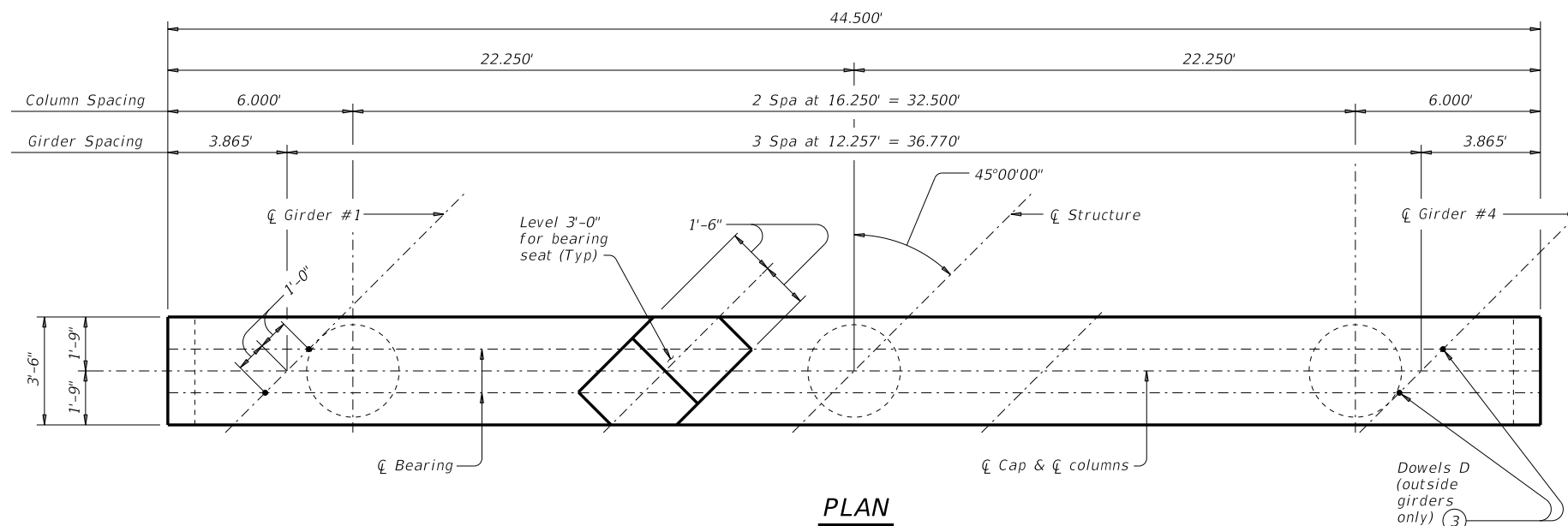


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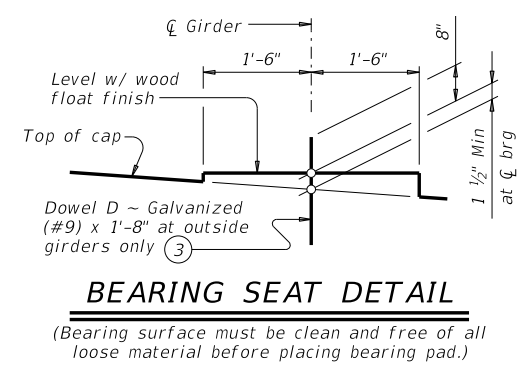
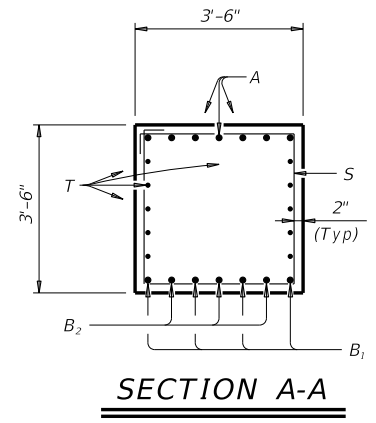
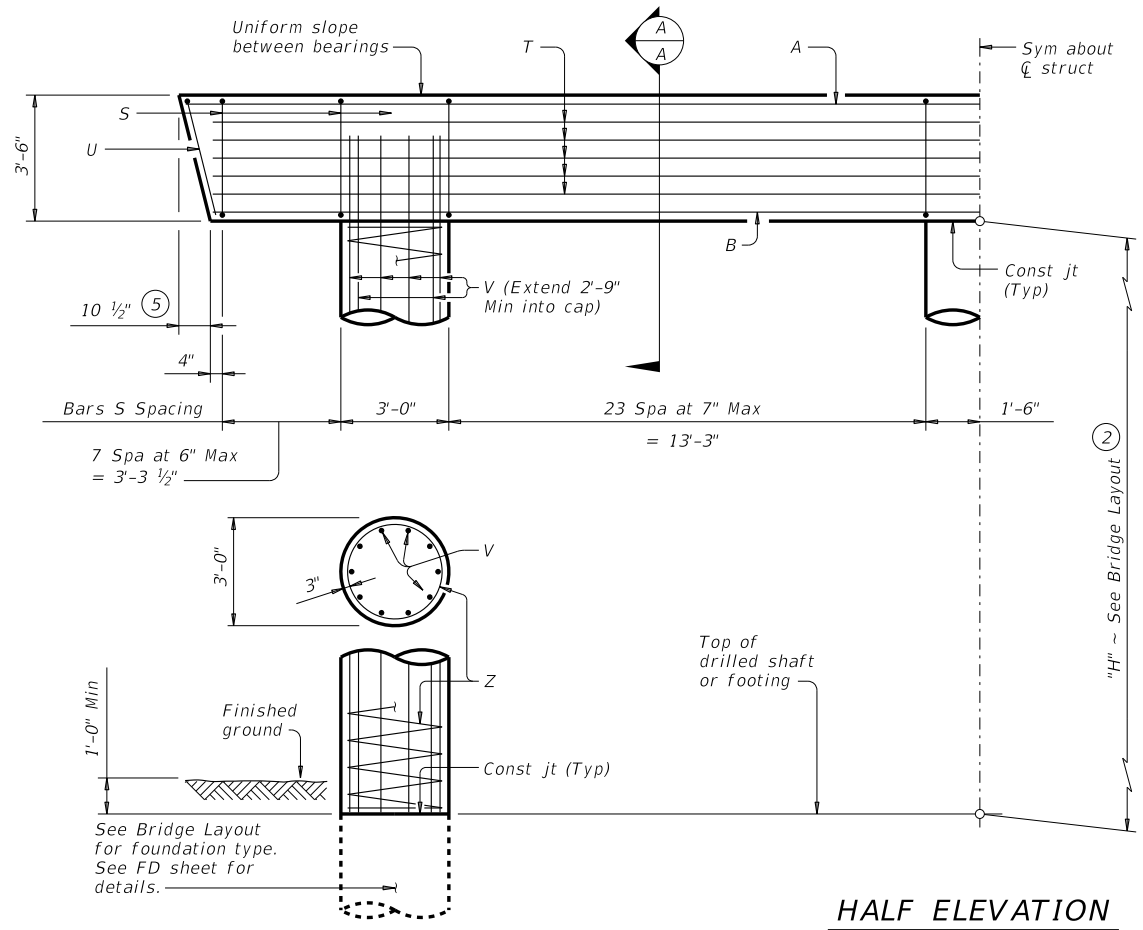
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- ① Quantities shown are based on an "H" value of 36'. For each linear foot variation in "H" value, make the following adjustments:  
 Bars V length, 1'-0"  
 Bars Z length, 31'-5"  
 Reinforcing steel, 165 Lb  
 Class "C" conc (col), 0.78 CY
- ② This standard may not be used for "H" heights exceeding 36'. In areas of very soft soil or where scour is anticipated, allowable "H" heights must be evaluated by the Engineer prior to the use of this standard.
- ③ Omit Dowels D at end of multi-span units. Adjust reinforcing steel total accordingly.
- ④ Foundation Loads based on "H" = 36'.
- ⑤ Measured parallel to top of cap cross-slope.

