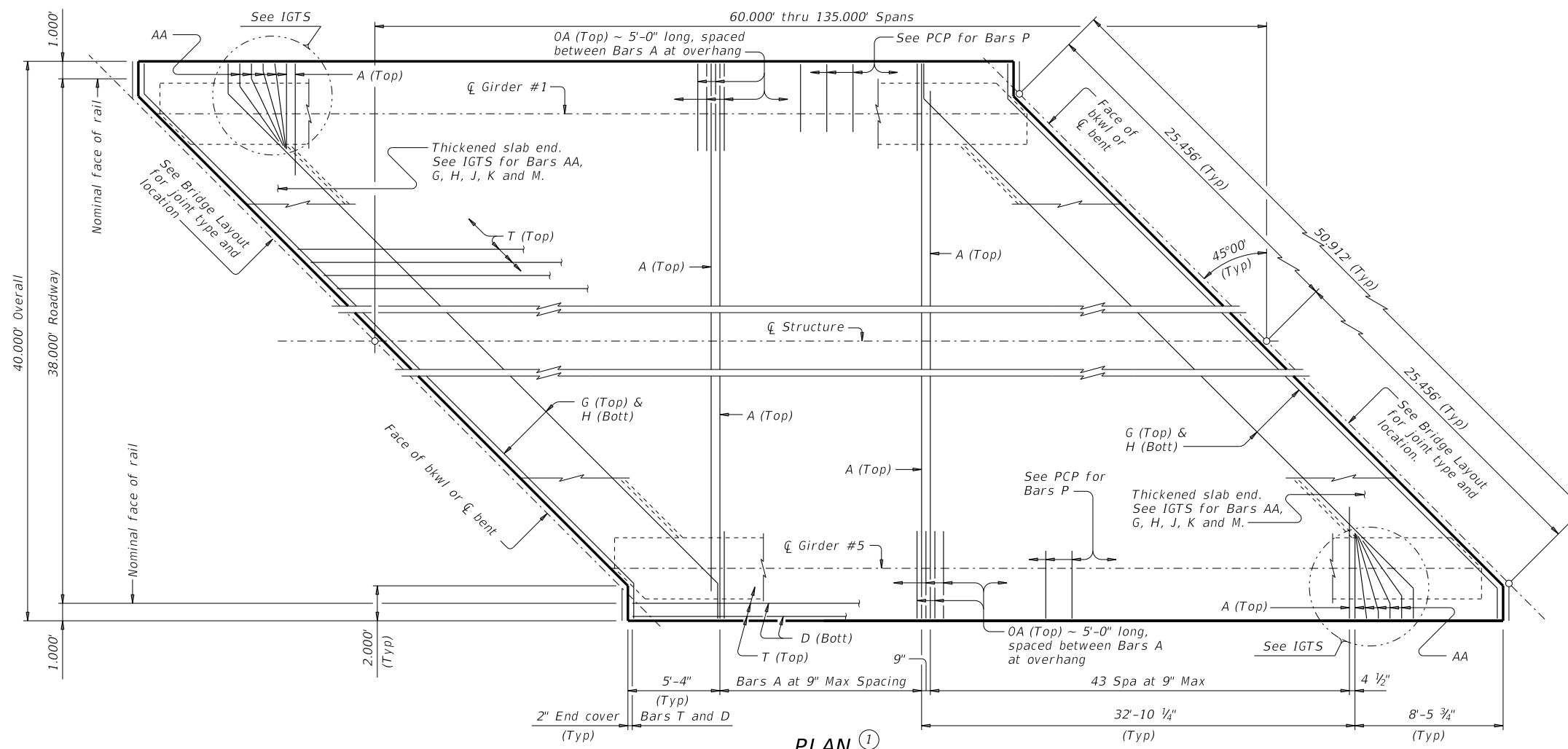
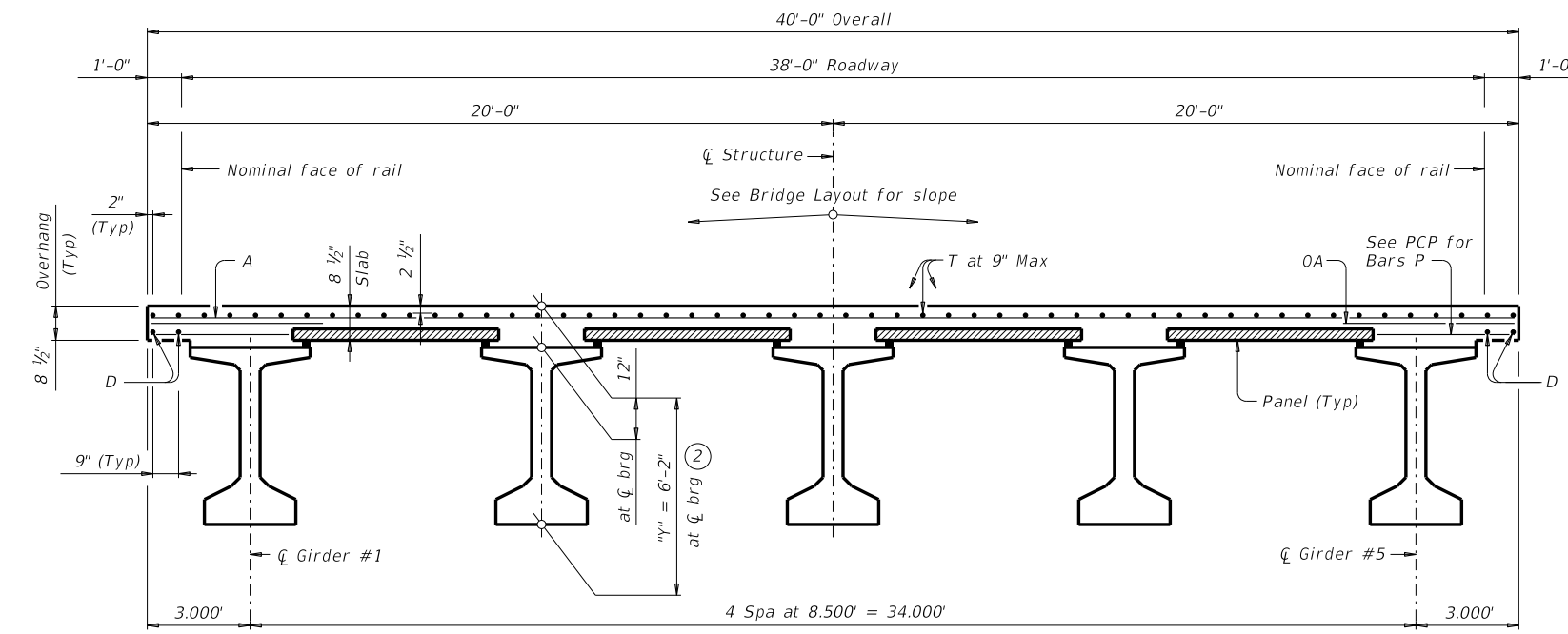


