

GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN:
AASHTO LRFD Bridge Design Specifications,
2007 edition with California Amendments

DEAD LOAD:
2" Concrete Surface Texture added to stem (DC)

WIND LOADING:
0.033 ksf on Sound Wall and Barrier (WS)

LIVE LOADING:
Varied surcharge on level ground surface (LS)

54 kip maximum traffic impact loading evenly
distributed over 10 feet at top of the barrier
and 1:1 distribution down and outward (CT)

SEISMIC LOADING (EQE)
 $K_h = 0.3$

SOIL PARAMETERS (BACKFILL):
 $\phi = 34^\circ$
 $\gamma = 0.120 \text{ kcf}$

REINFORCED CONCRETE:
 $f_y = 60 \text{ ksi}$
 $f'_c = 3.6 \text{ ksi}$

LOAD COMBINATIONS AND LIMIT STATES

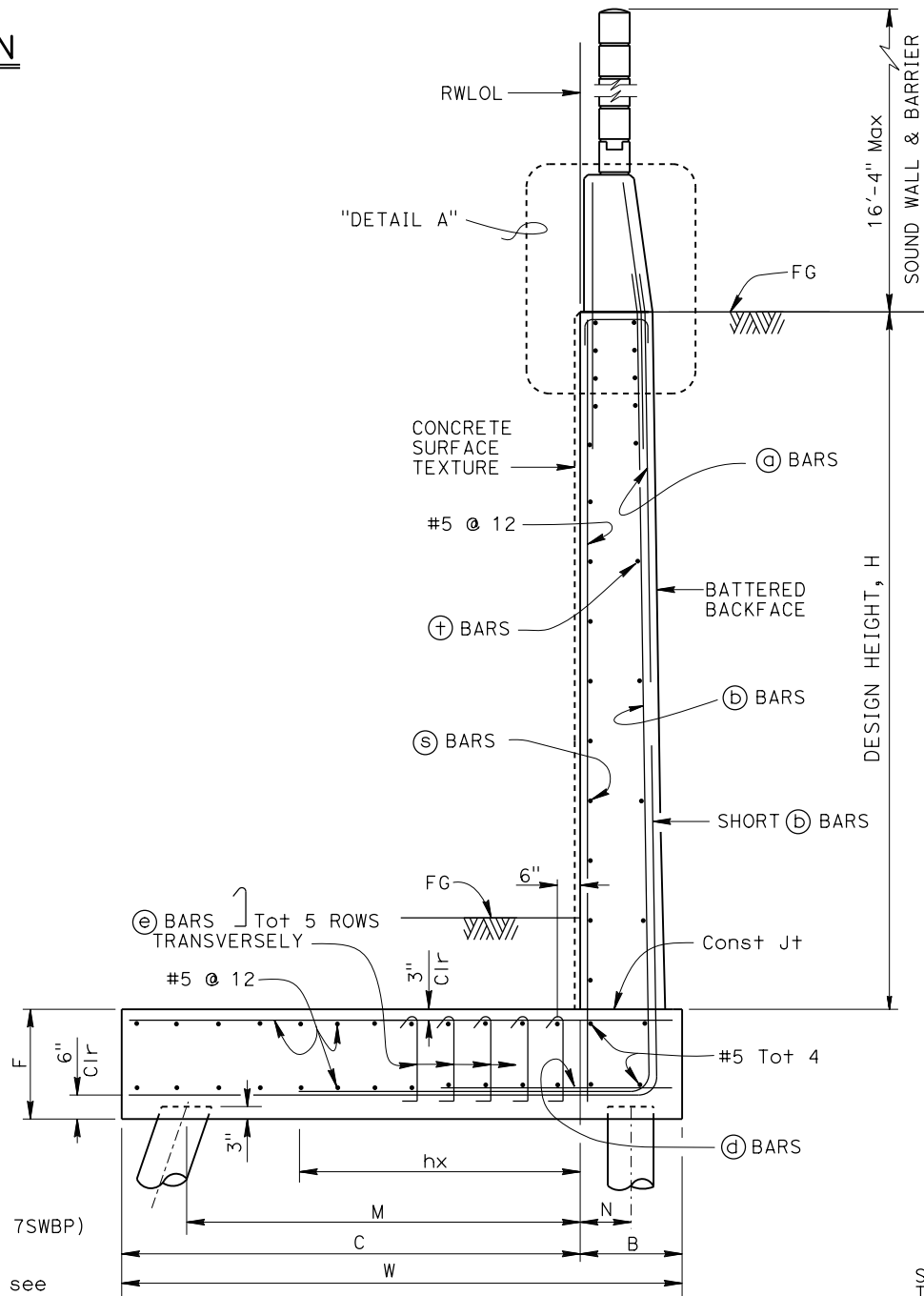
Service I $Q=1.00DC+1.00EV+1.00EH+1.00LS+0.30WS$
Service II $Q=1.00DC+1.00EV+1.00EH+1.00WS$
Strength I $Q=aDC+\beta EV+1.50EH+1.75LS$
Strength III $Q=aDC+\beta EV+1.50EH+1.40WS$
Strength V $Q=aDC+\beta EV+1.50EH+1.35LS+0.40WS$
Extreme I $Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE$
Extreme II $Q=1.00DC+1.00EV+1.00EH+1.00CT$

WHERE:

