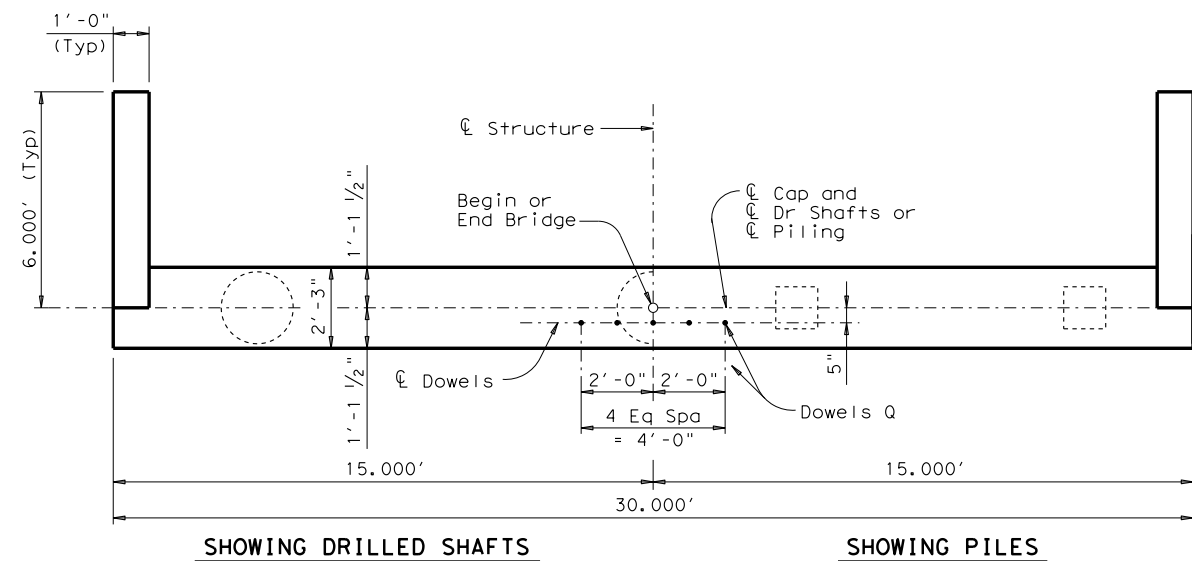
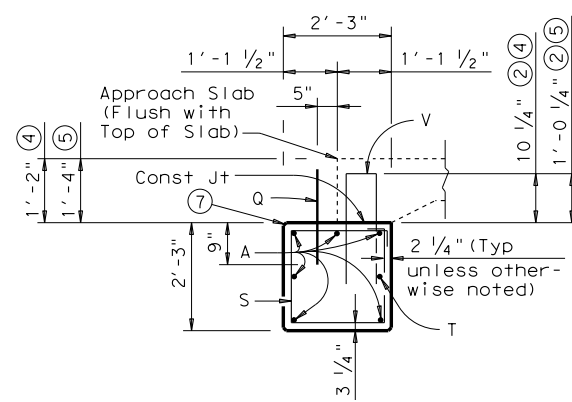


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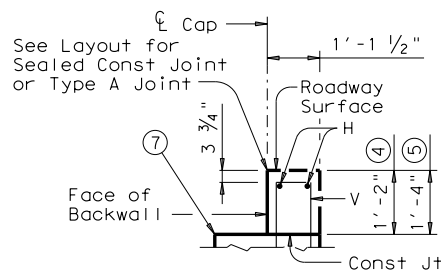
DATE: FILE:



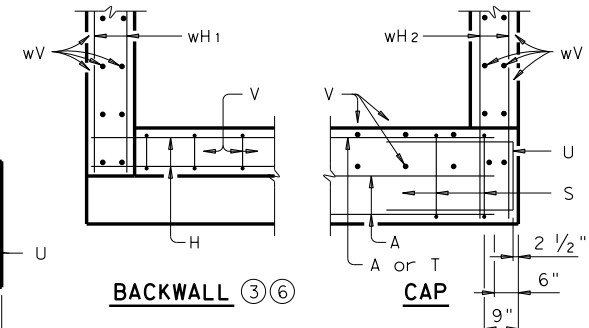
SHOWING DRILLED SHAFTS PLAN SHOWING PILES



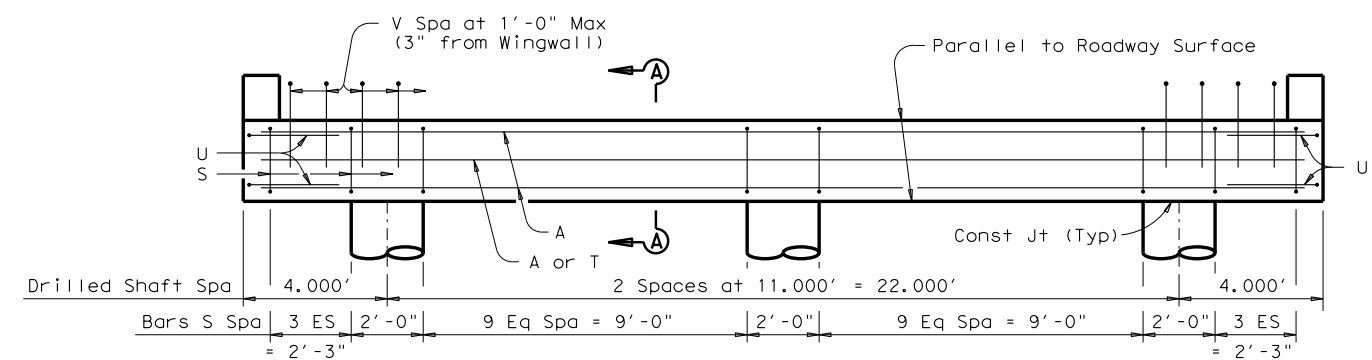
SECTION A-A (With Approach Slab)



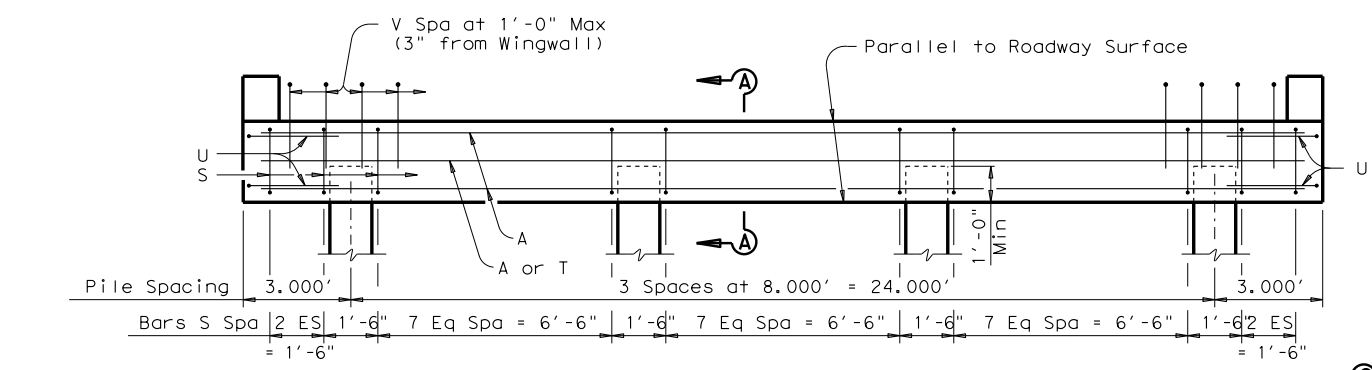
BACKWALL DETAIL (Without Approach Slab)



CORNER DETAILS

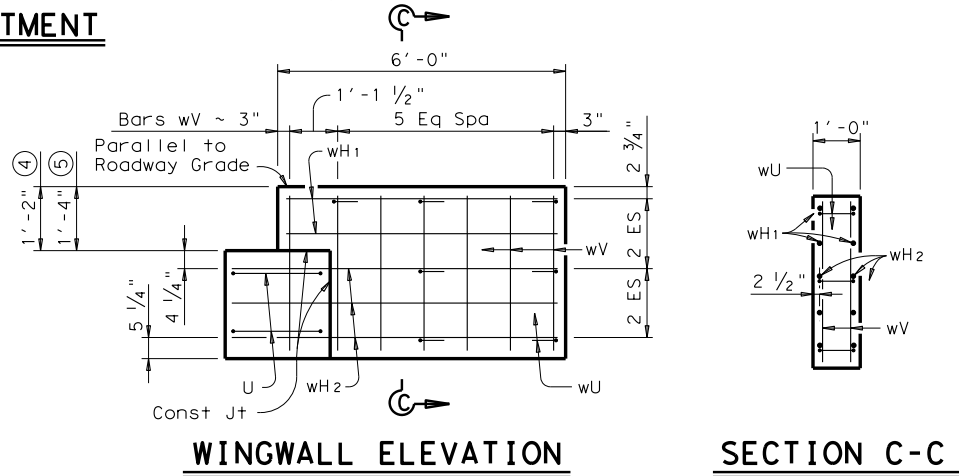
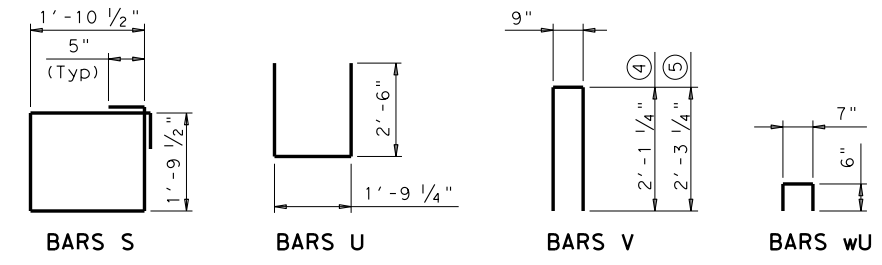


