

BNSF DIESEL SHOP

TEMPORARY EARTH RETENTION

PROJECT DESCRIPTION:

Project Date: Spring 2015

Project Name: BNSF Diesel Shop

Project Location: Tulsa, OK

Geotechnical: Kleinfelder

Tieback / Anchor Design: Schaefer Engineering

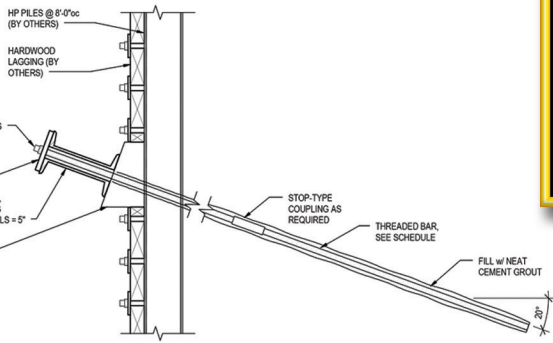
Wall Designer: Civil Solutions Associates

General Contractor: B.L. Spille

Owner: BNSF

Scope: Design and install tie-back anchors for a soldier pile with wood lagging wall with E80 loading requirements.

Dwyer's system included 4 rows, a total of 25 anchors, 25 kips each, attached to and through the wall with a series of "C" Channels used for walers. The anchors were installed with a 20 degree inclination from the horizontal plane with a 40ft bond zone and a 10ft free stressing length. The wood lagging was attached to the face of the soldier pile and secure by the means of steel plates with nuts.



TYPICAL SECTION OF DRIVEN PIER & TIE-BACK ANCHOR
3/4" = 1'-0"



SHORING

SCALE 1/4" = 1'-0"

SYMBOL	QUANTITY	DESIGN CAPACITY
①	2	50 KIPS
②	5	50 KIPS

* SEE DETAILS FOR LENGTH REQUIREMENTS

SYMBOL	QUANTITY	DESIGN CAPACITY	MIN. LENGTH	PIER CAP CONNECTION	NOTES
C	14	22 KIPS	AS REQ'D TO MEET DESIGN CAPACITY	PLATE BRACKET	MIN. 200# STEEL 2" DIA. PIER CAP BRACKET (AISC 305) (AISC 305)
C			AS REQ'D TO MEET DESIGN CAPACITY	PLATE BRACKET	MIN. 200# STEEL 2" DIA. PIER CAP BRACKET (AISC 305) (AISC 305)



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