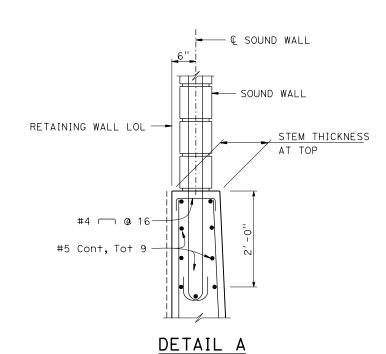


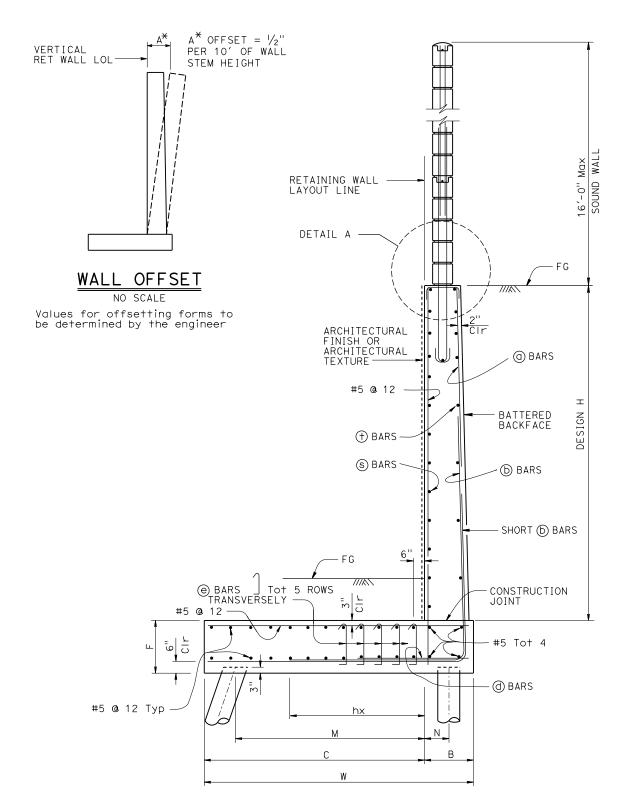
# **ELEVATION**

#### NOTES:

"ha", "hb" above b bars indicate distance from top of footing to upper end of b bars, see table. "S" is b bar spacing, see table.



For sound wall reinforcement, see "SOUND WALL - MASONRY BLOCK ON RETAINING WALL" sheet



### PILE FOOTING SECTION NO SCALE

POST MILES TOTAL PROJECT REGISTERED CIVIL ENGINEER DATE PLANS APPROVAL DATE The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet. CIVIL

## DESIGN DATA

The Registered Civil Engineer for the project is responsible for the selection and proper application of the component design and any modifications shown.

Design: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments

WS: 33 psf on Sound wall

LS: Varied surcharge on level ground surface

EQE: Mononabe-Okabe Method

> Κv = 0.0

 $\emptyset = 34^{\circ}$ Soil:  $\gamma = 120 \text{ pcf}$ 

Reinforced

f'c = 3600 psiConcrete: fy = 60,000 psi

Load Combinations and Limit States

Service I Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS

Service II Q=1.00DC+1.00EV+1.00EH+1.00WS

Strength I Q=aDC+BEV+1.50EH+1.75LS

Strength III Q=aDC+BEV+1.50EH+1.40WS

Strength V Q=aDC+BEV+1.50EH+1.35LS+0.40WS

Extreme I Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE

Where: Q:

a: 1.25 or 0.90, Which ever Controls Design
B: 1.35 or 1.00, which ever Controls Design
DC: Dead Load of Structure Components
EV: Vertical Earth Fill Pressure

Live Load Surcharge

EQE: Seismic Earth Pressure

EQD: Soil and Structure Components Inertia

Soil inertia ignored for stem design WS: Wind Load on Sound wall

#### NOTES:

- 1. All piles are class 90 concrete piles.
- 2. Pile batter shown are 1:3.
- 3. Minimum distance between center pile and edge of footing is 1'-6".
- 4. Lateral resistance of each pile: 30 kip for strength limit states. 40 kip for extreme limit states.
  Pile group reduction factors are not applied, unless soil passive resistance on footing is included.
- 5. Maximum spacing between piles is shown in the table. Reduce to suit the length of footing.
- 6. Minimum distance between any two piles is 3'-0". Reduce to suit the length of footing.
- 7. For sound wall and retaining wall architectural finish or texture, see details elsewhere in Project Plans.
- 8. For details not shown and drainage notes, see B3-5 Substitution of geocomposite drain for pervious backfill material is not permitted.
- 9. Footing cover, 2'-0" minimum.
- 10. For sound wall and reinforcements see "SOUND WALL -MASONRY BLOCK ON RETAINING WALL" sheets.

BRIDGE STANDARD DETAILS							ST	ATE OF	DIVIDION 4	BRIDGE NO				
xs14-400-1	October 2014	The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner					CALI	<b>FORNIA</b>	DIVISION ( ENGINEERING SI			_	_	
FILE NO.	APPROVAL DATE	a registered civil engineer in the State of California					DEPARTMENT	OF TRANSPORTA	ION ENGINEERING SE	RVICES	RETAININ	G WALL TYPE 7	'SWP - DETAII	LS No.1
Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail- sheets/index.html		FILE => xs14-400-1.dgn USERNAME => s136236	TIME PLOTTED => 10:39	DATE PLOTTED => 18-JUL-2016	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1	2 3	UNIT: PROJECT NUMBER & PHASE:	CONTR	ACT NO.:	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES 6-19-14 8-8-14 8-28-15 7-14-	SHEET OF	