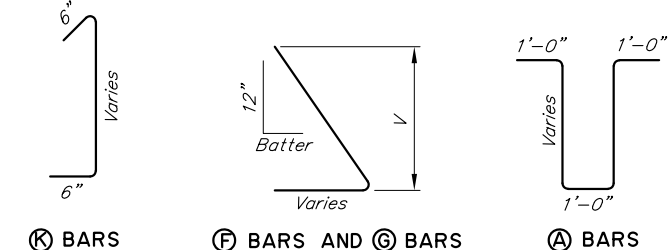


GENERAL NOTES

- DESIGN:.....AASHTO LRFD Bridge Design Specifications, 2017 Edition, with latest interim specifications.
- LIVE LOAD SURCHARGE:.....Up to 2' of fill on level ground surface.
- ADDITIONAL DEAD LOAD:.....Up to 2" Non-Structural Concrete on exterior face included.
- SEISMIC PARAMETERS:..... $0.40g < A_s \leq 0.60g$
- FOUNDATION SOIL:..... $\phi \geq 28^\circ$; Special footing design is required where foundation material is incapable of supporting bearing stress listed in the table.
- RETAINED SOIL:..... $32^\circ \leq \phi \leq 36^\circ$
 $120 \text{ pcf} \leq \gamma \leq 140 \text{ pcf}$
- REINFORCED CONCRETE:.....Class A Concrete, $f'_c = 4,000 \text{ psi}$
- REINFORCEMENT:.....ASTM A706 or A615, Grade 60, $F_y = 60,000 \text{ psi}$
- LOAD COMBINATIONS AND LIMIT STATES:.....
 Service I = $1.0DC + 1.0EV + 1.0EH + 1.0LS$
 Strength I = $\alpha DC + \beta EV + \eta EH + 1.75LS$
 Extreme I = $1.0DC + 1.0EV + 1.0EH + 1.0EQD + 1.0EQE$

Where:

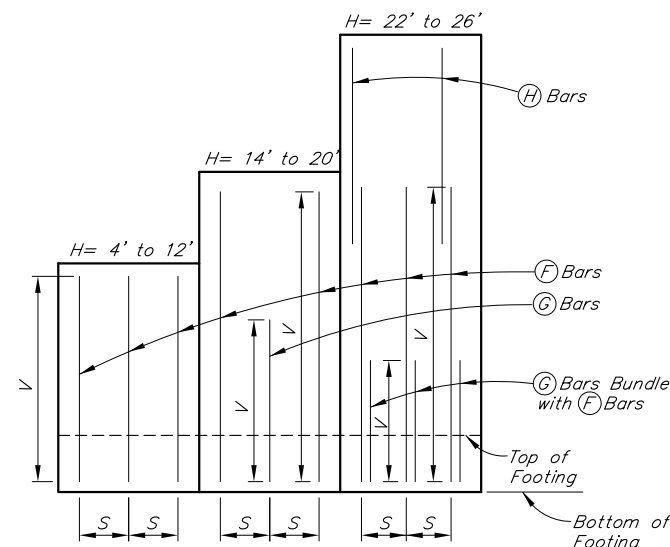
- α :.....1.25 or 0.90, Whichever Controls Design
- β :.....1.35 or 1.00, Whichever Controls Design
- η :.....1.50 or 0.90, Whichever Controls Design
- DC:.....Dead Load of Structure Components
- EH:.....Horizontal Earth Fill Pressure
- EV:.....Vertical Earth Pressure from Earth Fill Weight
- EQE:.....Seismic Earth Pressure
- EQD:.....Soil and Structural and Nonstructural Components Inertia
- LS:.....Live Load Surcharge



See "B-07.10" for details not shown

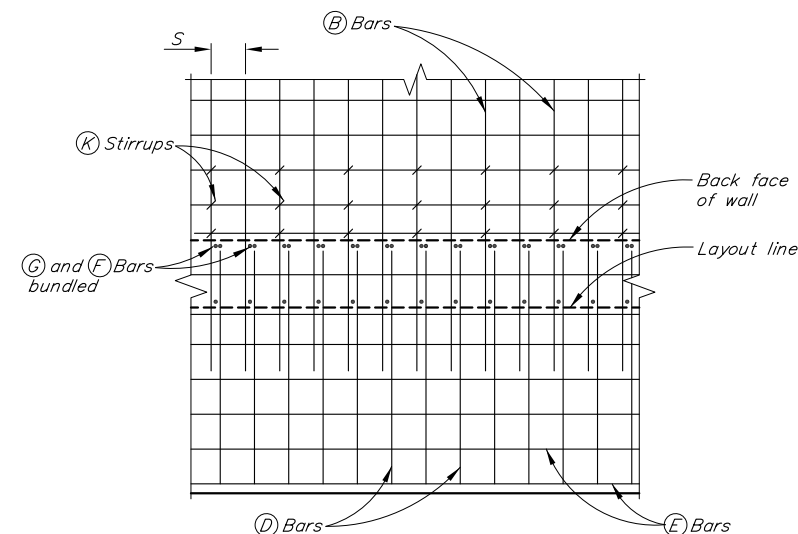
ABBREVIATIONS:

