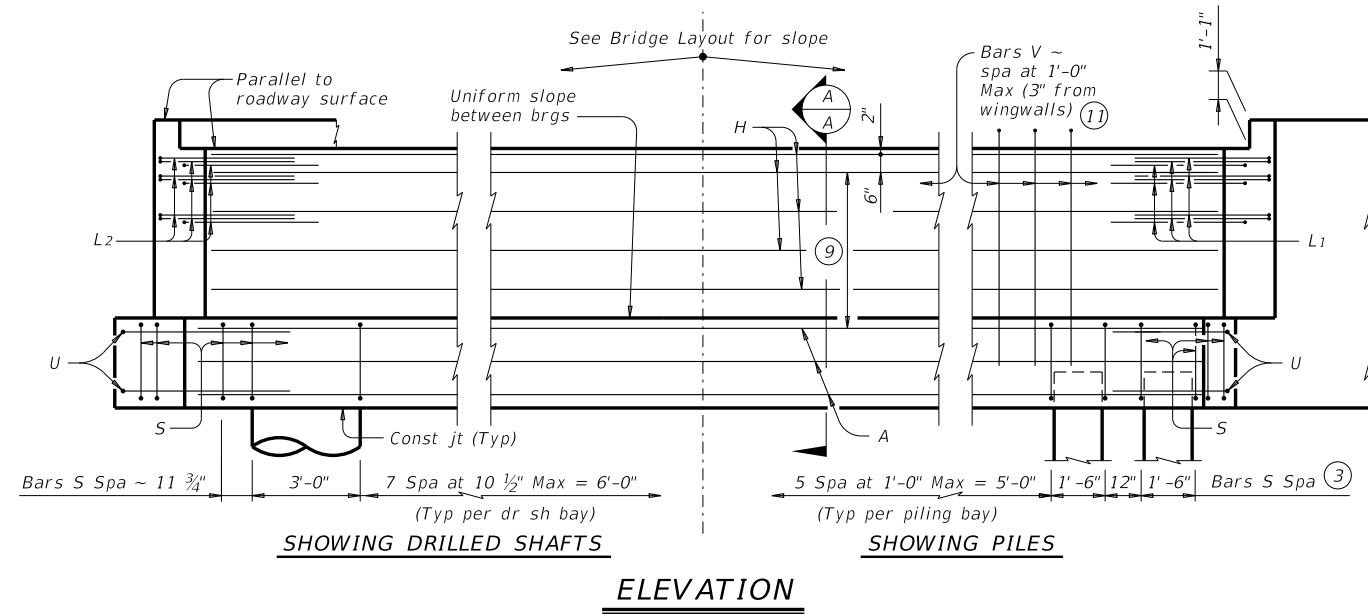
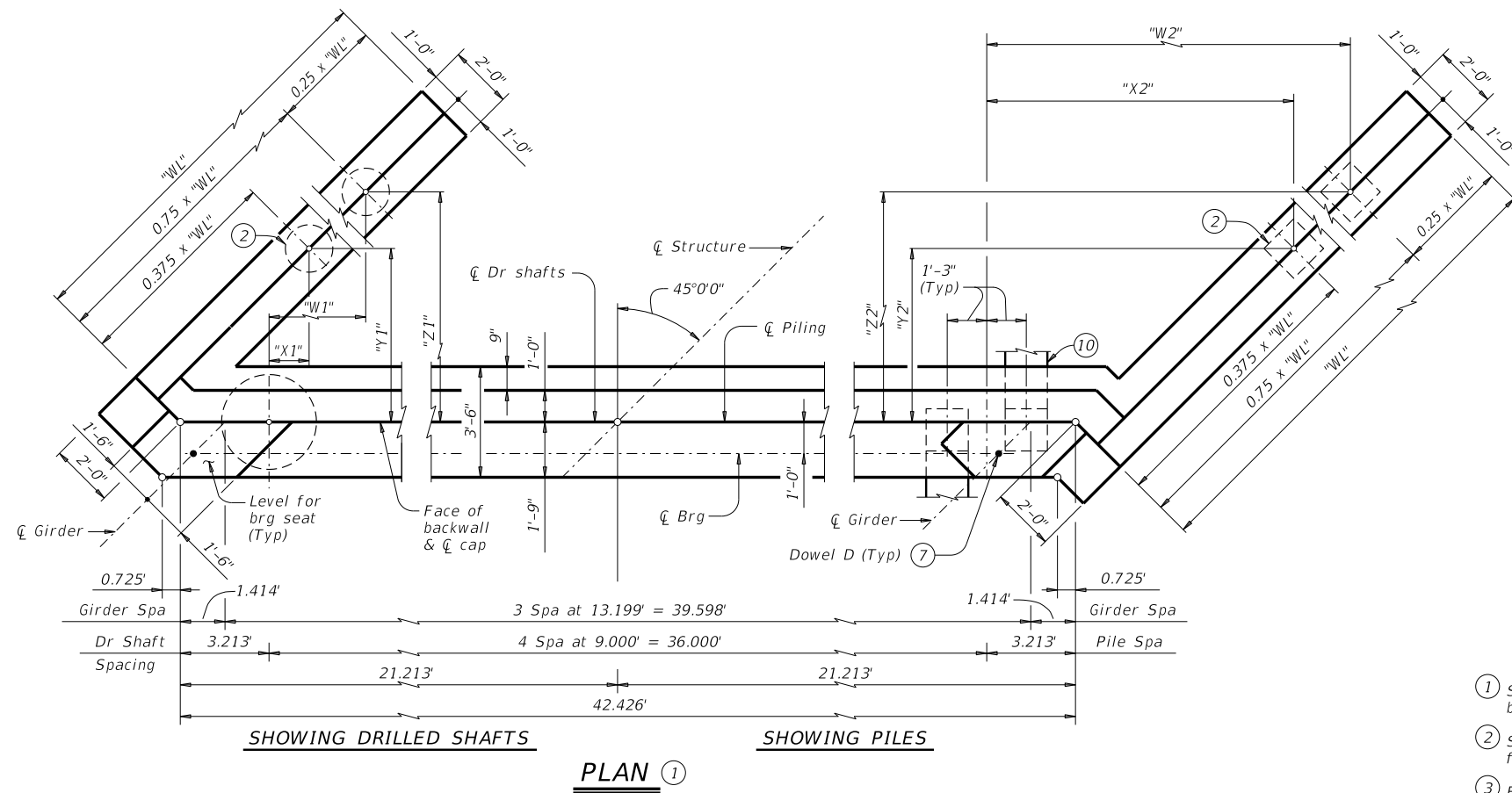


