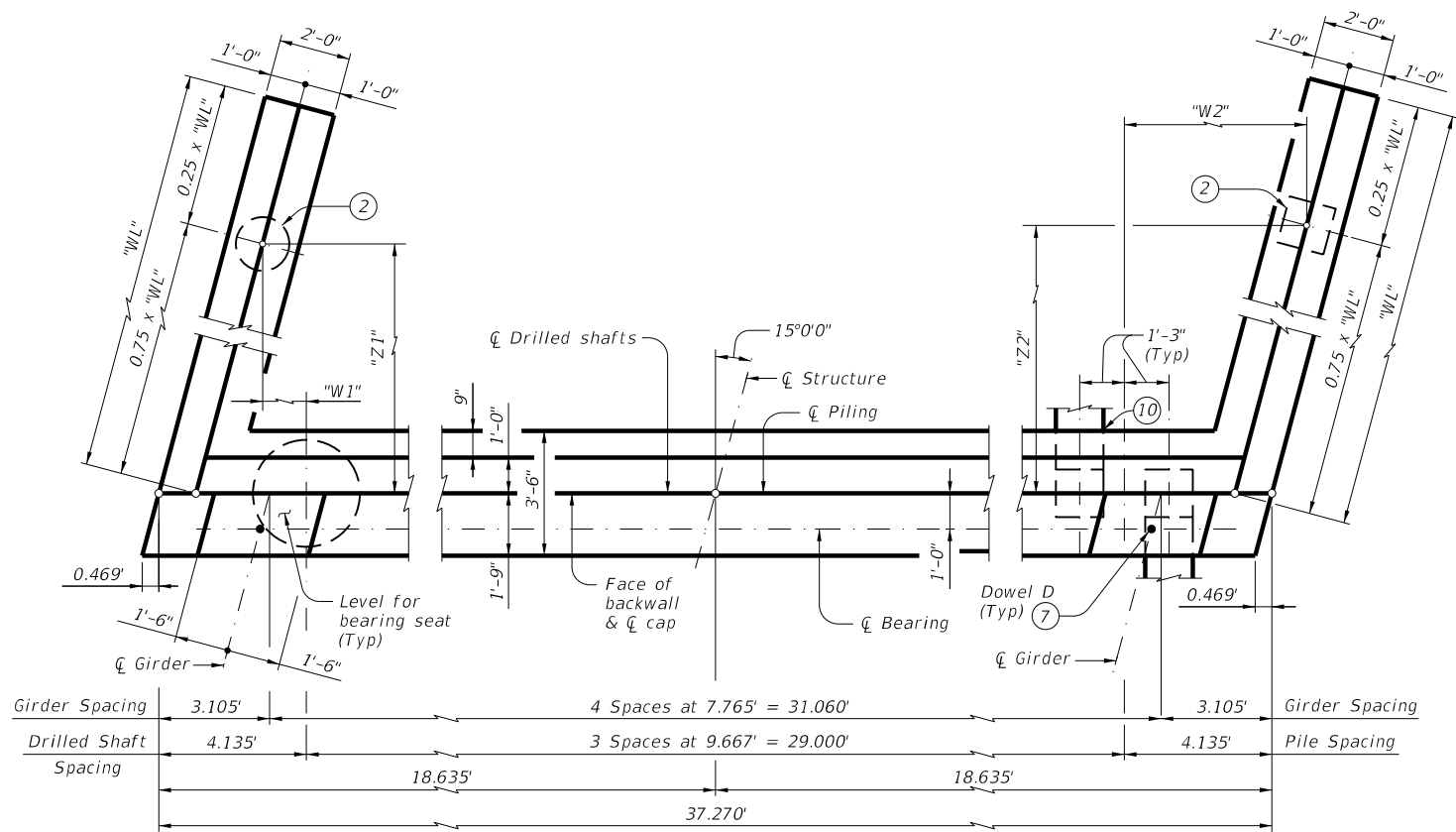
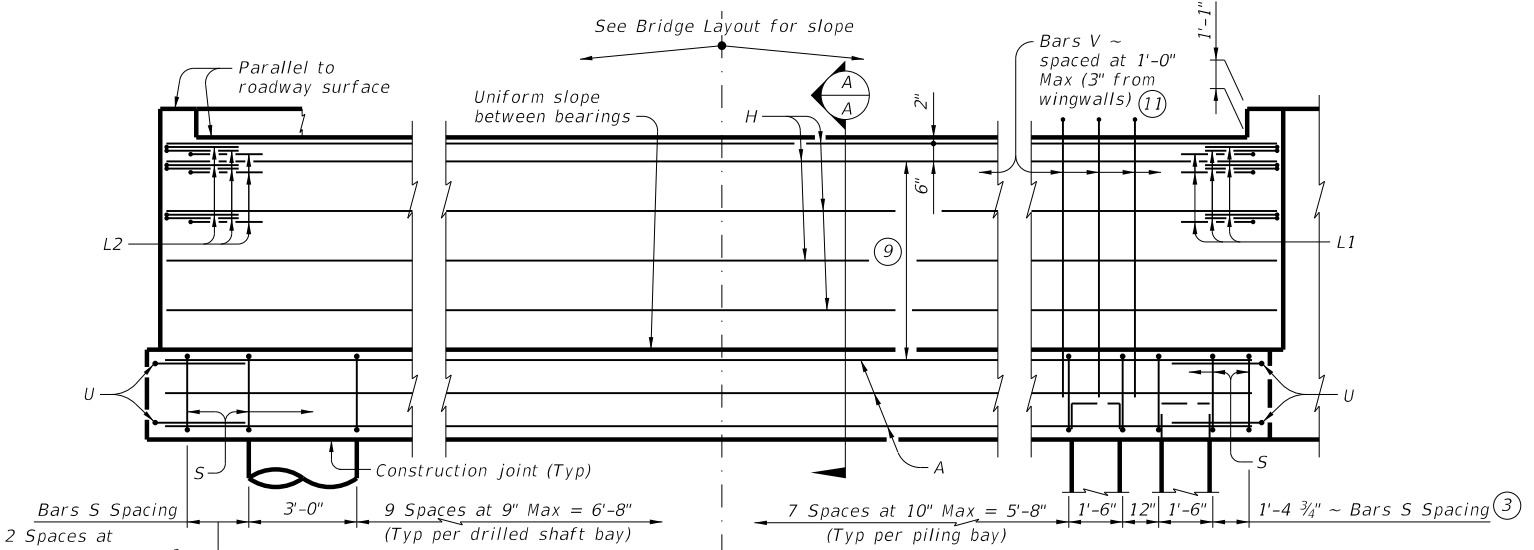