ELEVATION ~ DRILLED SHAFT ABUTMENT

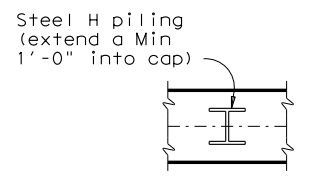


ELEVATION ~ PILING ABUTMENT

Note: For piling larger than 16", adjust Bars S and/or strip back piling as required to clear cap reinforcing.



WINGWALL ELEVATION SECTION C-C



ORIENTATION OF STEEL H PILING

14" SLAB ~ TABLE OF ESTIMATED QUANTITIES ①											
DRILLED SHAFT ABUT					PILING ABUTMENT						
Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight		
A	6	#11	29'-0"	924	A	6	#11	29'-0"	924		
Q	5	#6	1'-6"	11	Q	5	#6	1'-6"	11		
S	28	#4	8'-2"	153	S	30	#4	8'-2"	164		
T	1	#5	29'-0"	30	T	1	#5	29'-0"	30		
U	4	#6	6'-9"	41	U	4	#6	6'-9"	41		
V	29	#5	5'-0"	151	V	29	#5	5'-0"	151		
wH1	8	#6	5'-8"	68	wH1	8	#6	5'-8"	68		
wH2	12	#6	6'-10"	123	wH2	12	#6	6'-10"	123		
wU	14	#4	1'-7"	15	wU	14	#4	1'-7"	15		
wV	28	#5	3'-1"	90	wV	28	#5	3'-1"	90		
Reinforcing Steel				Lb	1,606	Reinforcing Steel				Lb	1,617
Class "C" Concrete				CY	7.0	Class "C" Concrete				CY	7.0

16" SLAB ~ TABLE OF ESTIMATED QUANTITIES ①											
DRILLED SHAFT ABUT					PILING ABUTMENT						
Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight		
A	6	#11	29'-0"	924	A	6	#11	29'-0"	924		
Q	5	#6	1'-6"	11	Q	5	#6	1'-6"	11		
S	28	#4	8'-2"	153	S	30	#4	8'-2"	164		
T	1	#5	29'-0"	30	T	1	#5	29'-0"	30		
U	4	#6	6'-9"	41	U	4	#6	6'-9"	41		
V	29	#5	5'-4"	161	V	29	#5	5'-4"	161		
wH1	8	#6	5'-8"	68	wH1	8	#6	5'-8"	68		
wH2	12	#6	6'-10"	123	wH2	12	#6	6'-10"	123		
wU	14	#4	1'-7"	15	wU	14	#4	1'-7"	15		
wV	28	#5	3'-3"	95	wV	28	#5	3'-3"	95		
Reinforcing Steel				Lb	1,621	Reinforcing Steel				Lb	1,632
Class "C" Concrete				CY	7.0	Class "C" Concrete				CY	7.0

- ① Quantities shown are for one Abutment only (with Approach Slab). With no Approach Slab, add 62 Lbs Reinforcing Steel for 2 ~ #5 Bars H (29'-8") and the following amounts of concrete:  
14" slab thickness add 1.4 CY Class "C" Concrete.  
16" slab thickness add 1.6 CY Class "C" Concrete.
- ② Increase as required to maintain 3 3/4" from Finished Grade.
- ③ See Layout to determine if Approach Slab is present.
- ④ Use with 14" slab thickness.
- ⑤ Use with 16" slab thickness.
- ⑥ Omit Bars H if Approach Slab is present.
- ⑦ See standard CS-MD for Preformed Bituminous Fiber Material.

**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Specifications. All cap and wall reinforcing shall be Grade 60. Concrete strength  $f'c = 3,600$  psi. Designed for normal embankment header slope of 3:1. See Layout for foundation type, size and length. See standard FD for foundation details and notes. See standard CS-MD for joint details and details not shown.  
 Calculated Foundation Loads: 40 Tons/Drilled Shaft  
 30 Tons/Pile.  
 These abutment details may be used with standards CS-25-28, CS-50-28, CS-75-28 and CS-80-28 only.

HL93 LOADING

		Bridge Division Standard	
<b>ABUTMENTS FOR C-I-P CONC SLAB SPANS</b>			
<b>28 FT ROADWAY</b>			
<b>ACS-28</b>			
FILE: acs05ste.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT
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REVISIONS			HIGHWAY
	DIST	COUNTY	SHEET NO.