

INSTALLATION

3.1 WORK

A. This section includes directions for the installation of Terre Box™ with Terre Hill Watertight Joint Seal System (US Patent No. US 7,828,496 B1)

1. SUBMITTALS

- A. Manufacturer's product data on Terre Box™ shall contain:
 - 1. Dimensions and weight of Terre Box™
 - 2. Volumes-Capacities-Dimensions of Terre Box™
- B. Shop drawings showing materials of construction by ASTM reference and grade.
- C. Box culverts shall be post tensioned using an electric motor driven hydraulic post tension jack providing a minimum of 28 Kips on each post tensioning cable
- D. All post tensioning cables shall be encased in a protective sheath containing lithium grease
- E. All post tensioning cable ducts shall be grouted after post tensioning is completed
- F. After post tensioning is completed grout shall be pressure injected into the entire annular space of each joint
- G. Grout shall consist of 1 bag of # 2 Portland cement; 5 gallons of water and Interplast additive equal to 1% by weight of cement.

3.2 PRODUCTS

1. GENERAL

- A. Precast concrete Terre Box™ with Terre Hill Watertight Joint Seal System (US Patent No. US 7,828,496 B1) shall be used where specified on drawings or required by owner, engineer or governing body

2. PRECAST CONCRETE TERRE BOX™

- A. Precast concrete Terre Box™ shall be manufactured in a NPCA certified plant.
- B. Terre Box™ shall conform to the shapes and dimensions shown on the drawings and as specified by Terre Hill Stormwater Systems
- C. Design loads shall consist of dead load, live load, impact load and loads due to soil pressure, ground water table pressure and any other load on the Terre Box™. Live loads shall be HS-25.

- D. The access cover shall be designed for HS-25 traffic loading and shall provide a minimum of 27 1/2 inches clear opening. Manhole frame and cover shall be East Jordan or Quirin manufactured from gray iron conforming to ASTM 48 Class 35B.

3.3 EXCAVATION / INSTALLATION

1.EARTHWORK

- A. The Contractor shall prepare excavation large enough to accommodate the Terre Box™ and to permit grouting, sealing, backfilling of 8 inch cover and 12 inch around perimeter of the installation. Additional installation specifications may be necessary, depending on soil and site conditions as determined and required by design engineer.

3.4 INSTALLATION

- A. Openings or “knockouts” in precast concrete Terre Box™ and distribution structure shall be located as shown on the drawings and shall be sized sufficiently to permit passage of the largest dimension of pipe and/or flange.