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DATE: FILE:

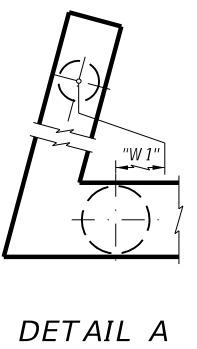


PLAN 1

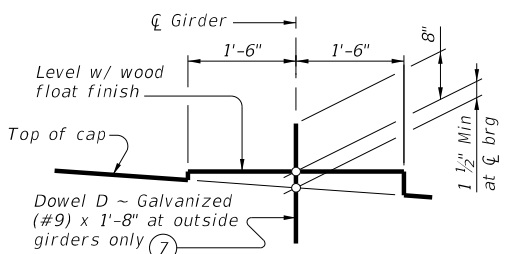


ELEVATION

Header Slope	Girder Type	Wingwall Type	Wingwall Lgth "WL"	"W1" (12)	"Z1"	"W2"	Z2"				
2:1	Tx28	Cantilevered	8.000'	Not Applicable							
	Tx34	Cantilevered	9.000'								
	Tx40	Cantilevered	10.000'								
	Tx46	Cantilevered	11.000'								
	Tx54	Founded	13.000'	0.576'	9.418'	5.623'	9.418'				
3:1	Tx28	Cantilevered	12.000'	Not Applicable							
	Tx34	Founded	14.000'					0.382'	10.142'	5.817'	10.142'
	Tx40	Founded	15.000'					0.188'	10.867'	6.011'	10.867'
	Tx46	Founded	17.000'					-0.200'	12.316'	6.400'	12.316'
	Tx54	Founded	19.000'	-0.589'	13.764'	6.788'	13.764'				

