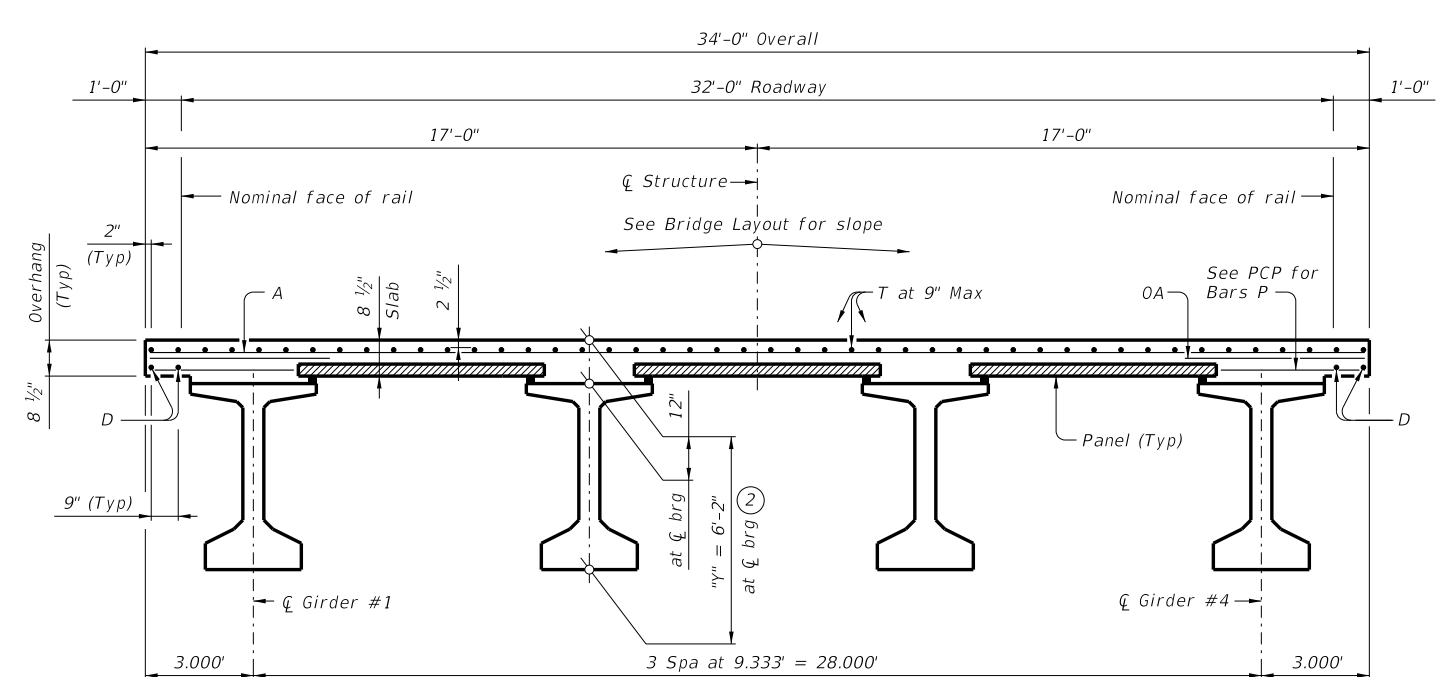
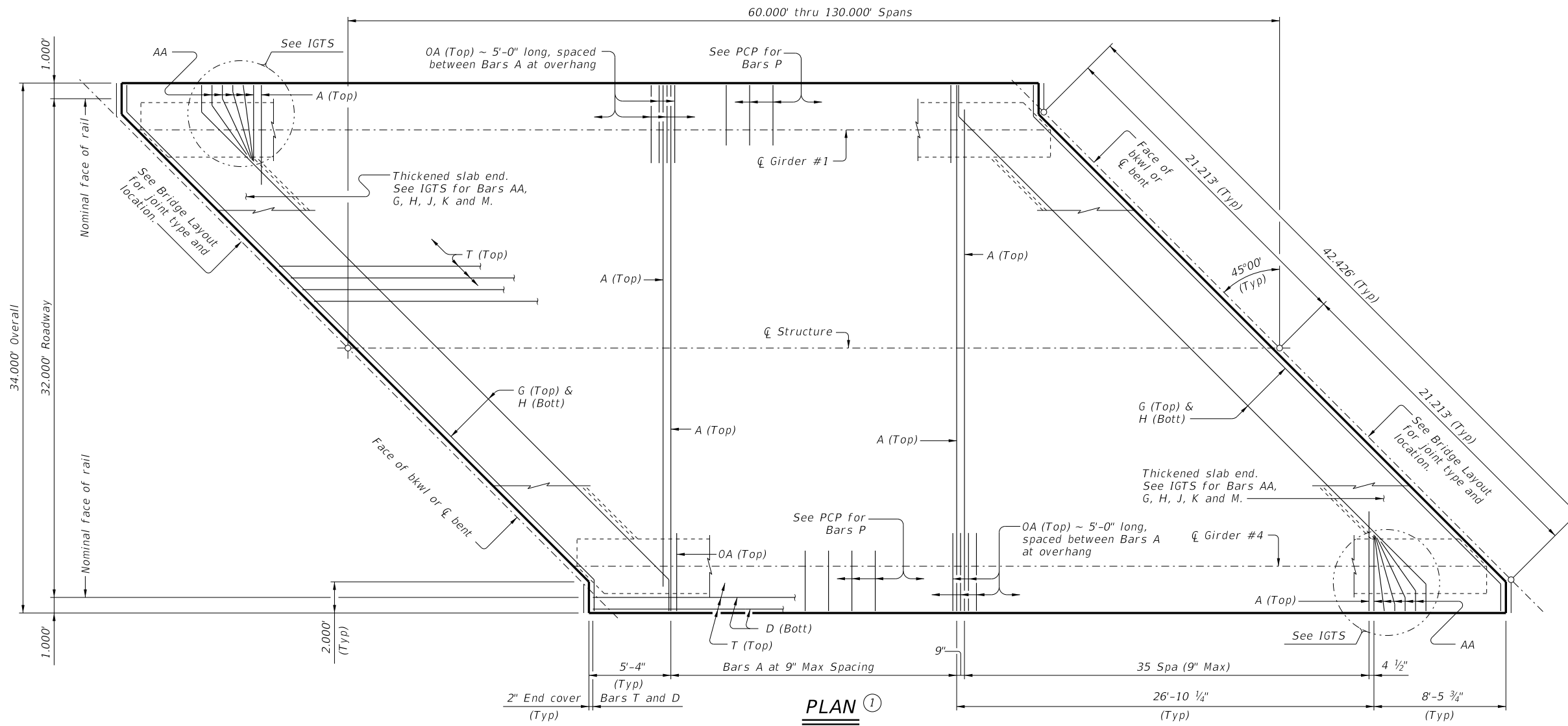