- Ser I - Service I limit state
- Str I - Strength I limit state
- Ext I - Extreme event I limit state
- B' - Effective footing width (ft)
- qo - Gross uniform bearing stress (ksf)
- F.G. - Finished grade



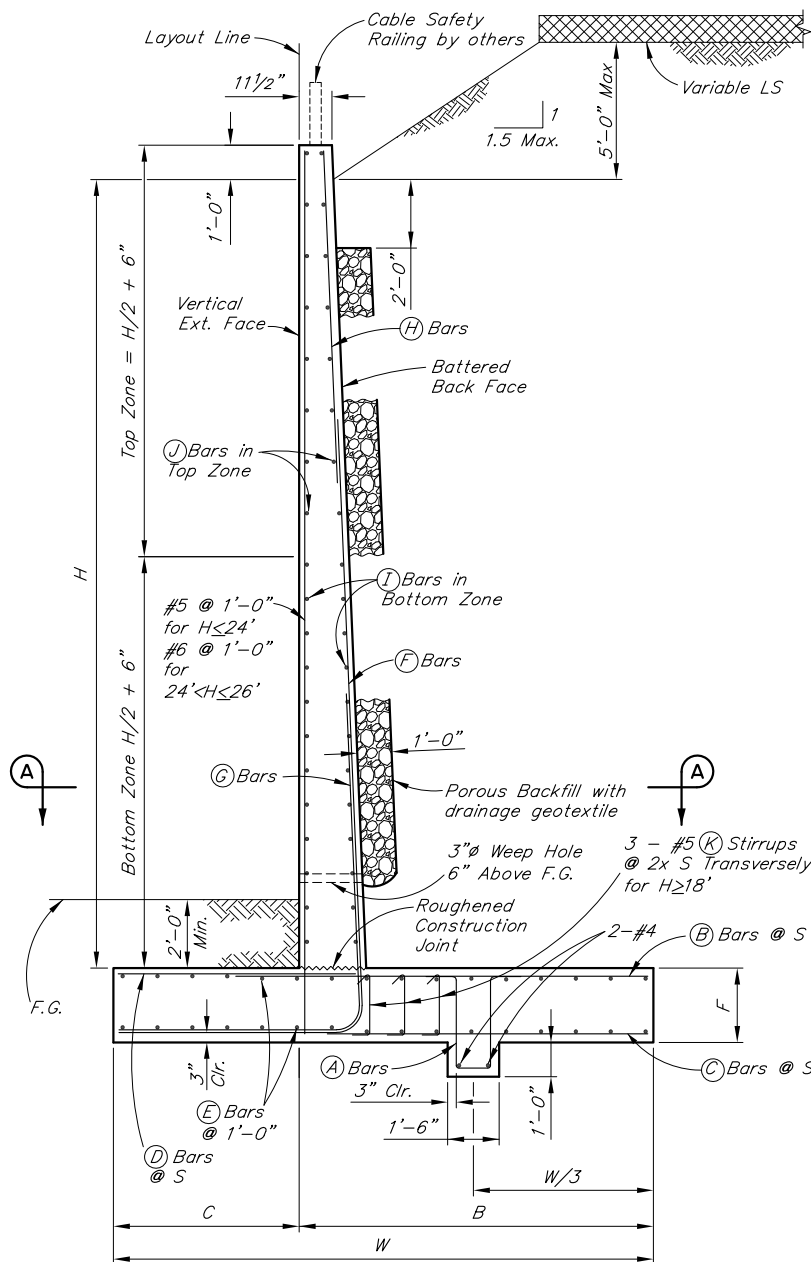
BACK FACE ELEVATION

No Scale



SECTION A-A

No Scale



TYPICAL SECTION

No Scale

TABLE OF DIMENSIONS, REINFORCING STEEL, AND DATA

DIMENSIONS							(A) BARS		(B) BARS		(C) BARS		(D) BARS		(E) BARS		(F) BARS			(G) BARS			(H) BARS		(I) BARS		(J) BARS		EFFECTIVE FOOTING WIDTHS AND BEARING PRESSURES			Steel (Lbs/ft) Concrete (CF/ft)	
H	W	F	C	B	Batter	Spacing S	Size	Spacing	Length	Size	Length	Size	Length	Size	Length	Size	Size	V	Length	Size	V	Length	Size	Length	Size	Spacing	Size	Spacing	Ser I B'-qo	Str I B'-qo	Ext I B'-qo		
4'-0"	4'-0"	1'-0"	1'-3"	2'-9"	1/2":12"	12"	#4	1'-6"	6'-2"	#4	2'-8"	#4	2'-3"	#4	1'-11"	#4	#4	4'-10"	7'-8"	-	-	-	-	-	#4	1'-6"	#4	1'-6"	2.9-1.2	2.6-1.8	1.4-3.2	30-10.9	
6'-0"	5'-6"	1'-3"	1'-9"	3'-9"	1/2":12"	12"	#4	1'-6"	6'-8"	#4	3'-11"	#4	3'-2"	#4	2'-5"	#4	#6	6'-10"	10'-6"	-	-	-	-	-	#4	1'-0"	#4	1'-6"	4.2-1.5	3.7-2.2	2.2-3.5	51-16.2	
8'-0"	6'-6"	1'-3"	2'-0"	4'-6"	1/2":12"	12"	#4	1'-6"	6'-8"	#5	5'-0"	#4	3'-10"	#4	2'-8"	#4	#6	8'-10"	12'-10"	-	-	-	-	-	#4	1'-0"	#4	1'-6"	4.9-1.9	4.3-2.8	2.4-4.4	63-20.0	
10'-0"	7'-6"	1'-6"	2'-3"	5'-3"	1/2":12"	9"	#4	1'-6"	7'-2"	#5	5'-8"	#4	4'-6"	#4	2'-11"	#4	#7	10'-10"	15'-5"	-	-	-	-	-	#4	1'-0"	#4	1'-0"	5.4-2.4	4.8-3.6	2.6-5.7	100-25.9	
12'-0"	8'-6"	1'-8"	2'-9"	5'-9"	5/8":12"	9"	#4	1'-6"	7'-6"	#5	5'-11"	#4	4'-9"	#4	3'-5"	#4	#8	12'-10"	18'-4"	-	-	-	-	-	#4	1'-0"	#4	1'-0"	6.1-2.7	5.4-4.2	2.9-6.6	131-32.6	
