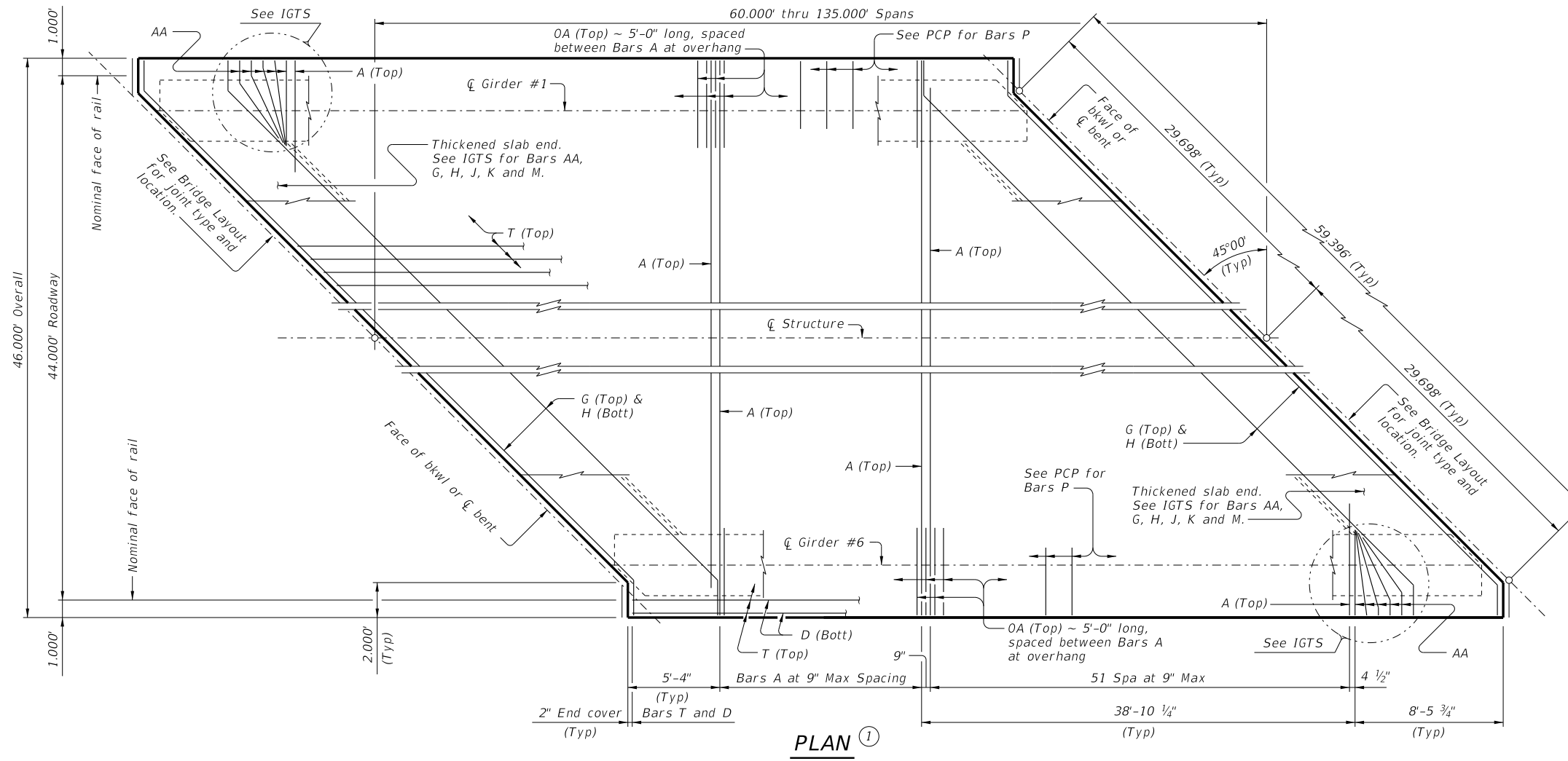
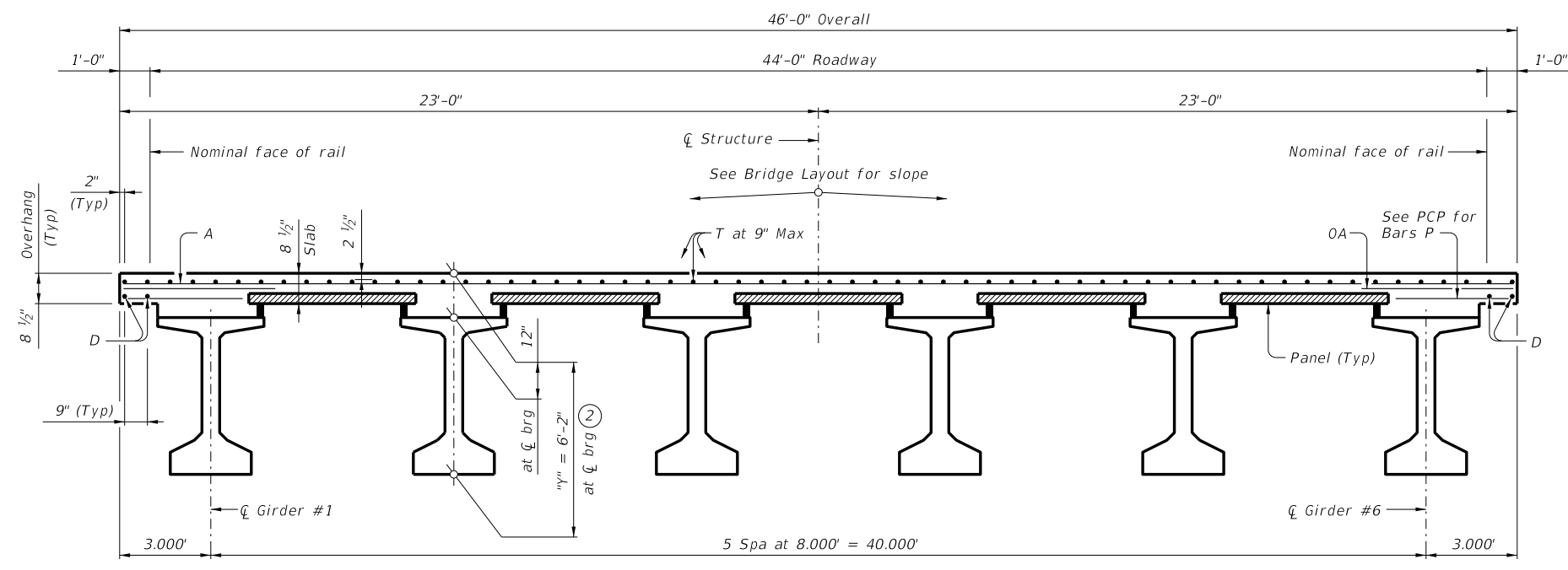


