

Section 02260

TRENCH SAFETY SYSTEM

PART 1 GENERAL

1.01 SUMMARY

- A. Trench safety system for construction of trench excavations.
- B. Trench safety system for structural excavations which fall under provisions of State and Federal trench safety laws.

1.02 MEASUREMENT AND PAYMENT

- A. Unit Prices:
  - 1. Measurement for trench safety systems used on trench excavations is on a linear foot basis measured along centerline of trench, including manholes and other line structures.
  - 2. No payment will be made for Trench Safety Systems for structural excavations, tunnel shafts, auger pits, or excavation for trenchless installations under this section. Include payment for Trench Safety Systems in applicable structural or utility installation sections.
  - 3. Refer to Section 01270 - "Measurement and Payment" for unit price procedures.
- B. Stipulated Price (Lump Sum). If the Contract is a Stipulated Price Contract, payment for Work in this Section is included in the total Stipulated Price.

1.03 REFERENCES

- A. Install and maintain trench safety systems in accordance with detail specifications set out in provision of Excavations, Trenching, and Shoring, Federal Occupation Safety and Health Administration (OSHA) Standards, 29CFR, Part 1926, Subpart P, as amended, including Final Rule, published in Federal Register Vol. 54, No. 209 on October 31, 1989. Sections that are incorporated into these specifications by reference include Sections 1926-650 through 1926-652.
- B. Reproduction of OSHA standards included in "Subpart P - Excavations" from Federal Register Vol. 54, No. 209 is available upon request to Contractors bidding on projects. The Owner assumes no responsibility for accuracy of reproduction. The Contractor is responsible for obtaining a copy of this section of the Federal Register.

- C. Legislation enacted by Texas Legislature with regard to Trench Safety Systems, is hereby incorporated, by reference, into these specifications. Refer to Texas Health and Safety Code Ann., §756.021 (Vernon 1991).

1.04 SUBMITTALS

- A. Conform to requirements of Section 01330 - “Submittal Procedures”.
- B. Submit trench safety program specifically for construction of trench excavation. Design the trench safety program to be in accordance with OSHA 29 CFR standards governing the presence and activities of individuals working in and around trench excavations.
- C. Construction and Shop Drawings containing deviations from OSHA standards or special designs shall be sealed by a licensed Engineer registered in the State of Texas retained and paid by Contractor.
- D. Review of trench safety system by Project Manager shall only be in regards to compliance with this specification and shall not constitute approval by Project Manager nor relieve Contractor of obligations under State and Federal trench safety laws.
- E. Submit certification that trench safety system shall not be subjected to loads exceeding those which the system was designed to withstand according to the available construction and geotechnical information.

1.05 RELATED REQUIREMENTS

- A. Section 01270 – “Measurement and Payment”
- B. Section 01330 – “Submittal Procedures”

1.06 QUALITY ASSURANCE

- A. Indemnification
  - 1. Contractor to indemnify and hold harmless the Owner and the Project Manager, its employees and agents, from any and all damages, costs (including, without limitation, legal fees, court costs, and cost of investigation), judgments or claims by anyone for injury or death of persons resulting from collapse or failure of trenches constructed under this Contract.
  - 2. Contractor acknowledges and agrees that this indemnity provision provides indemnity for the Owner and the Project Manager, its employees and agents, in case the Owner and the Project Manager is negligent either by act or omission in providing for trench safety, including, but not limited to safety program and design reviews, inspections, failures to issue stop work orders, and hiring of the Contractor.

1.07 – 1.09 NOT USED

1.10 DEFINITIONS

- A. Trench. Narrow excavation (in relation to its depth) made below surface of ground. In general, depth is greater than width, but width of trench (measured at bottom) is not greater than 15 feet.
- B. Trench safety system requirements shall apply to larger open excavations if erection of structures or other installations limits space between excavation slope and installation to dimensions equivalent of a trench as defined.
- C. Trench safety systems include but are not limited to sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, dewatering or diversion of water to provide adequate drainage. Trench safety system is Contractor's methods and means of construction.
- D. Trench Safety Program is the safety procedures governing the presence and activities of individuals working in and around trench excavations.

1.11 – 1.13 NOT USED

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 – 3.02 NOT USED

3.03 ERECTION/INSTALLATION APPLICATION AND/OR CONSTRUCTION

- A. Install and maintain trench safety systems in accordance with provisions of OSHA 29 CFR.
- B. Install specially designed trench safety systems in accordance with Contractor's trench excavation safety program for locations and conditions identified in the program.
- C. A competent person, as identified in Contractor's Trench Safety Program, shall verify that trench boxes and other pre-manufactured systems are certified for actual installation conditions.

3.04 REPAIR/RESTORATION (NOT USED)

3.05 FIELD QUALITY CONTROL

Contractor shall verify specific applicability of selected or specially designed trench safety systems to each field condition encountered on project.

3.06 – 3.07 NOT USED

3.08 DEMONSTRATION / TESTING AND INSPECTION

- A. Contractor, or Contractor's independently retained consultant, to make daily inspections of trench safety systems to ensure that installed systems and operations meet OSHA 29 CFR and other personnel protection regulation requirements.
- B. If evidence of possible cave-ins or slides is apparent, immediately stop work in trench and move personnel to safe locations until necessary precautions have been taken to safeguard personnel entering trench.
- C. Maintain permanent record of daily inspections. Daily inspection reports shall be retained by the Contractor and made available at the request of the Project Manager or Engineer.

3.09 -3.10 NOT USED

END OF SECTION