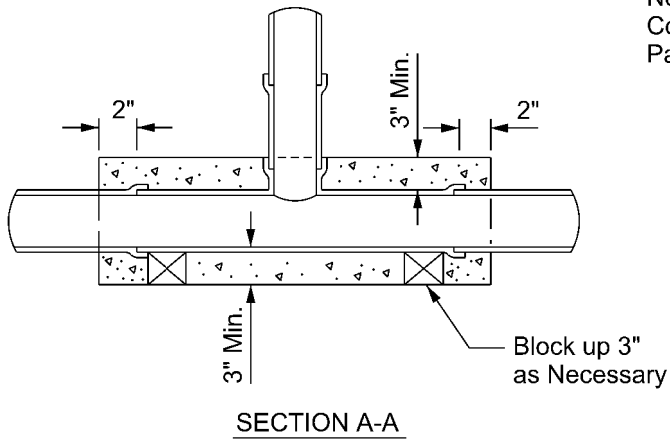
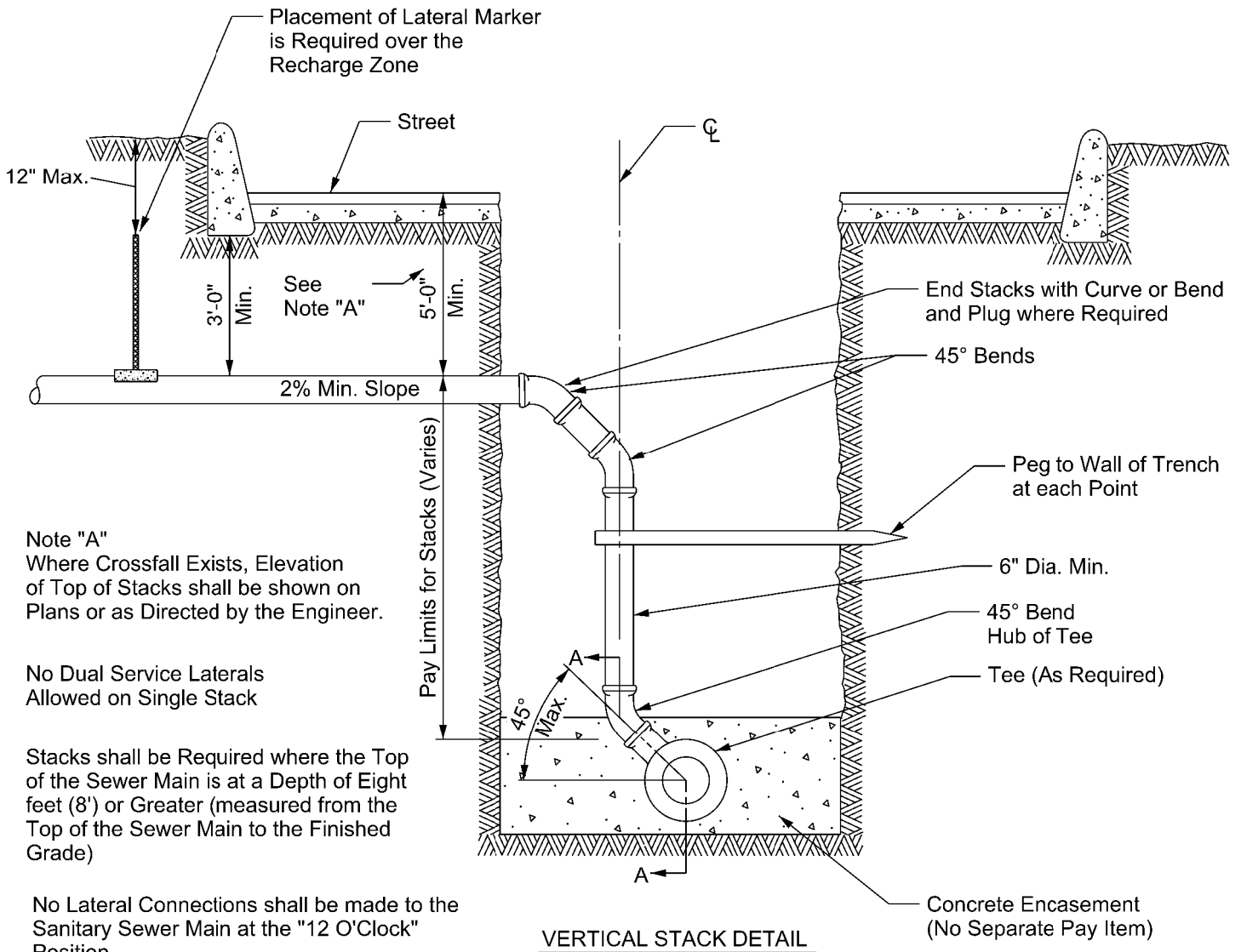
860.5 CONSTRUCTION: All work performed under this item shall conform to the latest applicable provisions of Item No. 848, "Sanitary Sewers," and the details shown in the contract documents. Generally, vertical stacks for sewer laterals shall be installed where the depth of the main (measured from the top of the sewer main to the finished grade) is eight feet or greater, or where specified by the Inspector, or Contractor Documents.

San Antonio Water System Standard Specifications for Construction

860.6 MEASUREMENT: Vertical stacks shall be measured by the vertical foot. Footage shall be computed as follows: Dimension from the top of the lateral (where it appears in the trench wall), to the top of the sewer main.

860.7 PAYMENT: Vertical stacks shall be paid for at the contract unit price bid per vertical foot as measured above, which price shall be full compensation for furnishing all pipe, pipe fitting, joint materials, concrete encasement, materials, tools, equipment, labor and incidentals necessary to complete the work. No separate pay shall be made for wyes, tees, or bends.

End of Specification



PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	TYPICAL VERTICAL STACK DETAIL	APPROVED	REVISED
		MARCH 2008	AUG 2019
DD 860-01			SHEET 1 OF 1