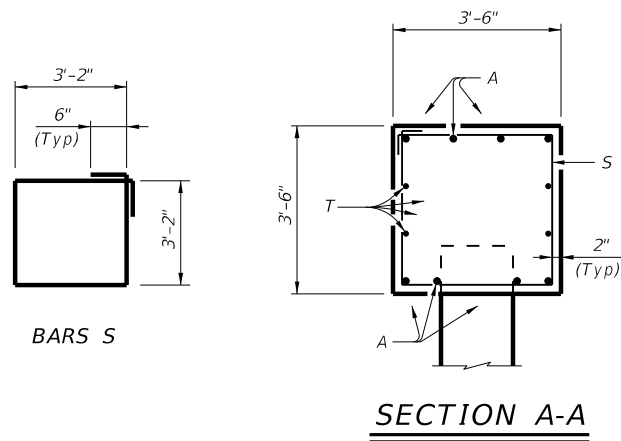
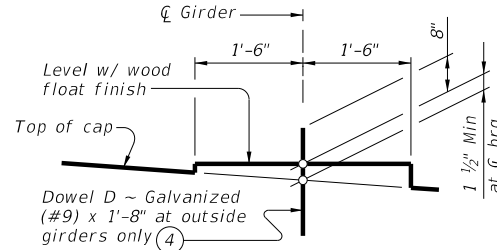


DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



**SECTION A-A**



**BEARING SEAT DETAIL**

(Remove all loose material and clean bearing surface before placing the bearing pad.)

**TABLE OF MAXIMUM ALLOWABLE EXPOSED PILE HEIGHTS AND PILE LOADS (2)**

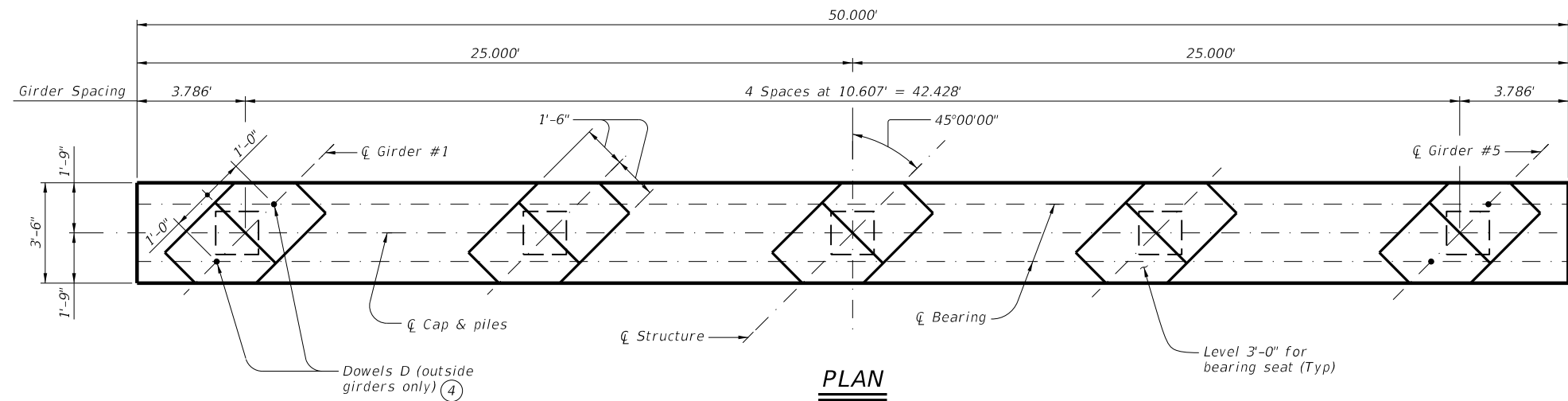
Pile Type	Maximum Height Ft	Maximum Load (Tons/Pile)
18" Sq	20	90
20" Sq	24	110
24" Sq	24	140

**FOUNDATION LOADS**

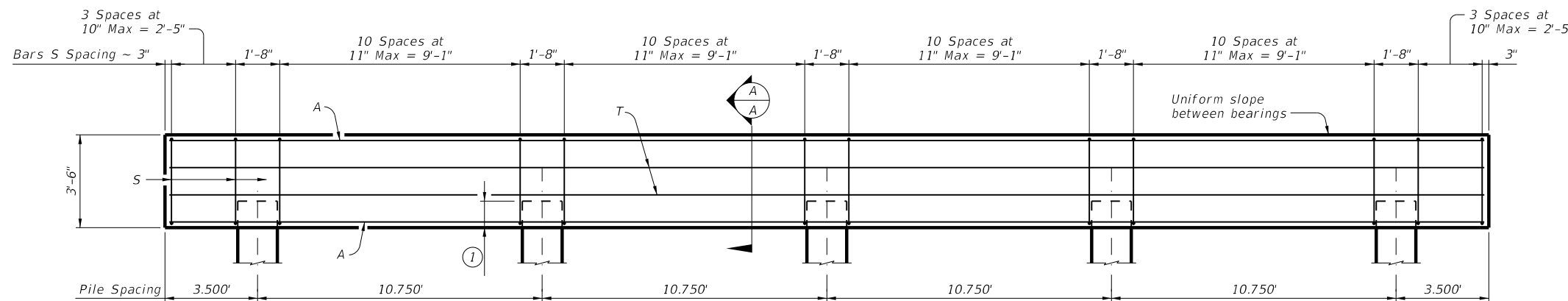
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS	Tx46 & Tx54 GIRDERS
		Pile Loads (Tons/Pile)	Pile Loads (Tons/Pile)
40	18	61	64
45		66	70
50		72	76
55		77	81
60	20	82	87
65		87	93
70		93	98
75		98	104
80		103	109
85	24	108	115

**TABLE OF ESTIMATED QUANTITIES**

Bar	No.	Size	Length	Weight
A	8	#9	49'-8"	1,351
D (4)	4	#9	1'-8"	23
S	52	#5	13'-8"	741
T	4	#5	48'-8"	203
Reinforcing Steel			Lb	2,318
Class "C" Concrete (Cap)			CY	22.9



**PLAN**



**ELEVATION**

Note: For piling larger than 18", adjust Bars S as required to avoid piling.

- See the Common Foundation Details (FD) standard.
- In areas of very soft soil or where scour is anticipated, maximum allowable exposed pile heights must be evaluated by the Engineer prior to use of this standard.
- Where no steel HP section is shown, a suitable HP equivalent to the square concrete pile has not been evaluated.
- Omit dowels at end of multi-span units. Adjust reinforcing steel total accordingly.
- When HP14x117 steel piling is specified in the plans, the Contractor has the option of furnishing either HP14x117 or HP16x101 steel piling.

**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.  
 For bents supporting unequal spans, the shorter span cannot be less than 80 percent of the longer span.  
 These details are limited to an 85' maximum span length. See Bridge Layout for piling size and length.  
 See Common Foundation Details (FD) standard sheet for all foundation details and notes.  
 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-34-45 only.

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

HL93 LOADING

**Texas Department of Transportation** Bridge Division Standard

**INTERIOR TRESTLE BENTS**  
 TY TX28 THRU TX54  
 PRESTR CONC I-GIRDERS  
 34' ROADWAY 45° SKEW

**BTIG-34-45**

FILE: IG-BTIG3445-24.dgn	DN: TAR	CK: VC	DW: SFS	CK: TAR
©TxDOT January 2023	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY	SHEET NO.	
05/2024: Updated FDN loads.				

DATE:  
FILE: