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AERIAL CROSSING DETAIL

SCALE 3/16" = 1'-0"

**General Notes**

**1. Design Building Code**

International Building Code, 2015 Edition

**2. Geotechnical Report**

Firm: Ellerbe-Walczak, Inc. Dated: February 6, 2019  
 Report No. IG190526

**3. Concrete Mix Design for Soldier Piers:**

- All concrete for piers shall have a minimum compressive strength of  $f_c = 4000$  psi at 28 days.
- Provide a design slump of 7" to 9" for concrete placed in piers.
- The use of workability admixtures and air entrainment in the concrete mix designs is not permitted.
- The use of calcium chloride admixtures in the concrete is not permitted.
- Adding water to the concrete at the site is not permitted.
- Hard rock aggregate maximum of 3/4" may be used in concrete placed in standard drilled piers.
- No hard rock aggregate is to be used in auger drilled cast in place piers.
- Provide the concrete mix designs for the piers to Falkofske Engineering, Inc. for review prior to construction. Also provide recent (within the last 6 months) compressive test results of the mix designs for review by Falkofske Engineering, Inc.
- Provide concrete test cylinders for every 50 yards of concrete placed, or for any concrete placed on any given day. Make 5 test cylinders, test one at 7 days, one at 14 days, two at 28 days, and hold the 5th cylinder in reserve for 56 days if necessary. Provide all concrete compressive test results to Falkofske Engineering, Inc. for final review.
- Provide steel centerizers to center the steel in the pier hole, and use chairs to hold steel off the ground in the bottom of the pier hole.
- Concrete may free fall during placement, as long as the concrete is centered in the pier and does not damage the steel cage.
- Piers may be "Standard Drilled" or "Auger Cast In Place".
- Steel Pipe shall be schedule 40 or stronger,  $F_y = 50$  ksi

**Concrete Reinforcement:**

- All concrete steel reinforcement shall be new billet steel conforming to ASTM A-615, Grade 60 with  $f_y = 60$  ksi. All reinforcement shall be free of rust and deleterious materials.

**2. Construction Reviews**

**Construction Reviews By Materials Testing Lab:**

- The geotechnical engineer, shall be retained to perform pier drilling review. A pier drilling log shall be made for each pier indicating the depth through clay soils.
- The pier drilling logs shall note that the piers holes are clean prior to placing the steel reinforcement cage.
- The size, number, and grade of the reinforcement placed in the pier hole shall be verified by the testing lab and so noted on the pier drilling logs.

**Construction Reviews by Falkofske Engineering, Inc.**

- Falkofske Engineering, Inc. shall be called to review the placement of the reinforcement in the piers prior to concrete placement and shall also be called for cursory review of the pier drilling operations.

**Construction Inspections by the Building Department:**

- The contractor shall arrange for all inspections that may be required by the City of Rockwall, Texas Building Department.

**3. Concrete Mix Design Other**

- Apron Concrete shall have a minimum compressive strength of  $f_c = 3000$  psi at 28 days.

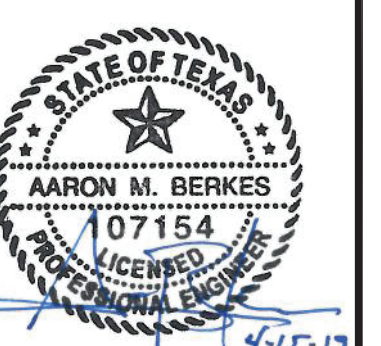
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Falkofske Engineering, Inc.  
 Structural Engineering Consultants  
 TX Reg. Engineering Firm F-4038  
 722 North Fielder Road  
 Arlington, Texas 76012  
 (817) 261-8300



to the original site for which this drawing was prepared. This drawing is not to be used for any other project without the written consent of Falkofske Engineering, Inc.

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 LADERA ROCKWALL  
 JOHN KING BLVD.  
 ROCKWALL, TEXAS  
 INTEGRITY GROUP  
 ROANOKE, TEXAS



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