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DATE: FILE:



**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.

HL93 LOADING SHEET 1 OF 2

**Texas Department of Transportation** Bridge Division Standard

## PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE T x 62)

**32' ROADWAY 45° SKEW**

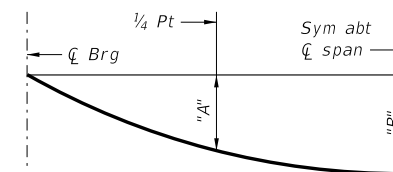
### SIG-62-32-45

FILE: IG-SIG623245-23.dgn	DN: JMH	CK: ASB	DW: JTR	CK: TAR
©TxDOT August 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS				
10-19: Increased "X" and "Y" Values.	DIST		COUNTY	SHEET NO.
01-23: Removed PCP(O) reference.				

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DATE: FILE:

TABLE OF DEAD LOAD DEFLECTIONS		
TYPE Tx62 GIRDERS		
SPAN LENGTH	"A"	"B"
Ft	Ft	Ft
60	0.006	0.009
65	0.009	0.013
70	0.012	0.017
75	0.016	0.023
80	0.021	0.030
85	0.027	0.038
90	0.034	0.048
95	0.043	0.060
100	0.053	0.074
105	0.064	0.090
110	0.078	0.109
115	0.093	0.131
120	0.111	0.156
125	0.131	0.184
130	0.154	0.216



**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	2,040	237.59	238.00	237.17	4,692
65	2,210	257.59	258.00	257.17	5,083
70	2,380	277.59	278.00	277.17	5,474
75	2,550	297.59	298.00	297.17	5,865
80	2,720	317.59	318.00	317.17	6,256
85	2,890	337.59	338.00	337.17	6,647
90	3,060	357.59	358.00	357.17	7,038
95	3,230	377.59	378.00	377.17	7,429
100	3,400	397.59	398.00	397.17	7,820
105	3,570	417.59	418.00	417.17	8,211
110	3,740	437.59	438.00	437.17	8,602
115	3,910	457.59	458.00	457.17	8,993
120	4,080	477.59	478.00	477.17	9,384
125	4,250	497.59	498.00	497.17	9,775
130	4,420	517.59	518.00	517.17	10,166

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

**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.

**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 the I-Girder Continuous Slab Detail (IGCS) standard.  
 See I-Girder Thickened Slab End Details (IGTS) standard for details and quantity adjustments.  
 See Prestressed Concrete Panels (PCP) standard and Prestressed Concrete Panel Fabrication Details (PCP-FAB) standard for panel details not shown.  
 See I-Girder Miscellaneous Slab Details (IGMS) standard for miscellaneous details.  
 See applicable rail details for rail anchorage in slab.  
 See Permanent Metal Deck Forms (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.

HL93 LOADING

SHEET 2 OF 2



**PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx62)**

**32' ROADWAY      45° SKEW**

**SIG-62-32-45**

FILE: IG-SIG623245-23.dgn	DN: JMH	CK: ASB	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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