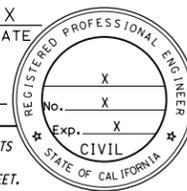
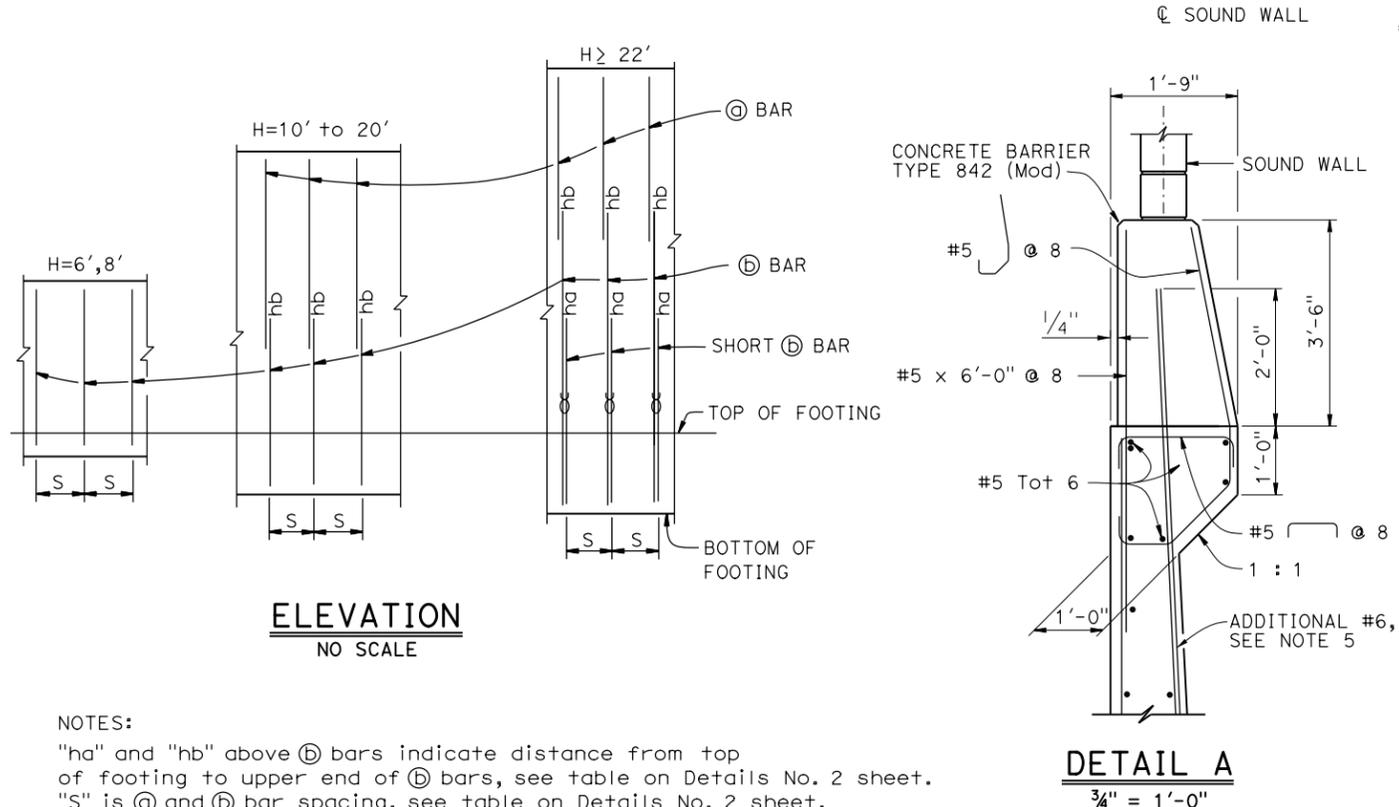


GENERAL NOTES LOAD AND RESISTANCE FACTOR DESIGN

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
				X	
REGISTERED CIVIL ENGINEER				DATE	
				X	
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.					
THE REGISTERED CIVIL ENGINEER FOR THE PROJECT IS RESPONSIBLE FOR THE SELECTION AND PROPER APPLICATION OF THE COMPONENT DESIGN AND ANY MODIFICATIONS SHOWN.					



