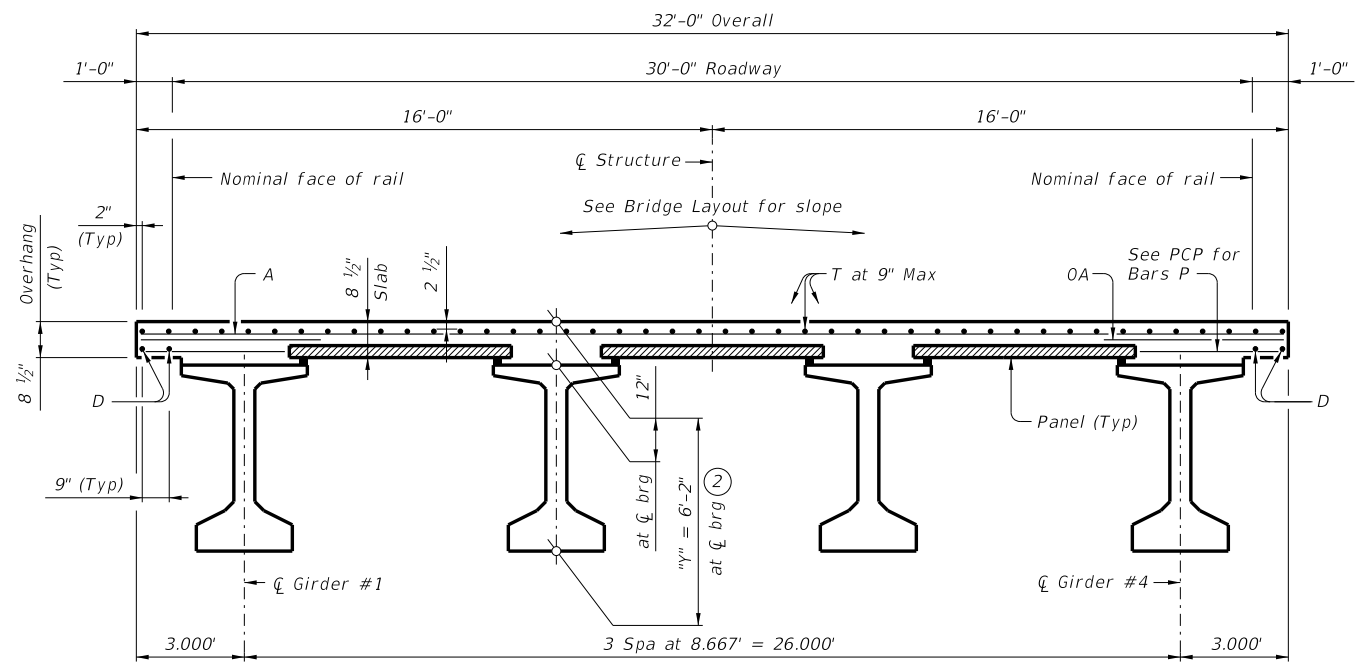
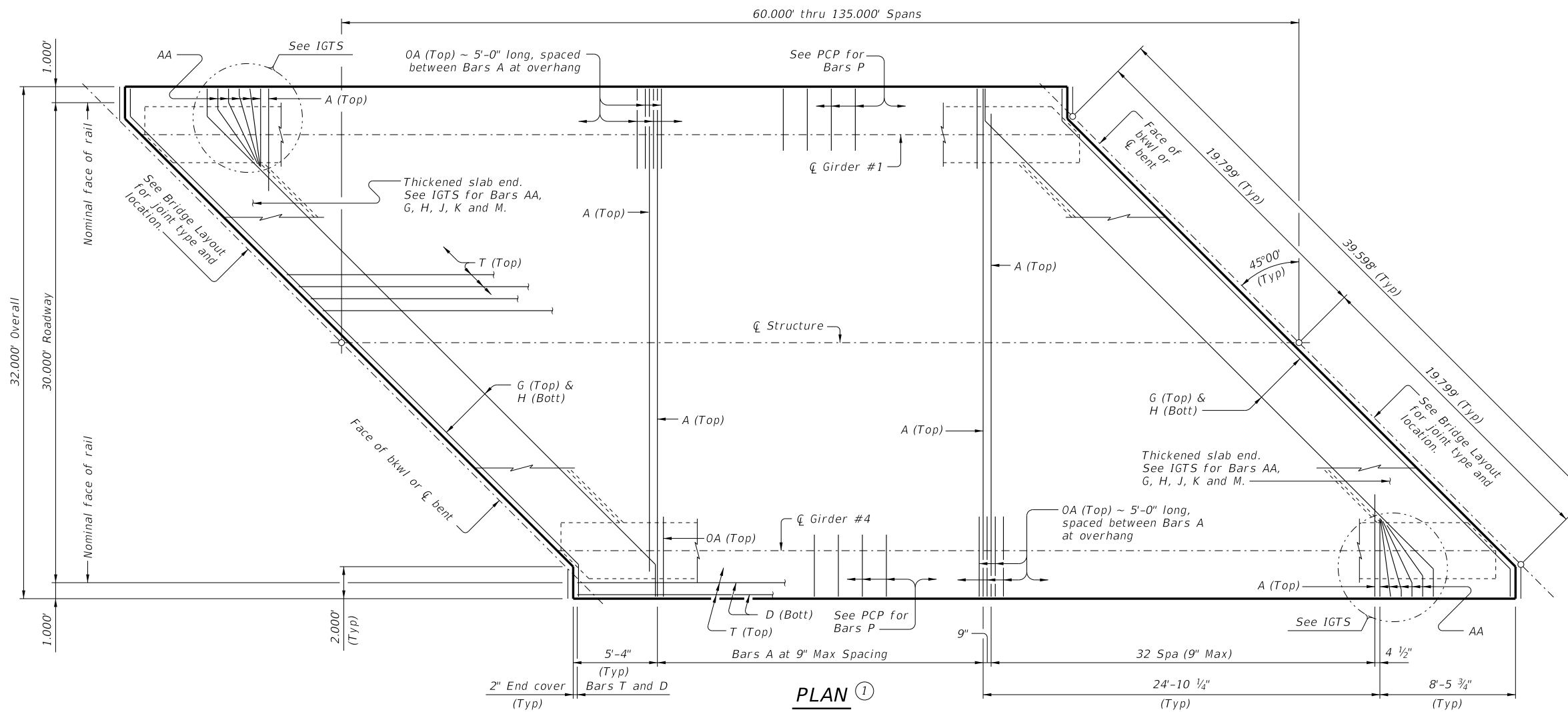