14'-0"	9'-6"	1'-8"	2'-9"	6'-9"	5/8":12"	6"	#4	1'-6"	7'-6"	#6	7'-3"	#4	5'-8"	#4	3'-5"	#4	#8	14'-10"	20'-5"	#8	8'-10"	13'-0"	-	-	-	#5	1'-0"	#4	1'-0"	6.6-3.3	5.9-5.0	3.4-7.4	185-37.6
16'-0"	10'-6"	1'-10"	3'-3"	7'-3"	5/8":12"	6"	#4	1'-6"	7'-10"	#6	7'-7"	#4	6'-1"	#4	3'-11"	#5	#9	16'-10"	23'-3"	#9	10'-3"	15'-0"	-	-	-	#5	1'-0"	#4	1'-0"	7.3-3.6	6.5-5.5	3.7-8.1	243-44.6
18'-0"	11'-6"	2'-0"	3'-6"	8'-0"	5/8":12"	6"	#4	1'-6"	8'-2"	#7	8'-8"	#4	6'-9"	#4	4'-2"	#5	#10	18'-10"	25'-9"	#10	11'-10"	16'-11"	-	-	-	#5	1'-0"	#4	1'-0"	7.9-4.1	7.0-6.3	4.1-8.9	327-52.2
20'-0"	12'-9"	2'-0"	4'-0"	8'-9"	3/4":12"	6"	#4	1'-6"	8'-2"	#8	9'-6"	#4	7'-2"	#4	4'-8"	#5	#10	20'-10"	28'-7"	#10	12'-6"	18'-5"	-	-	-	#5	1'-0"	#4	1'-0"	9.2-4.3	8.2-6.5	5.2-8.4	371-61.0
22'-0"	14'-0"	2'-0"	4'-3"	9'-9"	3/4":12"	6"	#4	1'-6"	8'-2"	#9	11'-1"	#4	8'-0"	#4	4'-11"	#5	#8	17'-7"	25'-7"	#8	11'-10"	18'-2"	#6	17'-2"	#5	1'-0"	#5	1'-0"	10.7-4.4	9.8-6.5	6.2-8.4	472-68.1	
24'-0"	16'-0"	2'-2"	5'-0"	11'-0"	3/4":12"	6"	#4	1'-6"	8'-6"	#10	13'-2"	#4	9'-2"	#4	5'-8"	#5	#9	20'-9"	29'-11"	#9	13'-3"	20'-5"	#6	18'-6"	#5	1'-0"	#5	1'-0"	13.5-4.3	12.6-6.2	8.5-7.4	633-79.7	
26'-0"	17'-6"	2'-2"	5'-3"	12'-3"	7/8":12"	6"	#4	1'-6"	8'-6"	2x#9	13'-1"	#4	10'-0"	#4	5'-11"	#5	#9	20'-1"	29'-10"	#9	13'-11"	21'-9"	#7	20'-2"	#6	1'-0"	#5	1'-0"	15.2-4.5	14.4-6.4	10.0-7.4	755-91.9	

State of Alaska DOT&PF
ALASKA STANDARD PLAN
CANTILEVER RETAINING WALL
TYPE III - HIGH SEISMIC

Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 07/17/2020

Last Code and Stds. Review By: NWM Date: 7/17/20

Next Code and Standards Review date: 07/17/2030

DRAWN BY: MCM

CHECKED BY: BAS

DESIGNED BY: NWM

B-06.10HS