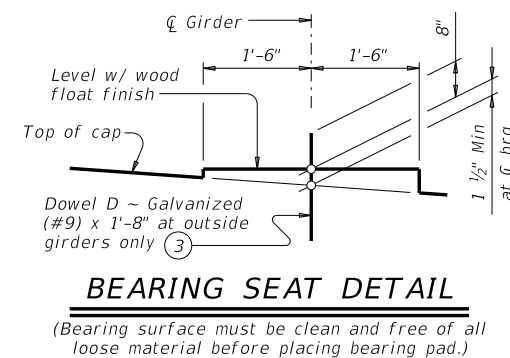
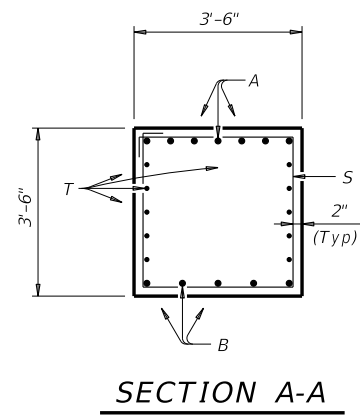
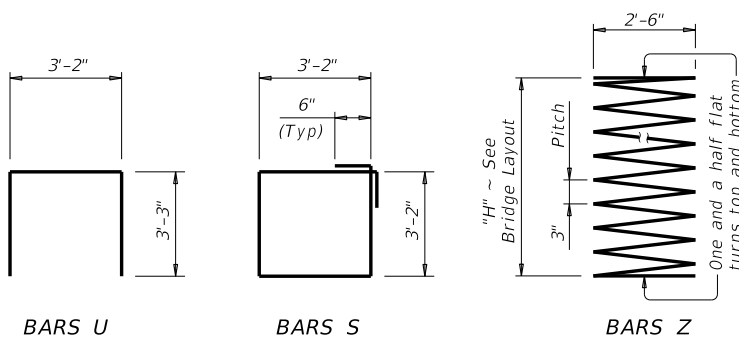
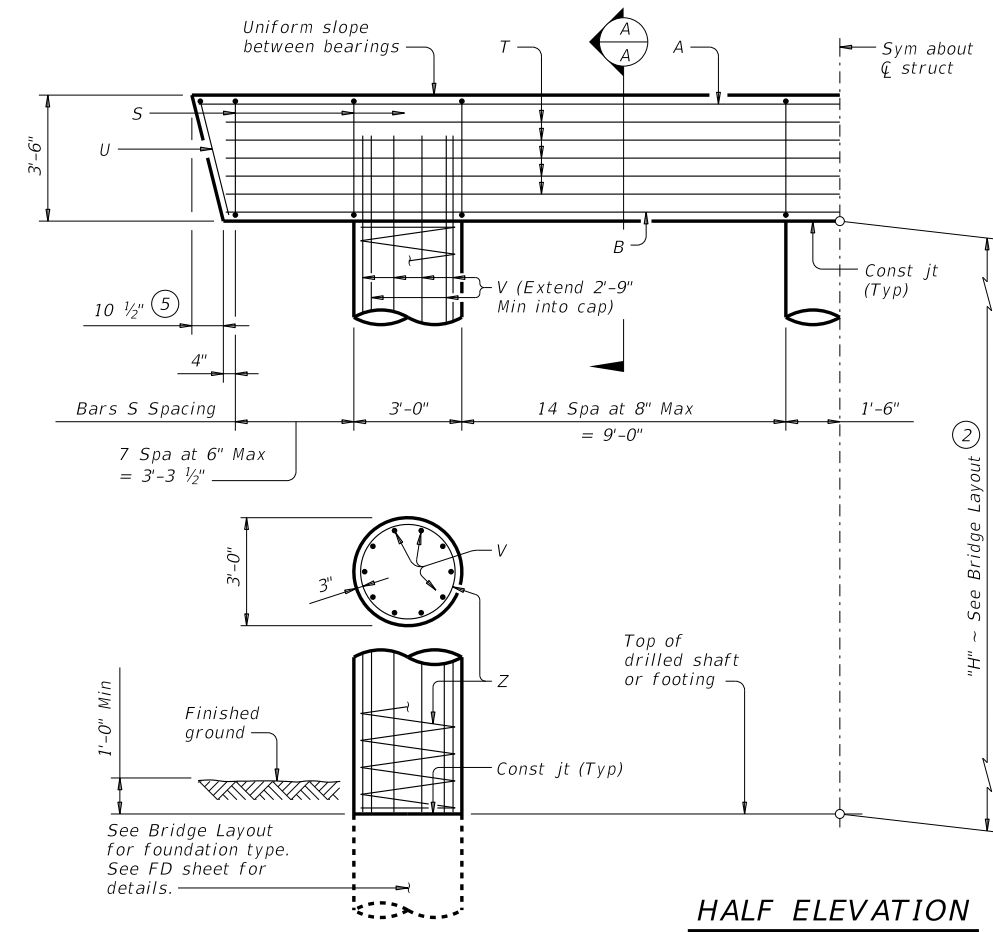
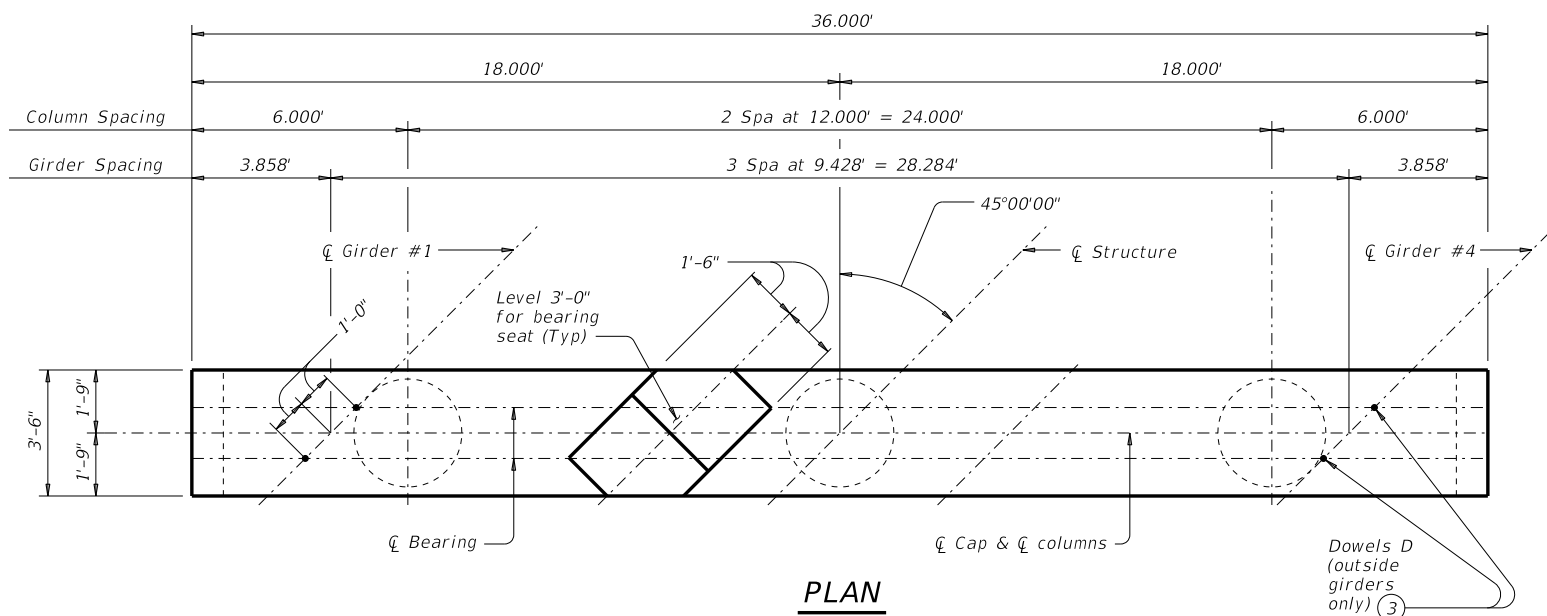


