NO.	
CW-1.	

	TYPE 1A - REINFORCED TABLE OF DIMENSIONS			
ment data	Design H W F C	4' 3'-5'' 1'-4'' 1'	6' 4'-11'' 1'-4'' 1'-3''	8' 6'-5'' 1'-4'' 1'-9''
Layout and reinforcement	Batter, Z  ⑤ bars ⑥ bars ⑥ bars ⑥ bars ⑥ bars ⑥ bars L 1 L 2	1/2 - #5@12'' #5@12'' #5@18'' - -	1/2 - +5@12" +5@12" +5@18" - -	1/2 - #5@12" #5@12" #5@18" - -
Est'd Qtys	Concrete ft <sup>3</sup> /ft Reinf lbs/ft	8.9 31	13.3 42	17.9 54
Max Toe Pressure (ksf)	Level Slope w/surch. Level Slope @ 0.15g Level Slope @ 0.25g Level Slope @ 0.35g Level Slope @ 0.40g Level Slope @ 0.50g	1.2 1.0 1.1 1.1 1.2	1.4 1.3 1.4 1.4 1.5	1.6 1.5 1.6 1.7 1.7

Ō		" "	1	" "
	F	1'-4''	1'-4''	1'-4''
Jen Jen	С	1'	1'-3''	1'-9''
reinforcement				
or o	Batter, Z	1/2	1/2	1/2
nfc	♠ bars	_	_	-
ē.	(b) bars	_	_	-
	© bars	#5@12''	#5@12''	#5@12"
Ъ	ⓓ bars	#5@12''	#5@12''	#5@12''
Layout and	e bars	# 5@18"	#5@18''	#5@18"
5	L 1	_	_	-
ĭ	L <sub>2</sub>	-	_	_
p.	Concrete ft <sup>3</sup> /ft	8.9	13.3	17.9
Est'd Qtys	Reinf lbs/ft	31	42	54
	Level Slope w/surch.	1.2	1,4	1.6
ψψ		1.0	1.3	1.5
Max Toe Pressure (ksf)	Level Slope @ 0.25g	1.1	1.4	1.6
Max Press (ks	Level Slope @ 0.35g	1.1	1.4	1.7
۶ آ	Level Slope @ 0.40g	1.2	1.5	1.7
	Level Slope @ 0.50g	1.2	1.6	1.8

GENERAL NOTES:

to 2 feet of earth.

at 28 days.

Soil Properties:

(Level Backfill)

(2H: 1V Backfill)

Unit Weight = 120 pcf Cohesion = 0.200 ksf

Method (Sloping Backfill)

(Top of Footing Down)

unless specified in the plans.

1. Design Specifications: AASHTO LRFD Bridge Design

2. Loading: Live load surcharge pressure equal

Seismic Acceleration = 0.15g, 0.25g, 0.35g, 0.40g and 0.50g, where  $\frac{1}{2}$  the peak ground

or AA modified (major) with f'c = 4000 psi

5. Design Data: Cantilevered Walls are designed based on the following parameters.

Internal Angle of Friction = 32 degrees

Equivalent Active Fluid Pressure = 0.036 kcf

Equivalent Active Fluid Pressure = 0.060 kcf

Equivalent Passive Fluid Pressure = 0.360 pcf

6. Return Walls: Return wall not required unless shown in plans. For dimension (D), see project plans.

7. Drainage: Drainage system (gutter, drain, pipe) not required

Equivalent Active Fluid Pressure = Rankine

Coefficient of Friction between Concrete Footing and Foundation Soil = 0.450

Specifications, 6th Edition 2012.

acceleration is used in the design. 3. Concrete: All concrete shall be class A

4. Reinforcing Steel: All reinforcing steel shall be ASTM A615 grade 60 or A706.

REINFORCED CONCRETE RETAINING WALL TYPE 1A						
Wall Type Required for Backfill Condition Seismic Acceleration						
	0.15g	0.25g	0.35g	0.40g	0.50g	
Level backfill w/surcharge	1A	1A	1A	1A	1A	

. Wii	- 1'			
1		Level Backfill	III]	Ī.
2'' C  ½'' Aesthetic Patterning  Concrete Quantity Not	r     -	-0		
#5 @ 16"- "5 @ 16"-		#5 @ 32"		H
LOL		Batter 12	L <sub>2</sub>	Design H
Wax 2/01		Const Jt (See Note 2)		
Cover Min		#5 @ 16" Top 8	s Bot	ட
		Ţ.	<b>,</b>	
-	l			

STANDARD BAR LAPS						
BAR#	UNCOATED	EPOXIED				
4	20''	23''				
5	26''	30''				
6	31''	36"				
7	39''	45"				
8	51''	59"				
9	59"	67''				
10	75''	85"				
11	91''	102''				
	BAR # 4 5 6 7 8	BAR# UNCOATED 4 20" 5 26" 6 31" 7 39" 8 51" 9 59" 10 75"				

			<u>≡</u> 100	
1/2" Aesthetic Patterning (Concrete Quantity Not — Included In Table)	2" Clr	•		
	lıl H	#5 @ 32"	=	
LC		Z Batter 12		Design
#5 @ 16"  12"  4' Mi  FG  -2% Min  2:\ Nox Slope		Const Jt (See Note 2)	L2	
-6" Min		#5 @ 16" Top &	Bot L	_
ř -	с <u></u>			

TYPICAL SECTION: TYPE 1A

	BAH	⊀ #
NOTES:	4	1
1. FOR DETAILS NOT SHOWN AND DRAINAGE REQUIREMENTS SEE	5	5
STANDARD PLAN SHEETS B-30.1.3 THRU B-30.1.5.	6	3
		_

2.	ROUGHEN	CONSTRUCTION	JOINT	SURFACE	ΤO	1/4"	AMPLITUDE

3. THIS SHEET SUPERCEDES STANDARD PLAN SHEET B-30.1.1

STATE OF NEVADA DEPARTMENT OF TRANSPORTATION

SPECIAL DETAIL TYPE 1A CANTILEVER CONCRETE RETAINING WALLS (LRFD)

B-30.1.1-SD		Signed Original On File			
ADOPTED 03/13	REVISED	CHIEF	BRIDGE	ENGINEER	