

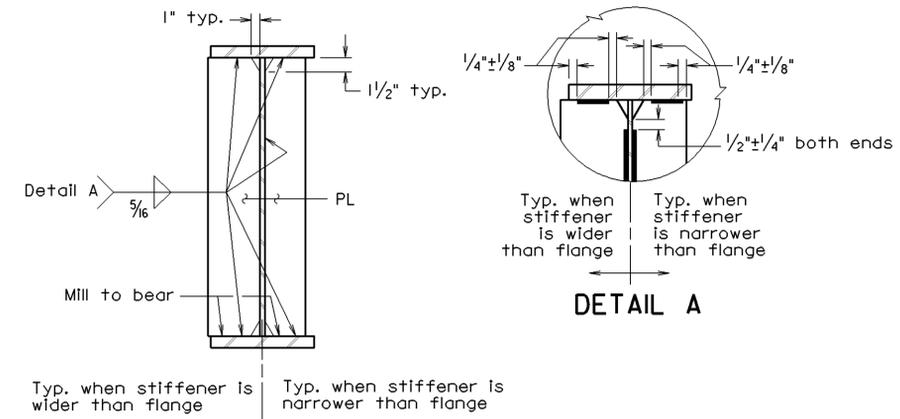
Notes:

The Contractor has the option of eliminating the intermediate web stiffeners by increasing the web thickness to .

For spacing of intermediate diaphragm connector PL's and intermediate web stiffener PL's, see Framing Plan, sheet .

For bolted splice details, sheet .

The top and bottom flanges as shown in Girder Elevation, the web and all splice plates are areas of tensile stress for Charpy V-Notch impact requirements.



GIRDER ELEVATION

PLATE DIMENSION TABLE

Girder	Web PL	PL 1	PL 2	PL 3	PL 4	PL 5	PL 6	PL 7	PL 8	PL 9	PL 10	PL 20	PL 21	PL 22	PL 23	PL 24	PL 25	PL 26	PL 27	PL 28	PL 29	

GIRDER DIMENSION TABLE

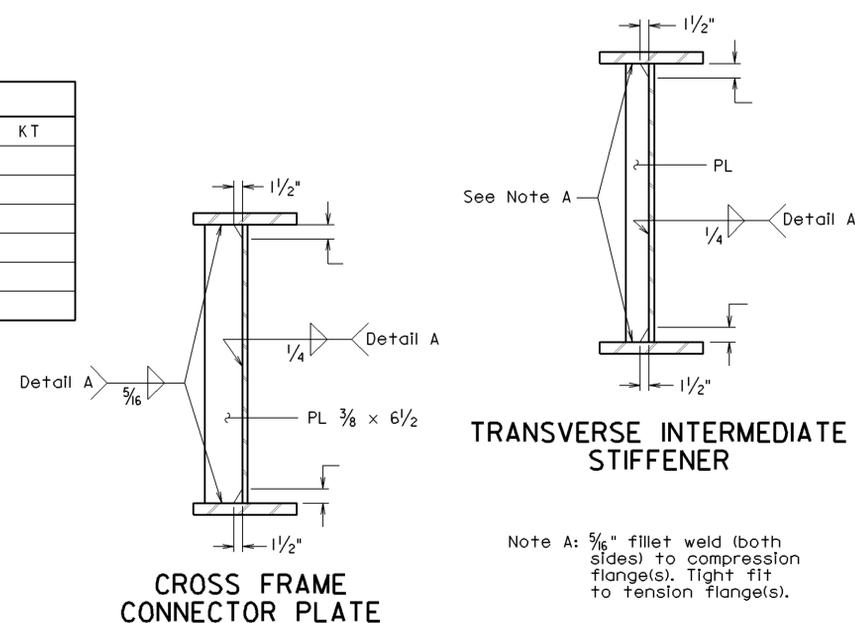
Girder	AB	AT	BB	BT	CB	CT	DB	DT	EB	ET	FB	FT	GB	GT	HB	HT	IB	IT	JB	JT	KB	KT	

GIRDER DIMENSION TABLE

Girder	WA	WB	WC	XA	XB	XC	XD	XE	XF	XG	XH	XI	Radius

TENSION FLANGES

Girder	T1	T2	T3	T4	T5	T6



CROSS FRAME CONNECTOR PLATE

TRANSVERSE INTERMEDIATE STIFFENER

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION					
STRUCTURE AND BRIDGE DIVISION					
GIRDER DETAILS					
No.	Description	Date	Designed:	Date	Plan No.
Revisions			Checked:		Sheet No.

05-16-01 SGDET4AC

**STEEL PLATE GIRDER
4-SPAN CONTINUOUS – TRAPEZOIDAL OR CURVED
GIRDER DETAILS (SHEET 1 OF 2)**

NOTES TO DESIGNER:

Standard is to be used for trapezoidal or curved, 4-span continuous, steel plate girders. The standard includes girder details; tables for plate sizes, dimensions, and tension flange limits; and details for stiffeners, connector plates, etc. Details for two spans of a 4-span continuous unit are on this standard and continued on standard SGDET4BC. The standard is used along with standards SGCAM4AC and SGCAM4BC (camber diagram) and standards SGDL4AC and SGDL4BC (dead load deflection and top of slab elevations along centerline girder).