ELEVATION
NO SCALE

DETAIL A
3/4" = 1'-0"

Design: AASHTO LRFD Bridge Design Specifications, 8th edition with California Amendments, Preface dated April 2019.

WS: Wind perpendicular to plane of sound barrier. Exposure Category D.

LS: Variable live load surcharge on level ground surface

DC: Stem Architectural Treatment of thickness up to 2" of concrete

CT: 54 Kip transverse force on soundwall applied at 6'-0" above finished grade, distributed over 3'-6" and 1:1 distribution down and outward. Load distribution of 1V:0.6H applied at begin wall, end wall and on either side of expansion joints.

Seismic: $K_h = 0.3$
 $K_v = 0.0$

Backfill Soil: $\phi = 34^\circ$ $\gamma = 120$ pcf
Foundation Soil (for footing bottom friction): $\phi = 32^\circ$

Reinforced Concrete: $f'_c = 3600$ psi
 $f_y = 60,000$ psi

Load Combinations and Limit States

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

Strength I $Q = aDC + BEV + \eta EH + 1.75LS$

Strength III $Q = aDC + \beta EV + 1.50EH + 1.00WS$

Strength V $Q = aDC + \beta EV + 1.50EH + 1.35LS + 1.00WS$

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

Extreme II $Q = 1.00DC + 1.00EV + 1.00EH + 1.00CT$

Where:

