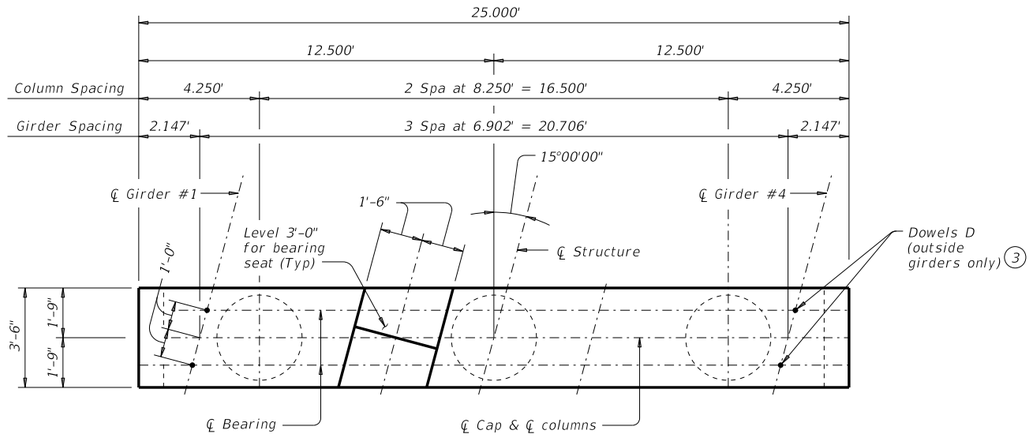
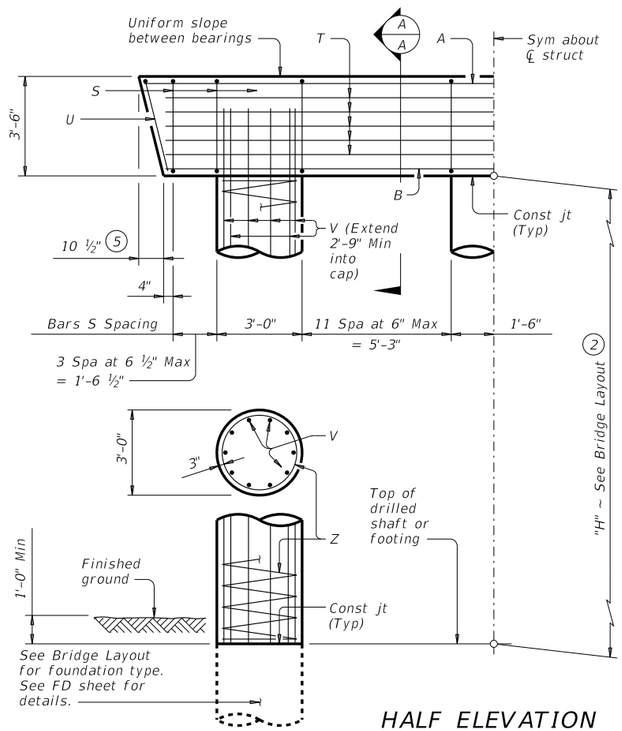
DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE:
FILE:

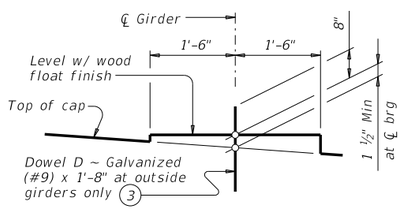


PLAN



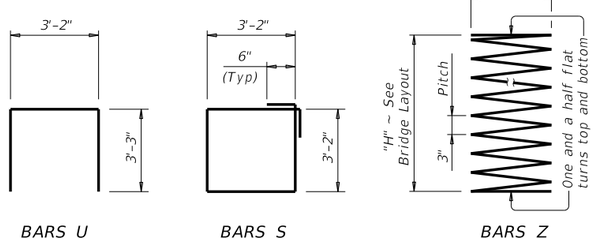
HALF ELEVATION

SECTION A-A



BEARING SEAT DETAIL

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



BARS U BARS S BARS Z

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	6	#11	24'- 6"	781
B	4	#11	23'- 0"	489
D 3	4	#9	1'- 8"	23
S	32	#5	13'- 8"	457
T	10	#5	23'- 0"	240
U	2	#5	9'- 8"	20
V	30	#9	38'- 9"	3,953
Z	3	#4	1,154'- 7"	2,314
Reinforcing Steel			Lb	8,277
Class "C" Concrete (Cap)			CY	11.1
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	104	38	29
45	112	41	31
50	120	43	33
55	127	46	35
60	135	48	37
65	142	51	39
70	150	53	41
75	157	56	42
80	165	58	44
85	172	61	46
90	179	63	48
95	187	66	50
100	194	68	52
105	202	71	54
110	209	73	55
115	216	75	57
120	224	78	59
125	231	80	61

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-24-15 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
24' ROADWAY 15° SKEW

BIG-24-15

FILE: IG-BIG2415-17.dgn	DN: TAR	CK: SDB	DW: JTR	CK: TAR	
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REVISIONS					
	DIST	COUNTY		SHEET NO.	