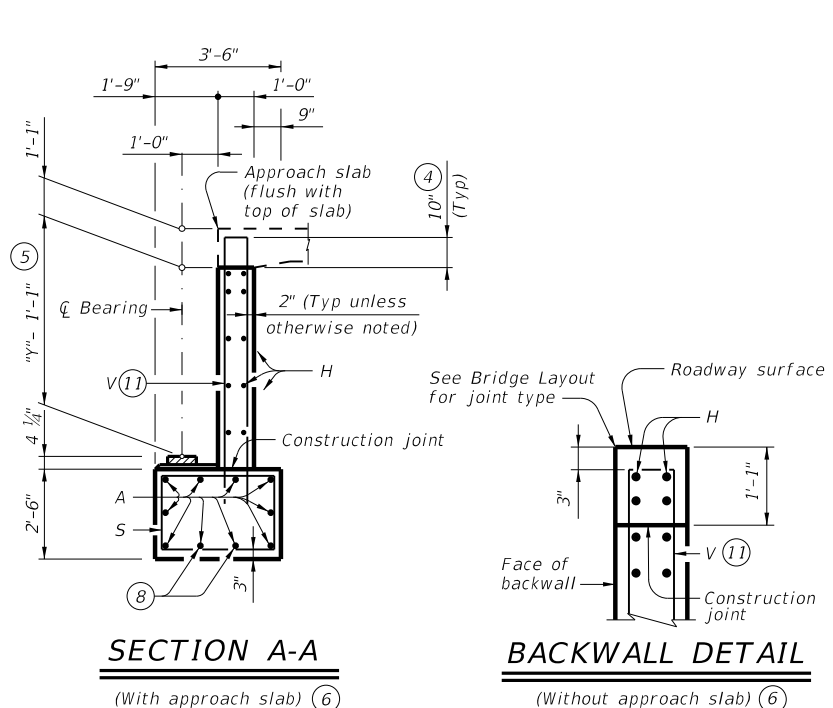


DETAIL A



BEARING SEAT DETAIL

(Bearing surface must be clean and free of all loose material before placing bearing pad.)



SECTION A-A

BACKWALL DETAIL


- See Table A for variable dimensions based on header slope and girder type.
- See Table A to determine if this wingwall foundation is required.
- For piling larger than 16" adjust Bars S spacing as required to avoid piling.
- Increase as required to maintain 3" from finished grade.
- See Span details for "Y" value.
- See Bridge Layout to determine if approach slab is present.
- Omit Dowels D at end of multi-span unit. Adjust reinforcing steel total accordingly.
- With pile foundations, move Bars A shown to clear piles.
- Spacing based on girder type:
Tx28 ~ 3 spaces at 1'-0" Max
Tx34 ~ 3 spaces at 1'-0" Max
Tx40 ~ 4 spaces at 1'-0" Max
Tx46 ~ 4 spaces at 1'-0" Max
Tx54 ~ 5 spaces at 1'-0" Max
- See Detail A on the Common Foundation Details (FD) standard.
- Field bend as needed to clear piles.
- Negative values for the "W1" dimension indicates a wingwall foundation on the other side of the cap foundation from what is shown in plan view. See Detail A.

Span Length Ft	All Girder Types	
	Tons/Shaft	Tons/Pile
40	57	52
45	61	54
50	64	56
55	68	58
60	72	60
65	75	62
70	79	63
75	83	65
80	86	67
85	90	69
90	93	71
95	97	73
100	100	74
105	104	76
110	107	78
115	111	80
120	114	82
125	118	83

MATERIAL NOTES:
Provide Class C concrete ($f'_c = 3,600$ psi).
Provide Class C (HPC) concrete if shown elsewhere in the plans.
Provide Grade 60 reinforcing steel.
Galvanize dowel bars D.

GENERAL NOTES:
Designed according to AASHTO LRFD Bridge Design Specifications.
See Bridge Layout for header slope and foundation type, size and length.
See Common Foundation Details (FD) standard sheet for all foundation details and notes.
See Concrete Riprap (CRR) standard sheet or Stone Riprap (SRR) standard sheet for riprap attachment details, if applicable.
See applicable rail details for rail anchorage in wingwalls.
Details are drawn showing right forward skew. See Bridge Layout for actual skew direction.
These abutment details may be used with standard SIG-34-15 only.

Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bar dimensions shown are out-to-out of bar.