Q: Force Effects

a: 1.25 or 0.90, Whichever Controls Design

β : 1.35 or 1.00, Whichever Controls Design

η : 0.9 or 1.5, Whichever Controls Design

DC: Dead Load of Structure Components

EH: Horizontal Earth Pressure

EV: Vertical Earth Fill Pressure

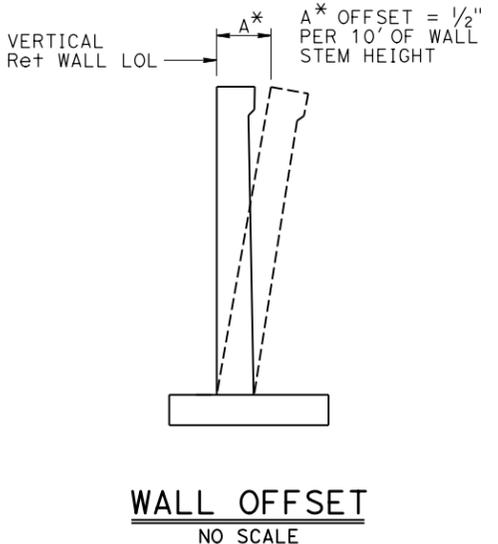
LS: Live Load Surcharge

EQE: Seismic Earth Pressure

EQD: Soil and Structural Components Inertia
Soil Inertia ignored for stem design

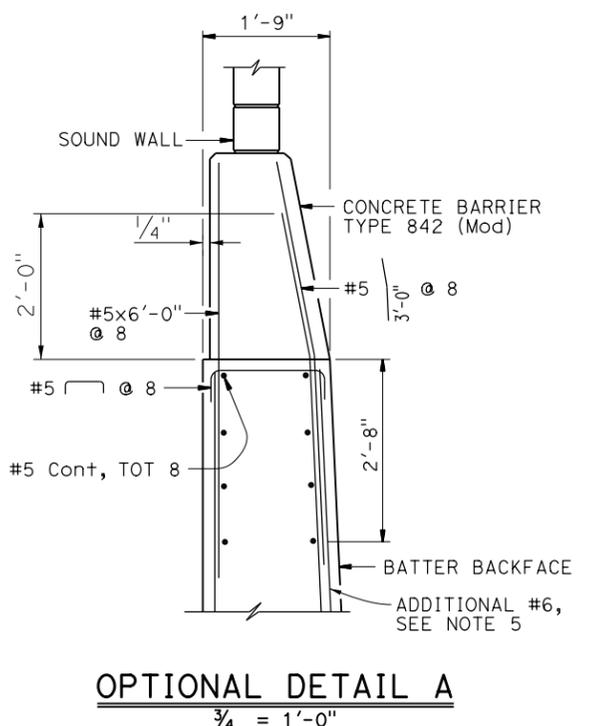
WS: Wind Load on Sound Wall and Barrier

- NOTES:
- For sound wall and retaining wall Architectural Treatment, see details elsewhere in Project Plans
 - For details not shown and drainage notes, see Standard Plans B0-3, B3-5 & B3-6.
 - Footing cover, 1'-6" minimum.
 - For sound wall and barrier reinforcement details, see xs15-130-1 and xs15-130-2.
 - Provide additional #6 x 18'-0" @ 6 bars over a distance of 8'-0" measured from all expansion joints, begin wall and end wall locations. For $H \leq 14'$, hook the additional #6 bars into footing.



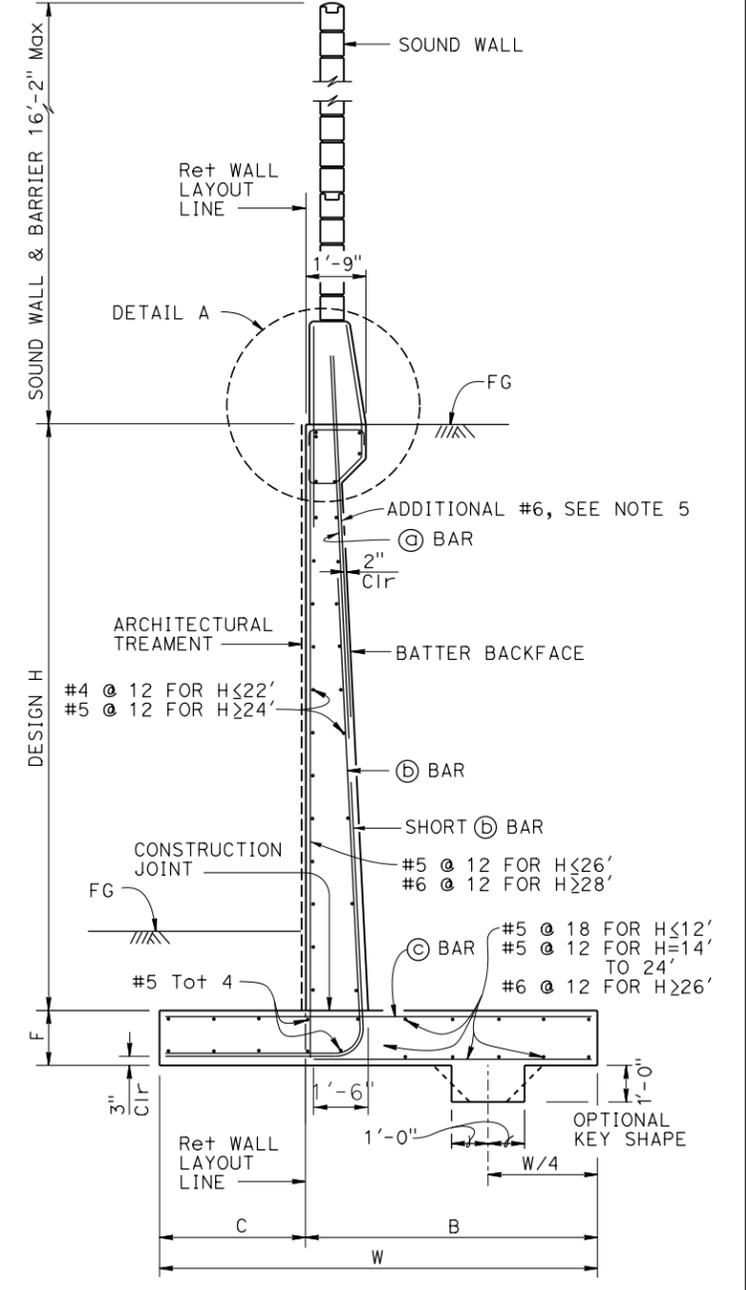
WALL OFFSET
NO SCALE

Values for offsetting forms to be determined by the Engineer



OPTIONAL DETAIL A
3/4" = 1'-0"

For Details not shown, see "DETAIL A"



SPREAD FOOTING SECTION
NO SCALE