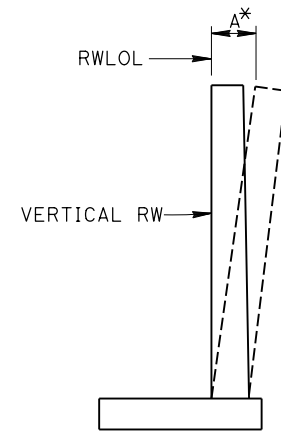
Q: Force Effects
a: 1.25 or 0.90, Whichever Controls Design
β: 1.35 or 1.00, Whichever Controls Design
DC: Dead Load of Structure Components
EV: Vertical Earth Fill Pressure
LS: Live Load Surcharge
EQE: Seismic Earth Pressure
EQD: Soil and Structure Components Inertia
(Soil inertia ignored for stem design)
WS: Wind Load on Sound wall and Barrier
CT: Vehicular Collision Force

NOTES:

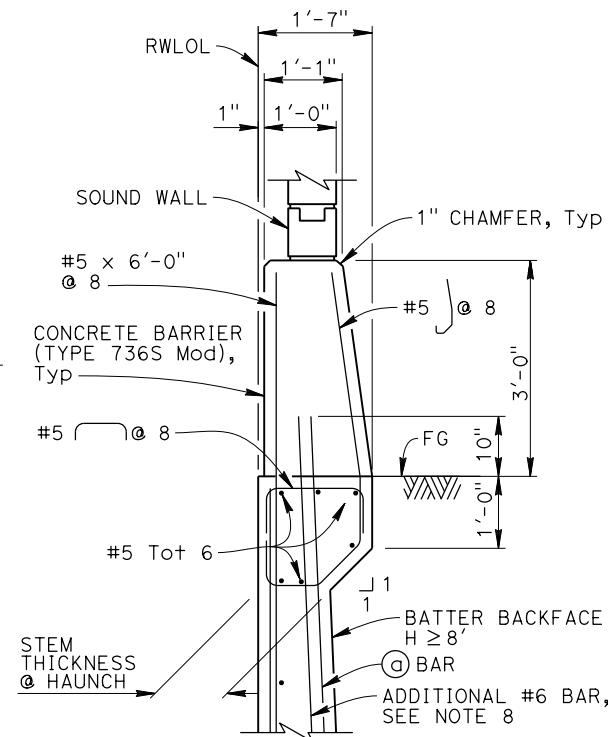
- For reinforcement layout details, see "RETAINING WALL (TYPE 7SWBP) DETAILS No. 2" sheet.
- For Sound Wall and Retaining Wall Concrete Surface Texture, see "ARCHITECTURAL DETAILS" sheet.
- For Retaining Wall details not shown and drainage notes, see Standard Plan B0-3 and B3-5.
- Footing cover, 2'-0" minimum.
- For Sound Wall reinforcement and details, see "SOUND WALL MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS No. 1", "SOUND WALL MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS No. 2" and "SOUND WALL MASONRY BLOCK WITH BARRIER ON RETAINING WALL DETAILS No. 3" sheets.
- For $H = 6'$ to $14'$, extend (b) bars into barrier for stem with haunch.
- For $H \geq 16'$, extend (b) bars into barrier for stem with haunch.
- 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 and reduce bar length as needed to maintain minimum clear cover.



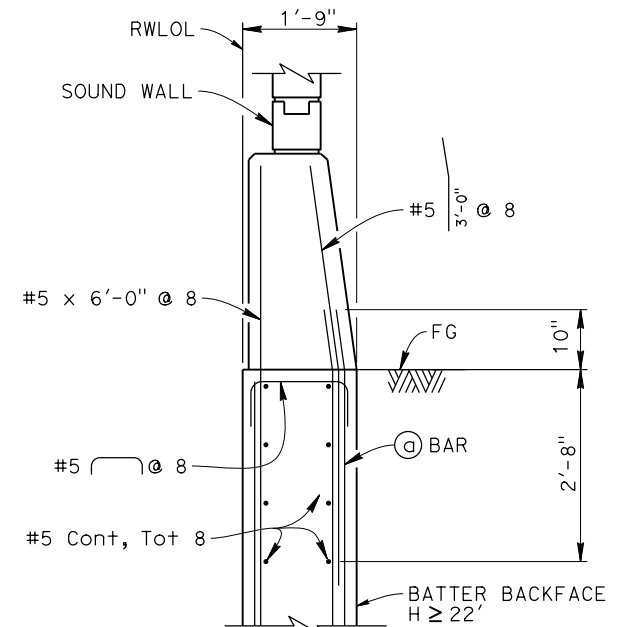
TYPICAL SECTION



WALL OFFSET



WALL STEM WITH HAUNCH



WALL STEM WITHOUT HAUNCH

NOTE:
For details not shown,
see "WALL STEM WITH HAUNCH".

DETAIL A

NO SCALE

BRIDGE STANDARD DETAILS		DESIGN	BY X	CHECKED X	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. XX-XXXX POST MILE X.X	X	RETAINING WALL (TYPE 7SWBP) DETAILS No. 1					
xs14-410-1 FILE NO.	August 2026 APPROVAL DATE	DETAILS	BY X	CHECKED X									
		QUANTITIES	BY X	CHECKED X									
Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html		FILE => xs14-410-1.dgn USERNAME => s136247		TIME PLOTTED => 14:12	DATE PLOTTED => 31-AUG-2026	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	UNIT: XXXX PROJECT NUMBER & PHASE: XXXXXXXXXX1	COUNTY/ROUTE/ZONE: XXX/XXX/X CONTRACT NO.: XX-XXXXX4	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET X	OF X