Bridge Division Standard

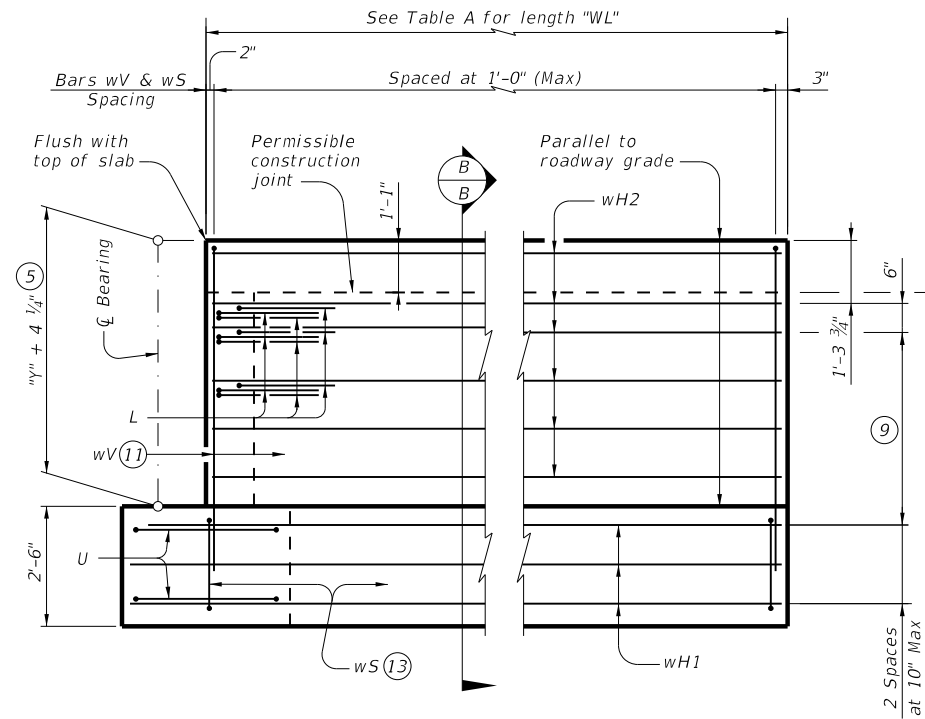
ABUTMENTS
TYPE TX28 THRU TX54
PRESTR CONC I-GIRDERS
34' ROADWAY 15° SKEW

AIG-34-15

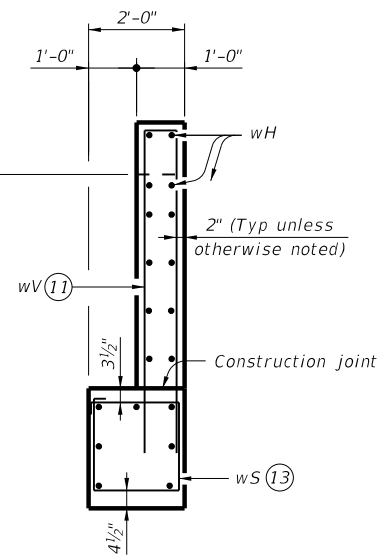
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©TxDOT January 2023	CONT	SECT	JOB	HIGHWAY
REVISIONS				
05/2024: Updated FDN loads.	DIST	COUNTY	SHEET NO.	

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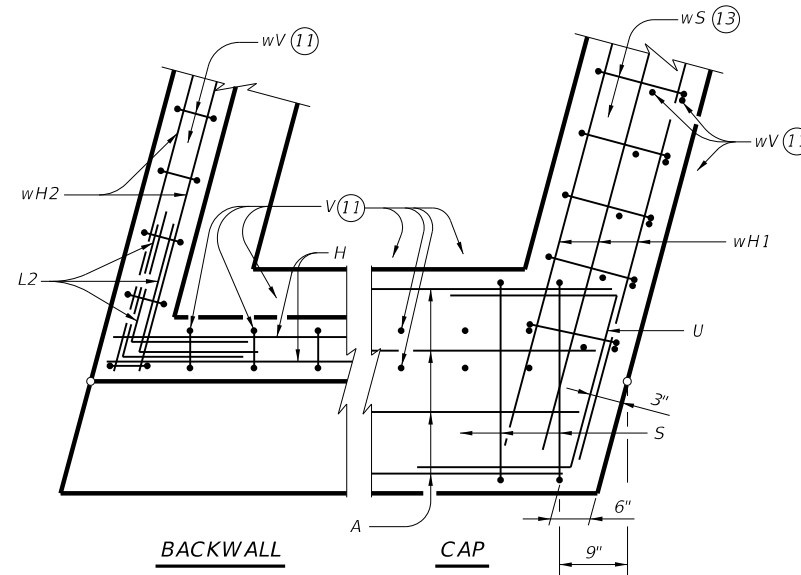
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WINGWALL ELEVATION