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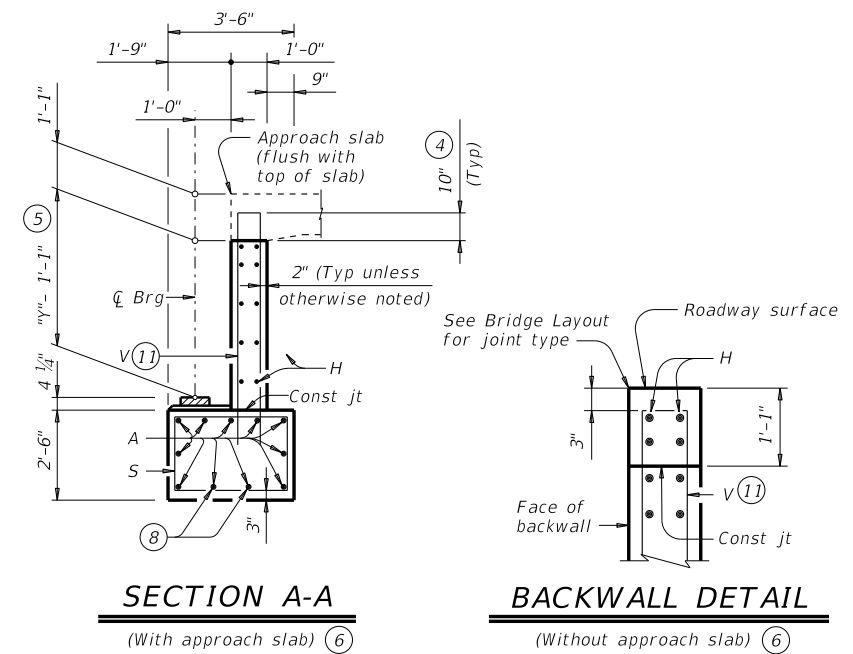
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Header Slope	Girder Type	Wingwall Type	Wingwall Lgth "WL"	"W1"	"X1"	"Y1"	"Z1"	"W2"	"X2"	"Y2"	"Z2"				
2:1	Tx28	Founded	13.000'	2.974'	Not Applicable			7.601'	10.814'	Not Applicable	6.187'				
	Tx34		14.000'	3.505'				8.132'	11.345'		6.718'				
	Tx40		16.000'	4.565'				9.192'	12.405'		7.778'				
	Tx46		17.000'	5.096'				9.723'	12.936'		8.309'				
	Tx54		19.000'	6.156'			10.783'	13.996'		9.369'					
3:1	Tx28	Founded	18.000'	5.626'	Not Applicable			10.253'	13.466'	Not Applicable	8.839'				
	Tx34		20.000'	6.686'				11.314'	14.527'		9.899'				
	Tx40		22.000'	7.747'				12.374'	15.587'		10.960'				
	Tx46		25.000'	9.338'				2.709'	7.336'		13.965'	17.178'	10.549'	5.922'	12.551'
	Tx54		27.000'	10.399'				3.239'	7.867'		15.026'	18.239'	11.080'	6.452'	13.612'

TABLE OF FOUNDATION LOADS

Span Length	All Girder Types	
	Tons/Shaft	Tons/Pile
40	45	44
45	48	46
50	51	47
55	53	49
60	56	50
65	58	51
70	61	53
75	64	54
80	66	55
85	69	57
90	71	58
95	74	59
100	76	60
105	79	62
110	81	63
115	84	64
120	86	66

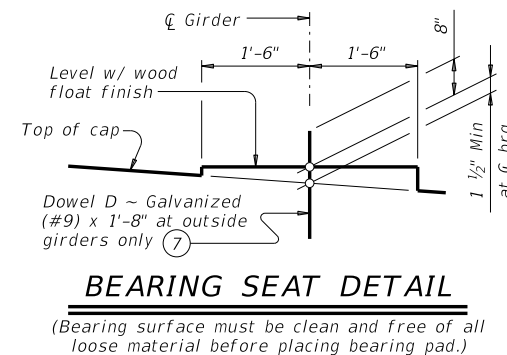


- See Table A for variable dimensions based on header slope and girder type.
- See Table A to determine if this wingwall foundation is required.
- For piling larger than 16" adjust Bars S spacing as required to avoid piling.
- Increase as required to maintain 3" from finished grade.
- See Span details 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 FD standard.
- Field bend as needed to clear piles.

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-32-45 only.

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

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.



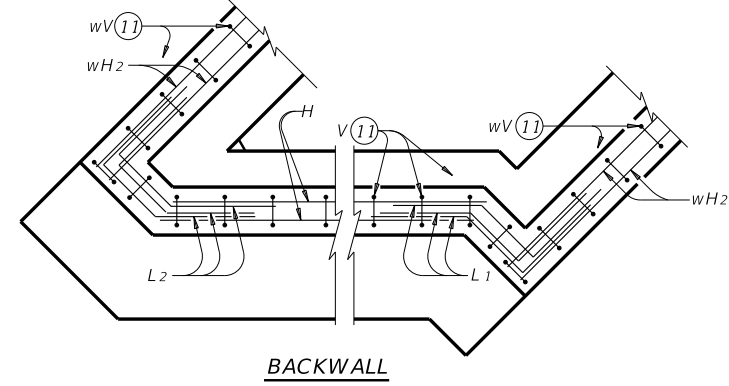
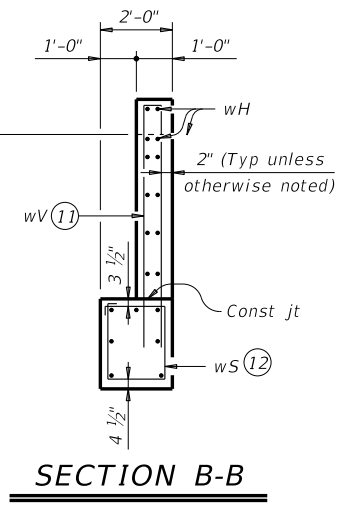
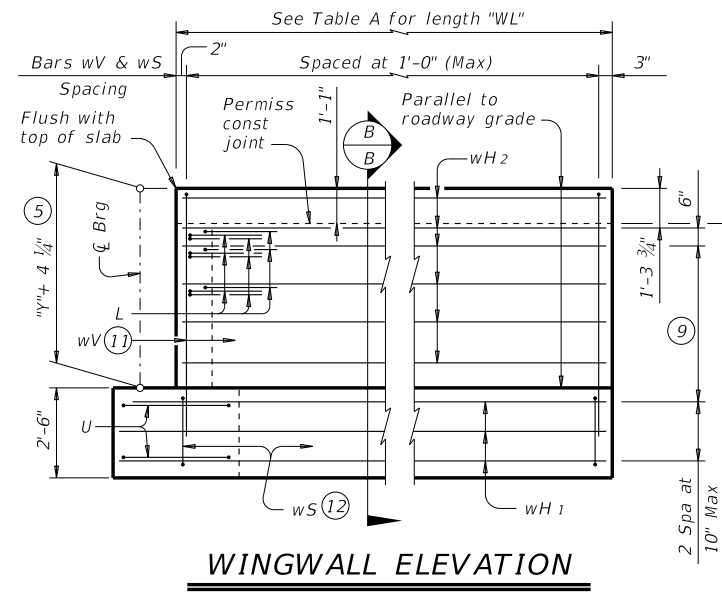
ABUTMENTS
 TYPE TX28 THRU TX54
 PRESTR CONC I-GIRDERS
 32' ROADWAY 45° SKEW

AIG-32-45

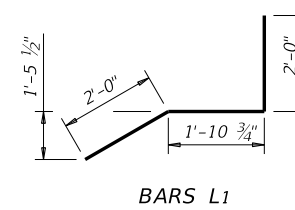
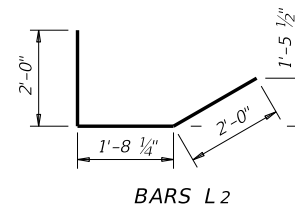
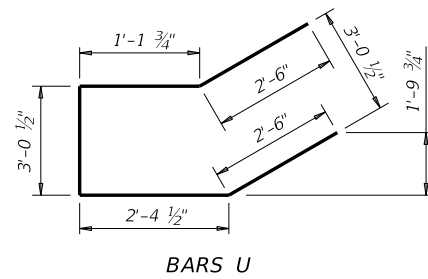
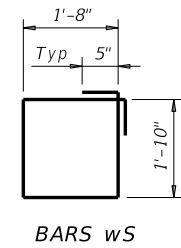
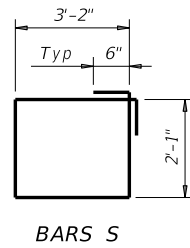
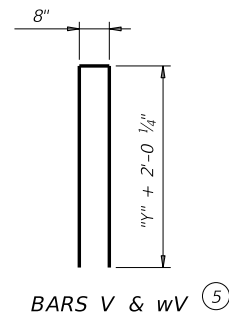
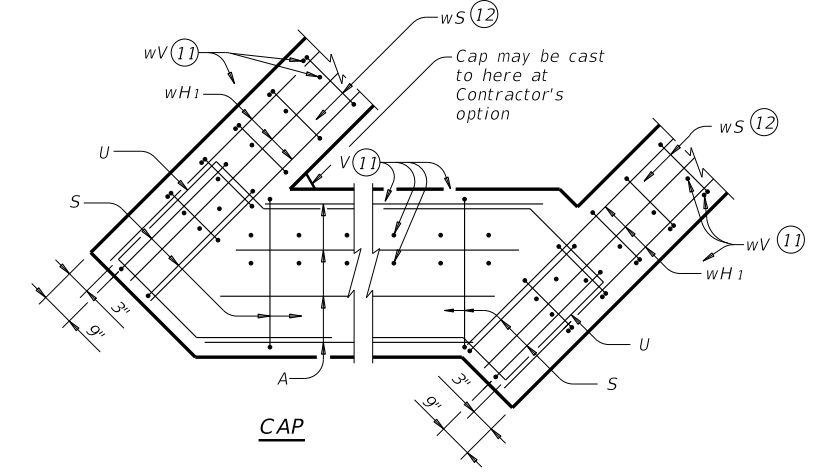
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	DIST	COUNTY		SHEET NO.

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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.

(12) Adjust as required to avoid piling.

HL93 LOADING

SHEET 2 OF 3

		Bridge Division Standard		
ABUTMENTS TYPE TX28 THRU TX54 PRESTR CONC I-GIRDERS 32' ROADWAY 45° SKEW AIG-32-45				
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		DIST	COUNTY	SHEET NO.