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

NOTES:

Complete first note (alternate web thickness). Add sheet number(s) to note(s).

GIRDER ELEVATION:

Show location(s) of permissible field splice(s) (bolted splice) and adjust spacing of stud shear connectors in vicinity of splice if required.

PLATE DIMENSION TABLE:

Fill in table.

TENSION FLANGES:

Fill in table.

GIRDER DIMENSION TABLE:

Fill in table.

BEARING STIFFENERS:

Add plate size(s) and location(s).

CROSS FRAME CONNECTOR PLATE:

Add dimensions. See Manual of the Structure and Bridge Division, Volume V – Part 2, file no. 07.21-3.

TRANSVERSE INTERMEDIATE STIFFENER:

Add plate size and dimensions. See Manual of the Structure and Bridge Division, Volume V – Part 2, file no. 07.21-3.

**STEEL PLATE GIRDER
4-SPAN CONTINUOUS – TRAPEZOIDAL OR CURVED
GIRDER DETAILS (SHEET 1 OF 2)**

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD (Continued):

FLANGE CLIP DETAIL:

Add flange clip detail from cell library (see file no. SGCELLS1A) for skewed bridges. Add angle, dimension(s) and location(s). See Manual of the Structure and Bridge Division, Volume V – Part 2, file no. 07.24.

**STEEL PLATE GIRDER
4-SPAN CONTINUOUS – TRAPEZOIDAL OR CURVED
GIRDER DETAILS (SHEET 2 of 2)**

NOTES TO DESIGNER:

Standard is the continuation of standard SGDET4AC. See notes to designer on that standard.

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

PLATE DIMENSION TABLE:

Fill in table.

TENSION FLANGES:

Fill in table.

GIRDER DIMENSION TABLE:

Fill in table.

FLANGE CLIP DETAIL:

Add flange clip detail from cell library (see file no. SGCELLS1A) for skewed bridges. Add angle, dimension(s) and location(s). See Manual of the Structure and Bridge Division, Volume V – Part 2, file no. 07.24.

**STEEL PLATE GIRDER
4-SPAN CONTINUOUS – TRAPEZOIDAL OR CURVED
CAMBER DIAGRAM**

NOTES TO DESIGNER:

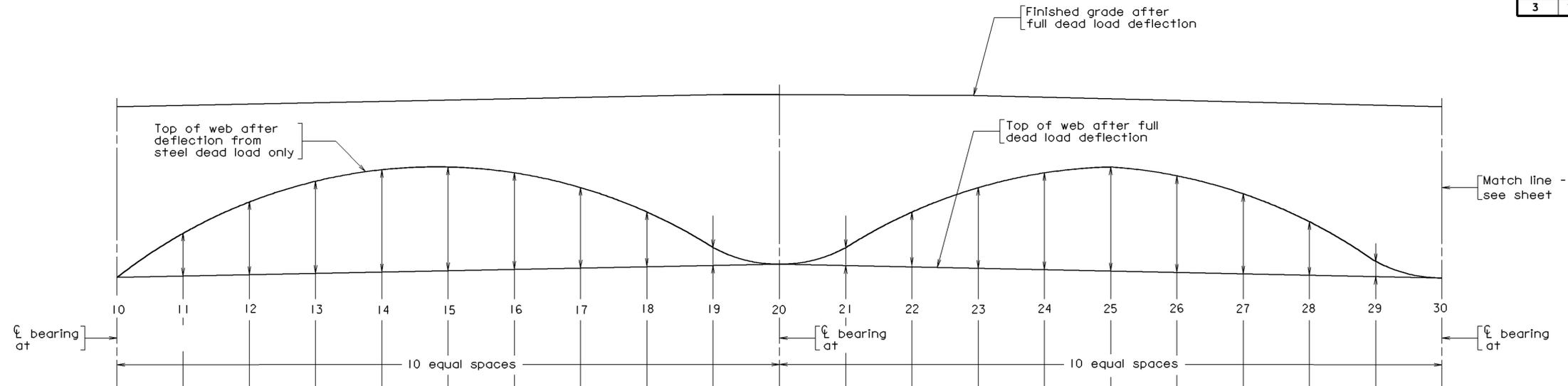
Standard is to be used for trapezoidal or curved, 4-span continuous, steel plate girders. The standard includes the camber diagram and table for deflections. The standard is used along with standards SGDET4AC and SGDET4BC (girder details; tables for plate sizes, dimensions, and tension flange limits; and details for stiffeners, connector plates, etc.) and SGDLD4AC and SGDLD4BC (dead load deflection and top of slab elevations along centerline girder).

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

CAMBER DIAGRAM:

Detail shows hump vertical curve with left support at a higher elevation than right support. Detail may be replaced with other shapes. See file no. SGCELLS4 and SGCELLS4A for modification with other cells.

Fill in dimensions on diagram and fill in table.



	Point	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Girder	△'s																							
	△ c																							
	Total																							
Girder	△'s																							
	△ c																							
	Total																							
Girder	△'s																							
	△ c																							
	Total																							
Girder	△'s																							
	△ c																							
	Total																							
Girder	△'s																							
	△ c																							
	Total																							

All values in Dead Load Deflection Table are in inches.

△'s = Deflection of girder from dead load of concrete deck slab and bolsters.

△c = Deflection of girder from dead load (e.g. parapet) added after deck slab is cast.

DEAD LOAD DEFLECTIONS

TOP OF SLAB ELEVATIONS ALONG G GIRDER

Point	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
Girder																							
Girder																							
Girder																							
Girder																							
Girder																							
Girder																							

SGDL4AC 05-16-01

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION					
STRUCTURE AND BRIDGE DIVISION					
DEAD LOAD DEFLECTIONS AND SLAB ELEVATIONS					
No.	Description	Date	Designed:	Date	Plan No.
			Drawn:		Sheet No.
			Checked:		
Revisions					

Not to scale

© 2001, Commonwealth of Virginia

**STEEL PLATE GIRDER
4-SPAN CONTINUOUS – TRAPEZOIDAL OR CURVED
DEAD LOAD DEFLECTION (SHEET 1 OF 2)**

NOTES TO DESIGNER:

Standard is to be used for trapezoidal or curved, 4-span continuous, steel plate girders. The standard includes table for deflections and top of slab elevations along centerline girder for the first two spans of a 4-span continuous unit and is continued on standard SGDL4BC. The standard is used along with standards SGDET4AC and SGDET4BC (girder details; tables for plate sizes, dimensions, and tension flange limits; and details for stiffeners, connector plates, etc.) and standards SGCAM4AC and SGCAM4BC (camber diagram).

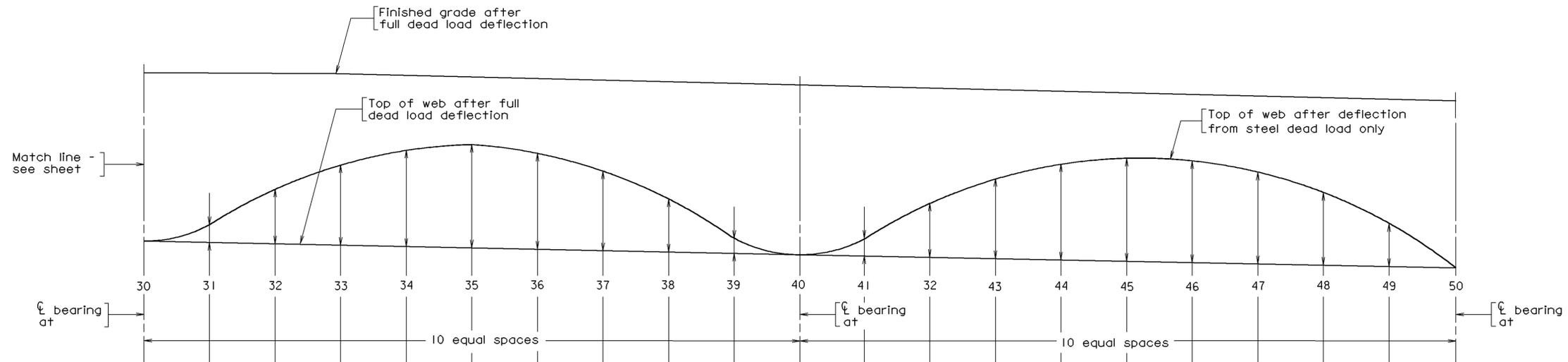
ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

DEAD LOAD DEFLECTION DIAGRAM:

Fill in table of dead load deflections.

TOP OF SLAB ELEVATIONS ALONG CENTERLINE GIRDER:

Fill in table.



	Point	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Girder	△'s																						
	△ c																						
	Total																						
Girder	△'s																						
	△ c																						
	Total																						
Girder	△'s																						
	△ c																						
	Total																						
Girder	△'s																						
	△ c																						
	Total																						
Girder	△'s																						
	△ c																						
	Total																						

All values in Dead Load Deflection Table are in inches.

△'s = Deflection of girder from dead load of concrete deck slab and bolsters.

△c = Deflection of girder from dead load (e.g. parapet) added after deck slab is cast.

DEAD LOAD DEFLECTIONS

TOP OF SLAB ELEVATIONS ALONG G GIRDER

Point	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Girder																						
Girder																						
Girder																						
Girder																						
Girder																						
Girder																						

SGDL4BC 05-16-01

Not to scale

© 2001, Commonwealth of Virginia

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION					
STRUCTURE AND BRIDGE DIVISION					
DEAD LOAD DEFLECTIONS AND SLAB ELEVATIONS					
No.	Description	Date	Designed:	Date	Plan No.
			Drawn:		Sheet No.
			Checked:		
Revisions					

**STEEL PLATE GIRDER
4-SPAN CONTINUOUS – TRAPEZOIDAL OR CURVED
DEAD LOAD DEFLECTION (SHEET 2 OF 2)**

NOTES TO DESIGNER:

Standard is the continuation of standard SGDL4AC. See notes to designer on that standard.

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

See standard SGDL4AC.