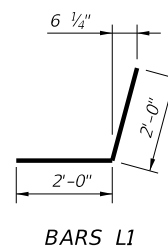
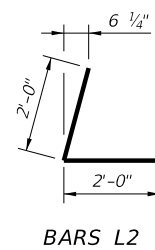
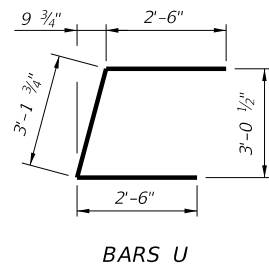
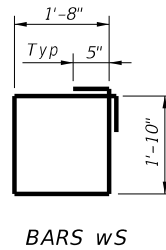
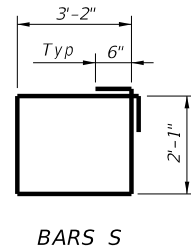
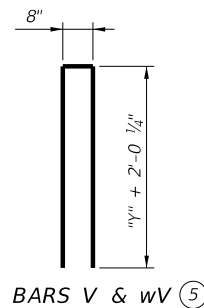


SECTION B-B



CORNER DETAILS

- ⑤ See Span details for "Y" value.
- ⑨ Spacing based on girder type:
Tx28 ~ 3 spaces at 1'-0" Max
Tx34 ~ 3 spaces at 1'-0" Max
Tx40 ~ 4 spaces at 1'-0" Max
Tx46 ~ 4 spaces at 1'-0" Max
Tx54 ~ 5 spaces at 1'-0" Max
- ⑪ Field bend as needed to clear piles.
- ⑬ Adjust as required to avoid piling.



HL93 LOADING

SHEET 2 OF 3

		Bridge Division Standard	
ABUTMENTS TYPE TX28 THRU TX54 PRESTR CONC I-GIRDERS 34' ROADWAY 15° SKEW AIG-34-15			
FILE: IG-AIG3415-24.dgn	DN: TAR	CK: VC	DW: SFS
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REVISIONS		HIGHWAY	
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TABLES OF ESTIMATED QUANTITIES WITH 2:1 HEADER SLOPE⁽¹⁴⁾

TYPE Tx28 Girders					TYPE Tx34 Girders					TYPE Tx40 Girders					TYPE Tx46 Girders					TYPE Tx54 Girders									
Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight					
A	10	#11	36'-3"	1,926	A	10	#11	36'-3"	1,926	A	10	#11	36'-3"	1,926	A	10	#11	36'-3"	1,926	A	10	#11	36'-3"	1,926					
D ⁽⁷⁾	2	#9	1'-8"	11	D ⁽⁷⁾	2	#9	1'-8"	11	D ⁽⁷⁾	2	#9	1'-8"	11	D ⁽⁷⁾	2	#9	1'-8"	11	D ⁽⁷⁾	2	#9	1'-8"	11					
H	8	#6	36'-11"	444	H	8	#6	36'-11"	444	H	10	#6	36'-11"	554	H	10	#6	36'-11"	554	H	12	#6	36'-11"	665					
L1	9	#6	4'-0"	54	L1	9	#6	4'-0"	54	L1	9	#6	4'-0"	54	L1	9	#6	4'-0"	54	L1	9	#6	4'-0"	54					
L2	9	#6	4'-0"	54	L2	9	#6	4'-0"	54	L2	9	#6	4'-0"	54	L2	9	#6	4'-0"	54	L2	9	#6	4'-0"	54					
S	33	#5	11'-6"	396	S	33	#5	11'-6"	396	S	33	#5	11'-6"	396	S	33	#5	11'-6"	396	S	33	#5	11'-6"	396					
U	4	#6	8'-2"	49	U	4	#6	8'-2"	49	U	4	#6	8'-2"	49	U	4	#6	8'-2"	49	U	4	#6	8'-2"	49					
V	36	#5	11'-4"	426	V	36	#5	12'-4"	463	V	36	#5	13'-4"	501	V	36	#5	14'-4"	538	V	36	#5	15'-8"	588					
wH1	14	#6	9'-5"	198	wH1	14	#6	10'-5"	219	wH1	14	#6	11'-5"	240	wH1	14	#6	12'-5"	261	wH1	14	#6	14'-5"	303					
wH2	20	#6	7'-8"	230	wH2	20	#6	8'-8"	260	wH2	24	#6	9'-8"	348	wH2	24	#6	10'-8"	385	wH2	28	#6	12'-8"	533					
wS	18	#4	7'-10"	94	wS	20	#4	7'-10"	105	wS	22	#4	7'-10"	115	wS	24	#4	7'-10"	126	wS	28	#4	7'-10"	147					
wV	18	#5	11'-4"	213	wV	20	#5	12'-4"	257	wV	22	#5	13'-4"	306	wV	24	#5	14'-4"	359	wV	28	#5	15'-8"	458					
Reinforcing Steel				Lb	4,095	Reinforcing Steel				Lb	4,238	Reinforcing Steel				Lb	4,554	Reinforcing Steel				Lb	4,713	Reinforcing Steel				Lb	5,184
Class "C" Concrete				CY	20.1	Class "C" Concrete				CY	21.7	Class "C" Concrete				CY	23.4	Class "C" Concrete				CY	25.2	Class "C" Concrete				CY	28.2