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DATE: FILE:



**PLAN 1**



**TYPICAL TRANSVERSE SECTION**

BAR TABLE	
BAR	SIZE
A	#4
AA	#5
D	#4
G	#4
H	#4
J	#4
K	#4
M	#4
OA	#5
P	#4
T	#4

- ① If multi-span units (with slab continuous over interior bents) are indicated on the Bridge Layout, see standard IGCS for adjustment to slab reinforcement and quantities.
- ② "y" value shown is based on theoretical girder camber, dead load deflection from an 8 1/2" concrete slab, a constant roadway grade, and using precast panels (PCP). The Contractor will adjust this value as necessary for any roadway vertical curve and/or if the precast overhang panel (PCP(0)) option is used.

HL93 LOADING SHEET 1 OF 2

**Texas Department of Transportation**  
 Bridge Division Standard

**PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx62)**  
**38' ROADWAY 45° SKEW**

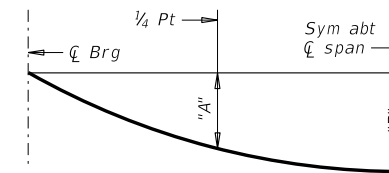
**SIG-62-38-45**

FILE: sig36sts-19.dgn	DN: JMH	CK: GC	DW: JTR	CK: TAR
©TxDOT August 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS				
10-19: Increased "X" and "Y" Values				
DIST	COUNTY	SHEET NO.		

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DATE:  
FILE:

TABLE OF DEAD LOAD DEFLECTIONS		
TYPE Tx62 GIRDERS		
SPAN LENGTH	"A"	"B"
Ft	Ft	Ft
60	0.006	0.008
65	0.009	0.012
70	0.011	0.016
75	0.015	0.021
80	0.019	0.027
85	0.025	0.035
90	0.031	0.044
95	0.039	0.055
100	0.048	0.067
105	0.058	0.082
110	0.071	0.100
115	0.085	0.119
120	0.101	0.142
125	0.119	0.167
130	0.140	0.196
135	0.163	0.229



**DEAD LOAD DEFLECTION DIAGRAM**

Calculated deflections shown are due to the concrete slab on interior girders only ( $E_c = 5000$  ksi). Adjust values as required for exterior girders and if optional slab forming is used. These values may require field verification.

TABLE OF ESTIMATED QUANTITIES					
SPAN LENGTH	REINF CONCRETE SLAB	Prestressed Concrete Girders			TOTAL REINF STEEL <sup>(4)</sup>
		ABUT TO INT BT <sup>(3)</sup>	INT BT TO INT BT <sup>(3)</sup>	ABUT TO ABUT <sup>(3)</sup>	
Ft	SF	LF	LF	LF	Lb
60	2,400	296.98	297.50	296.46	5,520
65	2,600	321.98	322.50	321.46	5,980
70	2,800	346.98	347.50	346.46	6,440
75	3,000	371.98	372.50	371.46	6,900
80	3,200	396.98	397.50	396.46	7,360
85	3,400	421.98	422.50	421.46	7,820
90	3,600	446.98	447.50	446.46	8,280
95	3,800	471.98	472.50	471.46	8,740
100	4,000	496.98	497.50	496.46	9,200
105	4,200	521.98	522.50	521.46	9,660
110	4,400	546.98	547.50	546.46	10,120
115	4,600	571.98	572.50	571.46	10,580
120	4,800	596.98	597.50	596.46	11,040
125	5,000	621.98	622.50	621.46	11,500
130	5,200	646.98	647.50	646.46	11,960
135	5,400	671.98	672.50	671.46	12,420

- <sup>(3)</sup> Fabricator will adjust lengths for girder slopes as required.
- <sup>(4)</sup> Reinforcing steel weight is calculated using an approximate factor of 2.3 lbs/SF.

**GENERAL NOTES:**

Designed according to AASHTO LRFD Bridge Design Specifications.  
Multi-span units, with slab continuous over interior bents, may be formed with the details shown on this sheet and standard IGCS.  
See IGTS standard for Thickened Slab End details and quantity adjustments.  
See PCP and PCP-FAB for panel details not shown.  
See PCP(0) and PCP(0)-FAB for precast overhang panel details if this option is used.  
See IGMS standard for miscellaneous details.  
See applicable rail details for rail anchorage in slab.  
See PMDF Standard for details and quantity adjustments if this option is used.  
This standard is drawn showing right forward skew. See Bridge Layout for actual skew direction.  
This standard does not support the use of transition bents.

Cover dimensions are clear dimensions, unless noted otherwise.

**MATERIAL NOTES:**

Provide Class S concrete ( $f'_c = 4,000$  psi).  
Provide Class S (HPC) concrete if shown elsewhere in the plans.  
Provide Grade 60 reinforcing steel.  
Provide bar laps, where required, as follows:  
Uncoated ~ #4 = 1'-7"  
Epoxy coated ~ #4 = 2'-5"  
Deformed Welded Wire Reinforcement (WWR) (ASTM A1064) of equal size and spacing may be substituted for Bars A, AA, D, OA, P or T unless noted otherwise.

HL93 LOADING SHEET 2 OF 2

		<b>Bridge Division Standard</b>		
<b>PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx62)</b> <b>38' ROADWAY 45° SKEW</b> <b>SIG-62-38-45</b>				
FILE: sig36sts-19.dgn	DN: JMH	CK: GC	DW: JTR	CK: TAR
©TxDOT August 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST		SHEET NO.
10-19: Increased "X" and "Y" values				