TABLE OF ESTIMATED QUANTITIES ①				
Bar	No.	Size	Length	Weight
A	7	#11	44'- 0"	1,636
B <sub>1</sub>	4	#11	42'- 6"	904
B <sub>2</sub>	6	#11	13'- 3"	423
D ③	4	#9	1'- 8"	23
S	64	#5	13'- 8"	912
T	10	#5	42'- 6"	443
U	2	#5	9'- 8"	20
V	30	#9	38'- 9"	3,953
Z	3	#4	1154'- 7"	2,314
Reinforcing Steel			Lb	10,628
Class "C" Concrete (Cap)			CY	20.0
Class "C" Concrete (Col)			CY	28.3

FOUNDATION LOADS ④				
Span Average	Drilled Shaft Loads	Pile Load (Tons/Pile)		
		3 Pile Ftg	4 Pile Ftg	5 Pile Ftg
Ft	Tons/Shaft			
40	115	42	32	26
45	123	44	34	28
50	132	47	36	30
55	140	50	38	31
60	148	53	40	33
65	156	55	42	34
70	164	58	44	36
75	172	61	46	38
80	180	63	48	39
85	188	66	50	41
90	196	69	52	42
95	204	71	54	44
100	212	74	56	46
105	220	77	58	47
110	228	79	60	49
115	236	82	62	50
120	244	85	64	52

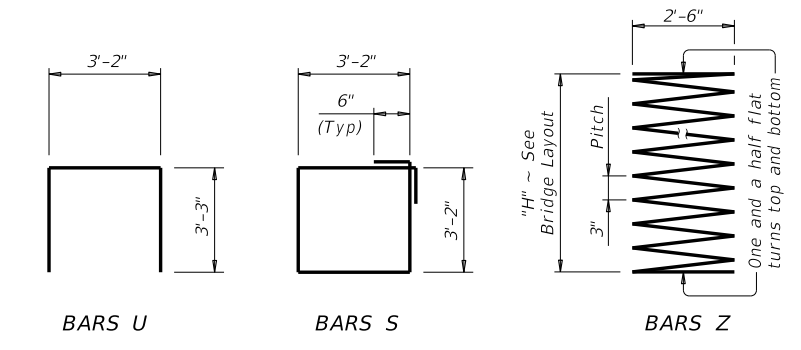


**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Bridge Design Specifications. See Bridge Layout for foundation type, size and length. See Common Foundation Details (FD) standard sheet for all foundation details and notes. See Shear Key Details (IGSK) standard sheet for all shear key details and notes, if applicable. Bent selected must be based on the average span length rounded up to the next 5 ft increment. Details are drawn showing right forward skew. See Bridge Layout for actual skew direction. These bent details may be used with standard SIG-30-45 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.

HL93 LOADING



Texas Department of Transportation  
 Bridge Division Standard

**INTERIOR BENTS**  
 TYPE TX28 THRU TX54  
 PRESTR CONC I-GIRDERS  
 30' ROADWAY 45° SKEW

**BIG-30-45**

FILE: IG-BIG3045-17.dgn	DN: TAR	CK: SDB	DW: JTR	CK: TAR
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	DIST	COUNTY	SHEET NO.	