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TABLES OF ESTIMATED QUANTITIES WITH 2:1 HEADER SLOPE ⁽¹³⁾

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	11	#11	42'-5"	2,479	A	11	#11	42'-5"	2,479	A	11	#11	42'-5"	2,479	A	11	#11	42'-5"	2,479	A	11	#11	42'-5"	2,479					
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	42'-5"	510	H	8	#6	42'-5"	510	H	10	#6	42'-5"	637	H	10	#6	42'-5"	637	H	12	#6	42'-5"	765					
L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80					
L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78					
S	40	#5	11'-6"	480	S	40	#5	11'-6"	480	S	40	#5	11'-6"	480	S	40	#5	11'-6"	480	S	40	#5	11'-6"	480					
U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70					
V	45	#5	11'-4"	532	V	45	#5	12'-4"	579	V	45	#5	13'-4"	626	V	45	#5	14'-4"	673	V	45	#5	15'-8"	735					
wH1	14	#6	14'-5"	303	wH1	14	#6	15'-5"	324	wH1	14	#6	17'-5"	366	wH1	14	#6	18'-5"	387	wH1	14	#6	20'-5"	429					
wH2	20	#6	12'-8"	381	wH2	20	#6	13'-8"	411	wH2	24	#6	15'-8"	565	wH2	24	#6	16'-8"	601	wH2	28	#6	18'-8"	785					
wS	28	#4	7'-10"	147	wS	30	#4	7'-10"	157	wS	34	#4	7'-10"	178	wS	36	#4	7'-10"	188	wS	40	#4	7'-10"	209					
wV	28	#5	11'-4"	331	wV	30	#5	12'-4"	386	wV	34	#5	13'-4"	473	wV	36	#5	14'-4"	538	wV	40	#5	15'-8"	654					
Reinforcing Steel				Lb	5,402	Reinforcing Steel				Lb	5,565	Reinforcing Steel				Lb	6,043	Reinforcing Steel				Lb	6,222	Reinforcing Steel				Lb	6,775
Class "C" Concrete				CY	27.0	Class "C" Concrete				CY	29.0	Class "C" Concrete				CY	31.8	Class "C" Concrete				CY	33.9	Class "C" Concrete				CY	37.5

TABLES OF ESTIMATED QUANTITIES WITH 3:1 HEADER SLOPE ⁽¹³⁾

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	11	#11	42'-5"	2,479	A	11	#11	42'-5"	2,479	A	11	#11	42'-5"	2,479	A	11	#11	42'-5"	2,479	A	11	#11	42'-5"	2,479					
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	42'-5"	510	H	8	#6	42'-5"	510	H	10	#6	42'-5"	637	H	10	#6	42'-5"	637	H	12	#6	42'-5"	765					
L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80	L1	9	#6	5'-11"	80					
L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78	L2	9	#6	5'-9"	78					
S	40	#5	11'-6"	480	S	40	#5	11'-6"	480	S	40	#5	11'-6"	480	S	40	#5	11'-6"	480	S	40	#5	11'-6"	480					
U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70	U	4	#6	11'-7"	70					
V	45	#5	11'-4"	532	V	45	#5	12'-4"	579	V	45	#5	13'-4"	626	V	45	#5	14'-4"	673	V	45	#5	15'-8"	735					
wH1	14	#6	19'-5"	408	wH1	14	#6	21'-5"	450	wH1	14	#6	23'-5"	492	wH1	14	#6	26'-5"	555	wH1	14	#6	28'-5"	598					
wH2	20	#6	17'-8"	531	wH2	20	#6	19'-8"	591	wH2	24	#6	21'-8"	781	wH2	24	#6	24'-8"	889	wH2	28	#6	26'-8"	1,121					
wS	38	#4	7'-10"	199	wS	42	#4	7'-10"	220	wS	46	#4	7'-10"	241	wS	52	#4	7'-10"	272	wS	56	#4	7'-10"	293					
wV	38	#5	11'-4"	449	wV	42	#5	12'-4"	540	wV	46	#5	13'-4"	640	wV	52	#5	14'-4"	777	wV	56	#5	15'-8"	915					
Reinforcing Steel				Lb	5,827	Reinforcing Steel				Lb	6,088	Reinforcing Steel				Lb	6,615	Reinforcing Steel				Lb	7,001	Reinforcing Steel				Lb	7,625
Class "C" Concrete				CY	30.2	Class "C" Concrete				CY	33.1	Class "C" Concrete				CY	36.0	Class "C" Concrete				CY	39.9	Class "C" Concrete				CY	43.9

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

⁽¹³⁾ Quantities shown are for one abutment only (with approach slab). With no approach slab, add 1.8 CY Class "C" concrete and 255 lbs reinforcing steel for 4 additional Bars H.

Bridge Division Standard

ABUTMENTS

TYPE TX28 THRU TX54

PRESTR CONC I-GIRDERS

32' ROADWAY 45° SKEW

AIG-32-45

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