

ONE PIECE TRENCH SPECIFICATIONS

1. GENERAL

- 1.1 The trench system will consist of precast concrete U-shaped bases and removable covers equivalent to Trenwa's One Piece trench system to be installed in earth trenches with covers extending above the surrounding crushed rock surface.
- 1.2 The trench system will be designed to support at least 200 pounds per square foot live load for pedestrian traffic or 9,000# G.V.W. for pickup trucks and light duty utility vehicles.
- 1.3 The trench shall have an interior clear cross sectional area of (10")(20")(24")(30")(40")(48") wide x (12") (15")(24") deep. The trench will be approximately (16")(26")(30")(36")(46")(54") wide x (19-1/4")(28 1/4") deep overall including cover
- 1.4 The precast U-shaped bases for the trench will be furnished in standard 10 foot lengths, except that special lengths will be furnished where required by the layout on the drawings. The U-shaped bases will (have openings in the bottom) (be solid bottom). The trench shall not require cross braces to support the walls during backfilling.
- 1.5 The precast trench covers will be furnished in lightweight sections, sized to permit removal by a single person. The covers will have slots for lifting tools and will be made of (Fiber and Steel Reinforced Concrete) (Polymer Concrete)(Galvanize Checker Plate)(Aluminum Checker Plate).
- 1.6 The precast trench system shall be designed and constructed so that neither the covers, nor temporary side-to-sides braces need to be installed to facilitate installation or subsequent machine backfilling and tamping.

ROAD CROSSING TRENCH SPECIFICATIONS

1. GENERAL

- 1.1 All sections of trench designated for road crossing use will be designed to carry HS20, 32,000 pound axle loading and will be furnished in standard 10 foot lengths, except that special lengths will be furnished where required by the layout on the drawings.
- 1.2 The lids for the road crossing trench will be made of (FRP Monolithic Composite)(Steel Reinforced Concrete) (Hot-dipped Galvanized Steel) designed to carry HS20, 32,000 pound axle loading.
- 1.3 The interior clear cross sectional area for the road crossing bases will be at least (10")(20")(24")(30")(36")(40") (48")(60") (72")(84")(96") wide x (12")(16")(24")(36")(48")(60")(72") deep.
- 1.4 The precast trench system shall be designed and constructed so that supplemental support such as protection rods or cross supports are not required.

COMPONENT SPECIFICATIONS

1. GENERAL

- 1.1 The trench system shall consist of precast concrete support brackets, sidewalls and removable covers assembled to form a completely enclosed trench, except with open earth bottom having a 4" bedding of sand.
- 1.2 The trench system will be designed to support at least 200 pounds per square foot live load for pedestrian traffic.
- 1.3 The trench shall have an interior clear cross sectional area of (20")(30")(40") wide by (16")(24") deep. The outside dimensions shall be approximately (32")(42")(52") wide x (20")(28") deep overall (including cover).
- 1.4 The precast sides of the trench system shall be furnished in standard 5 foot lengths, except that special lengths shall be furnished where required by the layout on the drawings. The trench design is such that the sidewalls are held in place by the pressure of the external earth backfill.
Provide U shaped support brackets at a maximum spacing of 5 feet center to center with rectangular sidewall panels spanning the brackets .
- 1.5 The precast trench covers will be furnished in lightweight sections, sized to permit removal by a single person. The covers will have slots for lifting tools and will be made of (fiber and steel reinforced concrete)(polymer concrete).