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- ① If multi-span units (with slab continuous over interior bents) are indicated on the Bridge Layout, see standard IGCS for adjustment to slab reinforcement and quantities.
- ② "y" value shown is based on theoretical girder camber, dead load deflection 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.

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

HL93 LOADING SHEET 1 OF 2

**Texas Department of Transportation** Bridge Division Standard

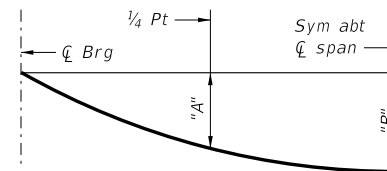
**PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE T x 62)**

**30' ROADWAY 45° SKEW**

**SIG-62-30-45**

FILE: IG-SIG623045-23.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.
01-23: Removed PCP(O) reference.				

TABLE OF DEAD LOAD DEFLECTIONS		
TYPE T <sub>x</sub> 62 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	0.020	0.028
85	0.025	0.035
90	0.032	0.045
95	0.040	0.056
100	0.049	0.069
105	0.060	0.084
110	0.072	0.101
115	0.087	0.122
120	0.103	0.145
125	0.122	0.171
130	0.142	0.200
135	0.166	0.233



**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	1,920	237.59	238.00	237.17	4,416
65	2,080	257.59	258.00	257.17	4,784
70	2,240	277.59	278.00	277.17	5,152
75	2,400	297.59	298.00	297.17	5,520
80	2,560	317.59	318.00	317.17	5,888
85	2,720	337.59	338.00	337.17	6,256
90	2,880	357.59	358.00	357.17	6,624
95	3,040	377.59	378.00	377.17	6,992
100	3,200	397.59	398.00	397.17	7,360
105	3,360	417.59	418.00	417.17	7,728
110	3,520	437.59	438.00	437.17	8,096
115	3,680	457.59	458.00	457.17	8,464
120	3,840	477.59	478.00	477.17	8,832
125	4,000	497.59	498.00	497.17	9,200
130	4,160	517.59	518.00	517.17	9,568
135	4,320	537.59	538.00	537.17	9,936

- <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.

**MATERIAL NOTES:**

Provide Cla  
 Provide Class 5 (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 (PMD) 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 T<sub>x</sub>62)**

30' ROADWAY 45° SKEW

**SIG-62-30-45**

FILE:	DN: JMH	CK: GC	DW: JTR	CK: TAR
©TxDOT	CONT	SECT	JOB	HIGHWAY
REVISIONS				
	DIST	COUNTY		SHEET NO.

DATE:  
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