DISCLAIMER: This standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE: FILE:



- 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
- 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.
- Omit Dowels D at end of multi-span units. Adjust reinforcing steel total accordingly.
- Foundation Loads based on "H" = 36'.
- Measured parallel to top of cap cross-slope.

TABLE OF ESTIMATED QUANTITIES ①				
Bar	No.	Size	Length	Weight
A	7	#11	35'- 6"	1,320
B	5	#11	34'- 0"	903
D ③	4	#9	1'- 8"	23
S	46	#5	13'- 8"	656
T	10	#5	34'- 0"	355
U	2	#5	9'- 8"	20
V	30	#9	38'- 9"	3,953
Z	3	#4	1,154'- 7"	2,314
Reinforcing Steel			Lb	9,544
Class "C" Concrete (Cap)			CY	16.2
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
Ft	Tons/Shaft		
40	107	39	30
45	115	42	32
50	123	44	34
55	131	47	36
60	138	49	38
65	146	52	40
70	153	54	41
75	161	57	43
80	168	59	45
85	175	62	47
90	183	64	49
95	190	67	51
100	198	69	53
105	205	72	54
110	212	74	56
115	220	77	58
120	227	79	60
125	234	81	62

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 (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-24-45 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.

Texas Department of Transportation Bridge Division Standard

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

BIG-24-45

FILE: IG-BIG2445-17.dgn	DN: TAR	CK: SDB	DW: JTR	CK: TAR
©TxDOT August 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY	SHEET NO.	