TABLES OF ESTIMATED QUANTITIES WITH 3:1 HEADER SLOPE⁽¹⁴⁾

TYPE Tx28 Girders					TYPE Tx34 Girders					TYPE Tx40 Girders					TYPE Tx46 Girders					TYPE Tx54 Girders									
Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight	Bar	No.	Size	Length	Weight					
A	10	#11	36'-3"	1,926	A	10	#11	36'-3"	1,926	A	10	#11	36'-3"	1,926	A	10	#11	36'-3"	1,926	A	10	#11	36'-3"	1,926					
D ⁽⁷⁾	2	#9	1'-8"	11	D ⁽⁷⁾	2	#9	1'-8"	11	D ⁽⁷⁾	2	#9	1'-8"	11	D ⁽⁷⁾	2	#9	1'-8"	11	D ⁽⁷⁾	2	#9	1'-8"	11					
H	8	#6	36'-11"	444	H	8	#6	36'-11"	444	H	10	#6	36'-11"	554	H	10	#6	36'-11"	554	H	12	#6	36'-11"	665					
L1	9	#6	4'-0"	54	L1	9	#6	4'-0"	54	L1	9	#6	4'-0"	54	L1	9	#6	4'-0"	54	L1	9	#6	4'-0"	54					
L2	9	#6	4'-0"	54	L2	9	#6	4'-0"	54	L2	9	#6	4'-0"	54	L2	9	#6	4'-0"	54	L2	9	#6	4'-0"	54					
S	33	#5	11'-6"	396	S	33	#5	11'-6"	396	S	33	#5	11'-6"	396	S	33	#5	11'-6"	396	S	33	#5	11'-6"	396					
U	4	#6	8'-2"	49	U	4	#6	8'-2"	49	U	4	#6	8'-2"	49	U	4	#6	8'-2"	49	U	4	#6	8'-2"	49					
V	36	#5	11'-4"	426	V	36	#5	12'-4"	463	V	36	#5	13'-4"	501	V	36	#5	14'-4"	538	V	36	#5	15'-8"	588					
wH1	14	#6	13'-5"	282	wH1	14	#6	15'-5"	324	wH1	14	#6	16'-5"	345	wH1	14	#6	18'-5"	387	wH1	14	#6	20'-5"	429					
wH2	20	#6	11'-8"	350	wH2	20	#6	13'-8"	411	wH2	24	#6	14'-8"	529	wH2	24	#6	16'-8"	601	wH2	28	#6	18'-8"	785					
wS	26	#4	7'-10"	136	wS	30	#4	7'-10"	157	wS	32	#4	7'-10"	167	wS	36	#4	7'-10"	188	wS	40	#4	7'-10"	209					
wV	26	#5	11'-4"	307	wV	30	#5	12'-4"	386	wV	32	#5	13'-4"	445	wV	36	#5	14'-4"	538	wV	40	#5	15'-8"	654					
Reinforcing Steel				Lb	4,435	Reinforcing Steel				Lb	4,675	Reinforcing Steel				Lb	5,031	Reinforcing Steel				Lb	5,296	Reinforcing Steel				Lb	5,820
Class "C" Concrete				CY	22.7	Class "C" Concrete				CY	25.1	Class "C" Concrete				CY	27.0	Class "C" Concrete				CY	29.7	Class "C" Concrete				CY	33.1

⁽⁷⁾ Omit Dowels D at end of multi-span unit. Adjust reinforcing steel total accordingly.

⁽¹⁴⁾ Quantities shown are for one abutment only (with approach slab). With no approach slab, add 1.4 CY Class "C" concrete and 222 lbs reinforcing steel for 4 additional Bars H.

Bridge Division Standard

ABUTMENTS

TYPE TX28 THRU TX54

PRESTR CONC I-GIRDERS

34' ROADWAY 15° SKEW

AIG-34-15

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