DISCLAIMER: This standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



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.



TYPICAL TRANSVERSE SECTION

HL93 LOADING SHEET 1 OF 2

Texas Department of Transportation Bridge Division Standard

PRESTRESSED CONCRETE I-GIRDER SPANS (TYPE Tx62)

44' ROADWAY 45° SKEW

SIG-62-44-45

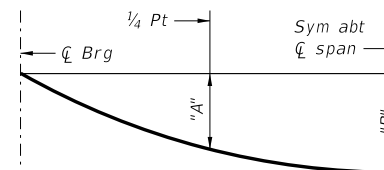
FILE: IG-SIG624445-23.dgn	DN: JMH	CK: GC	DW: JTR	CK: TAR
©TxDOT August 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS				
10-19: Increased "X" and "Y" Values.	DIST		COUNTY	SHEET NO.
01-23: Removed PCPO reference.				

DATE: FILE:

**TABLE OF
DEAD LOAD
DEFLECTIONS**

TYPE Tx62 GIRDERS

SPAN LENGTH	"A"	"B"
Ft	Ft	Ft
60	0.006	0.008
65	0.008	0.011
70	0.011	0.015
75	0.014	0.020
80	0.018	0.025
85	0.024	0.033
90	0.029	0.041
95	0.036	0.051
100	0.045	0.063
105	0.055	0.077
110	0.067	0.094
115	0.080	0.112
120	0.095	0.133
125	0.113	0.158
130	0.132	0.185
135	0.153	0.215



**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 ⁽⁴⁾
		ABUT TO INT BT ⁽³⁾	INT BT TO INT BT ⁽³⁾	ABUT TO ABUT ⁽³⁾	
Ft	SF	LF	LF	LF	Lb
60	2,760	356.38	357.00	355.76	6,348
65	2,990	386.38	387.00	385.76	6,877
70	3,220	416.38	417.00	415.76	7,406
75	3,450	446.38	447.00	445.76	7,935
80	3,680	476.38	477.00	475.76	8,464
85	3,910	506.38	507.00	505.76	8,993
90	4,140	536.38	537.00	535.76	9,522
95	4,370	566.38	567.00	565.76	10,051
100	4,600	596.38	597.00	595.76	10,580
105	4,830	626.38	627.00	625.76	11,109
110	5,060	656.38	657.00	655.76	11,638
115	5,290	686.38	687.00	685.76	12,167
120	5,520	716.38	717.00	715.76	12,696
125	5,750	746.38	747.00	745.76	13,225
130	5,980	776.38	777.00	775.76	13,754
135	6,210	806.38	807.00	805.76	14,283

- ⁽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:

Pr
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)**

44' ROADWAY 45° SKEW

SIG-62-44-45

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

DATE:
FILE: