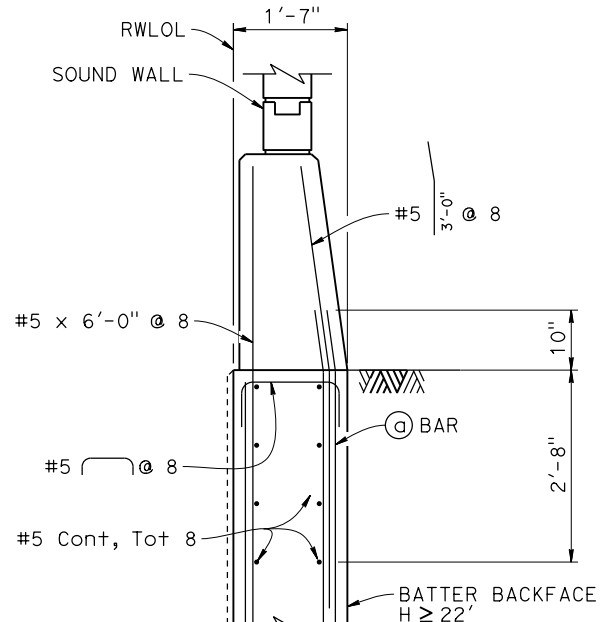
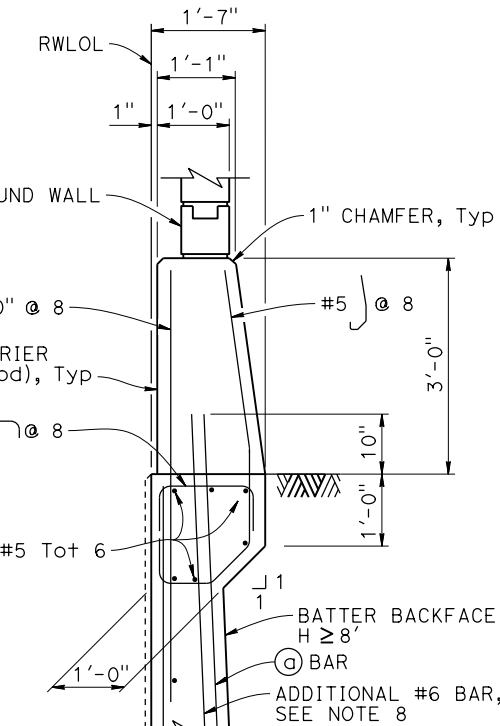
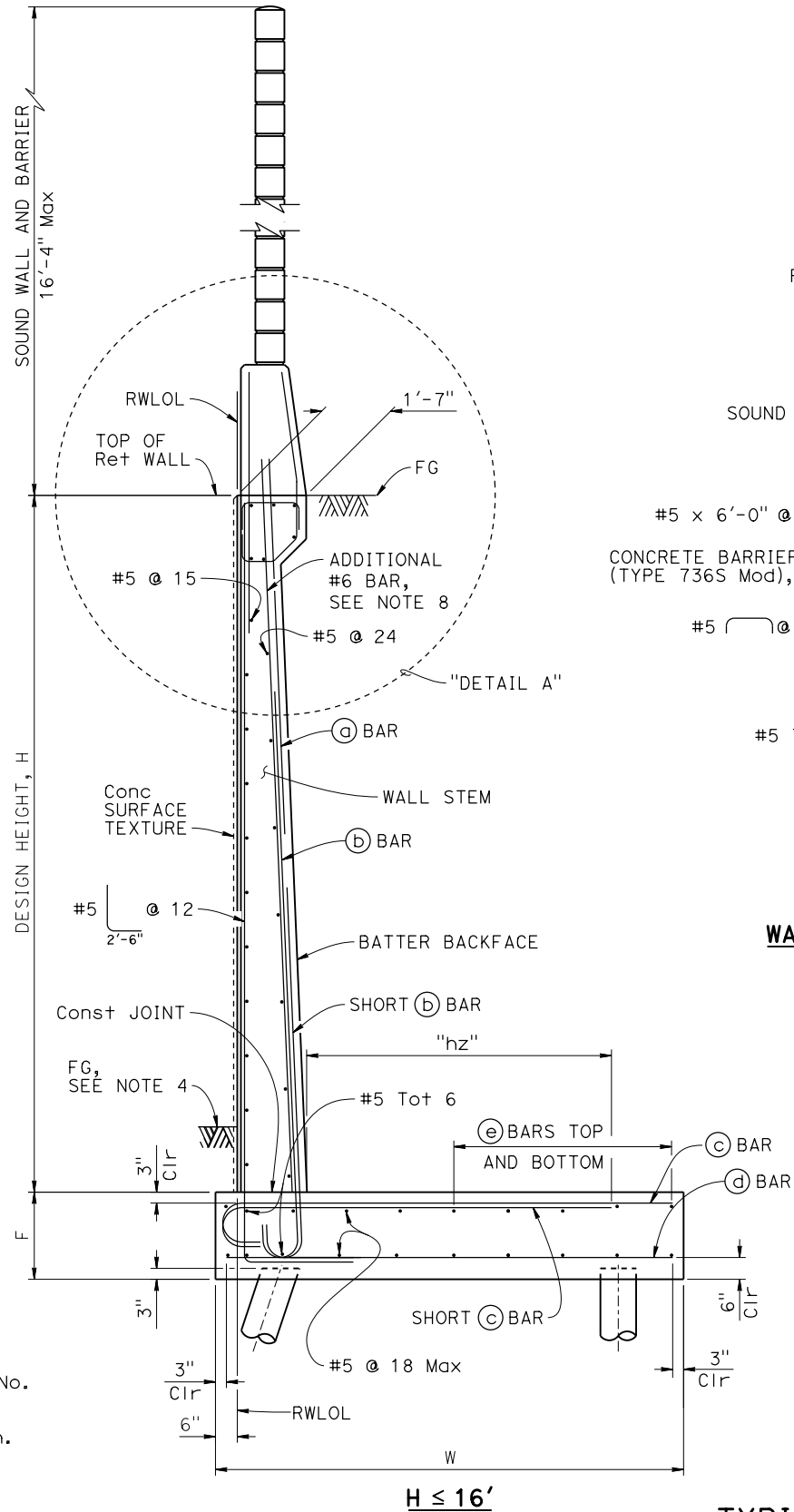
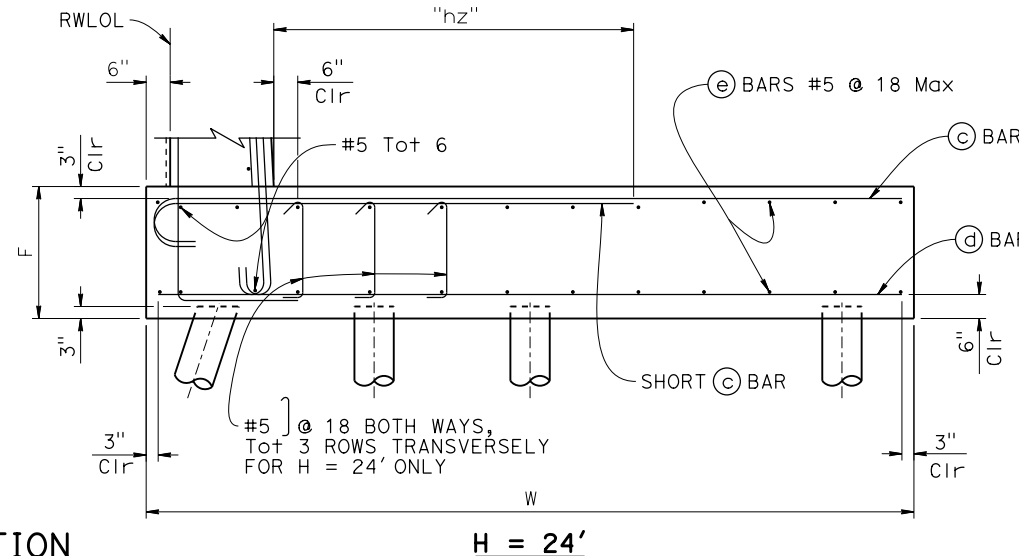


GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

- 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' 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 | $Q = \alpha DC + \beta EV + 1.50EH + 1.75LS$ |
| | $Q = 1.25DC + 1.35EV + 0.90EH + 1.75LS$ (for piles at heel) |
| Strength III | $Q = \alpha DC + \beta EV + 1.50EH + 1.40WS$ |
| Strength V | $Q = \alpha DC + \beta EV + 1.50EH + 1.35LS + 0.40WS$ |
| 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
b: 1.35 or 1.00, Whichever Controls Design
DC: Dead Load of Structure Components
EV: Vertical Earth Fill Pressure
EH: Horizontal 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
CT: Vehicular Collision Force
- NOTES:
- For reinforcement layout details, see "RETAINING WALL (TYPE 5SWBP) 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, 1'-6" 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 (a) bars into barrier for stem with haunch.
 - Provide additional #6 x $18'-0"$ @ 6 vertical 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.



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



TYPICAL SECTION

NOTE: Typical Section for $16' > H < 24'$ not shown, but similar.

NO SCALE

BRIDGE STANDARD DETAILS		DESIGN	BY	CHECKED	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE No.	X	RETAINING WALL (TYPE 5SWBP) DETAILS No. 1							
xs14-370-1 FILE NO.	August 2026 APPROVAL DATE	DETAILS	BY	CHECKED			XX-XXXX									
		QUANTITIES	BY	CHECKED			X.X									
Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html		DATE PLOTTED => 31-AUG-2026 FILE => xs14-370-1.dgn		TIME PLOTTED => 14:10 USERNAME => s136247		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	OF			
										X	X					