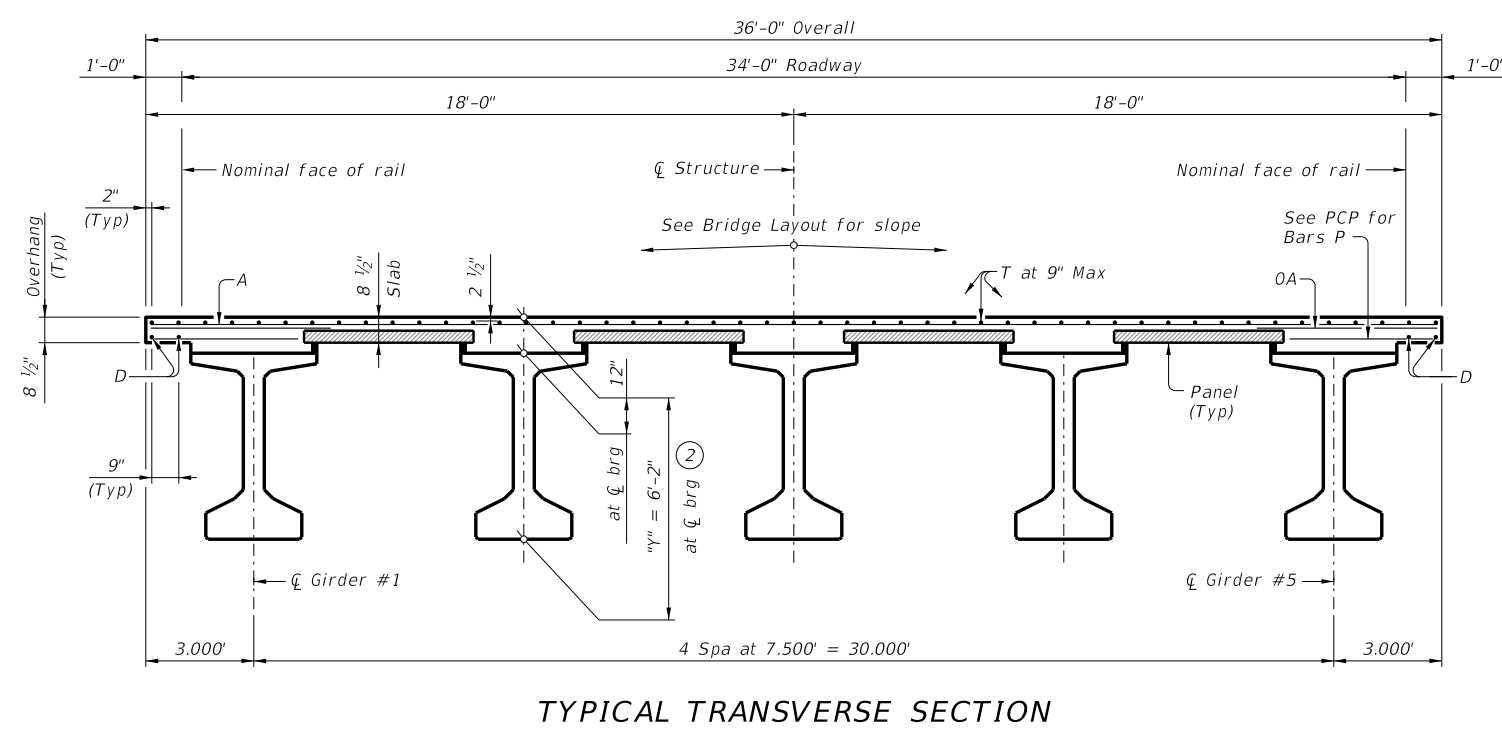
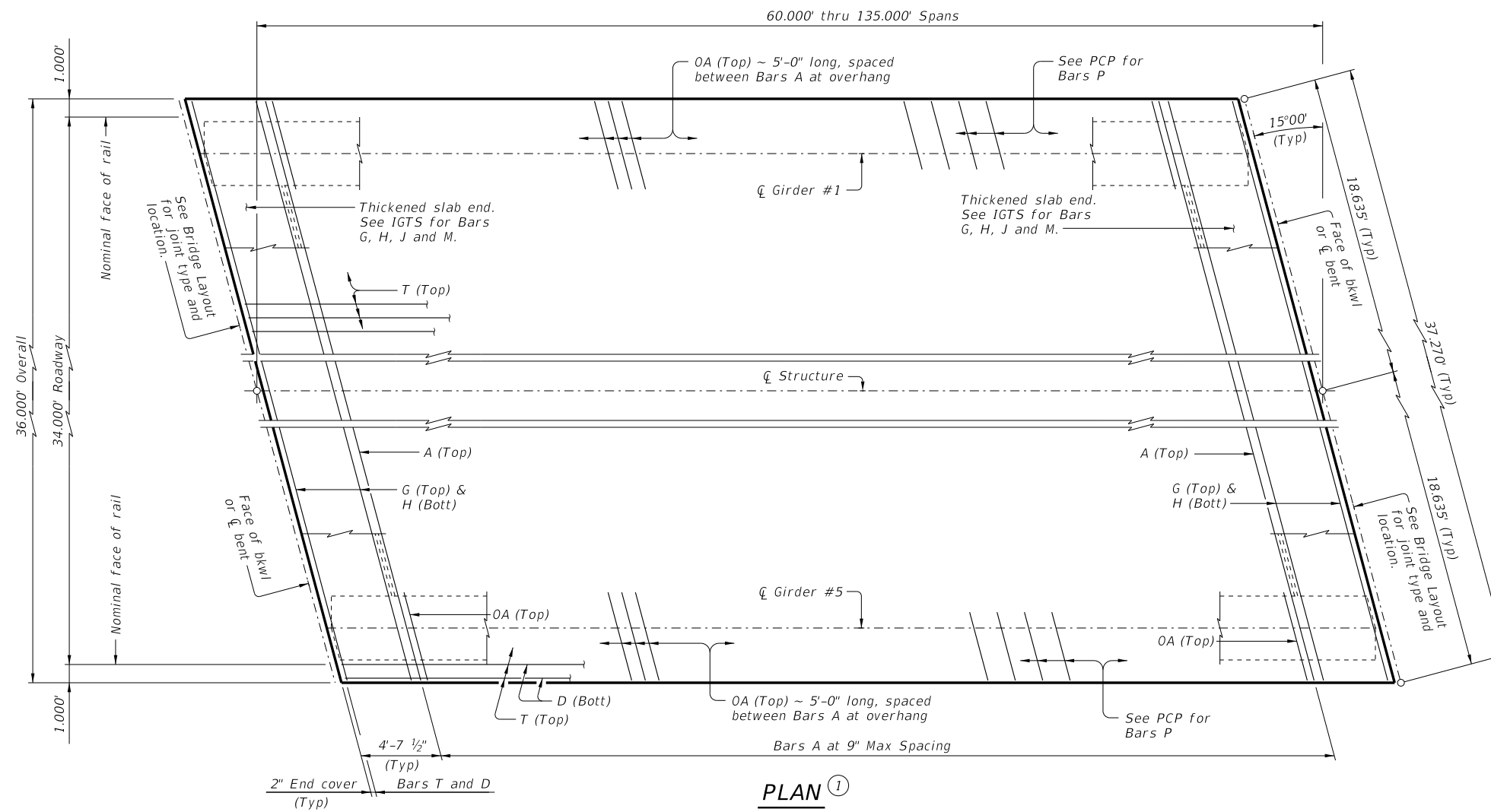


DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE: FILE:



BAR TABLE	
BAR	SIZE
A	#4
D	#4
G	#4
H	#4
J	#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 Tx62)**  
**34' ROADWAY 15° SKEW**

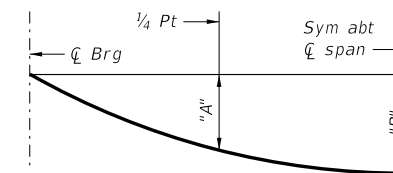
**SIG-62-34-15**

FILE: IG-SIG623415-23.dgn	DN: TAR	CK: VC	DW: SFS	CK: TAR
©TxDOT January 2023	CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST	COUNTY	SHEET NO.

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.

DATE: FILE:

TABLE OF DEAD LOAD DEFLECTIONS		
TYPE T <sub>x</sub> 62 GIRDERS		
SPAN LENGTH	"A"	"B"
Ft	Ft	Ft
60	0.005	0.007
65	0.007	0.010
70	0.010	0.014
75	0.013	0.018
80	0.017	0.024
85	0.022	0.031
90	0.027	0.039
95	0.034	0.048
100	0.042	0.060
105	0.051	0.073
110	0.062	0.088
115	0.074	0.105
120	0.088	0.125
125	0.104	0.148
130	0.122	0.173
135	0.142	0.202



**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.

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	2,160	297.46	297.50	297.41	4,968
65	2,340	322.46	322.50	322.41	5,382
70	2,520	347.46	347.50	347.41	5,796
75	2,700	372.46	372.50	372.41	6,210
80	2,880	397.46	397.50	397.41	6,624
85	3,060	422.46	422.50	422.41	7,038
90	3,240	447.46	447.50	447.41	7,452
95	3,420	472.46	472.50	472.41	7,866
100	3,600	497.46	497.50	497.41	8,280
105	3,780	522.46	522.50	522.41	8,694
110	3,960	547.46	547.50	547.41	9,108
115	4,140	572.46	572.50	572.41	9,522
120	4,320	597.46	597.50	597.41	9,936
125	4,500	622.46	622.50	622.41	10,350
130	4,680	647.46	647.50	647.41	10,764
135	4,860	672.46	672.50	672.41	11,178

<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 Class 5 concrete ( $f'_c = 4,000$  psi).
- 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 (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 T<sub>x</sub>62)**

34' ROADWAY 15° SKEW

**SIG-62-34-15**

FILE: IG-SIG623415-23.dgn	DN: TAR	CK: VC	DW: SFS	CK: TAR
©TxDOT January 2023	CONT	SECT	JOB	HIGHWAY
REVISIONS				
	DIST	COUNTY	SHEET NO.	