

HALF ELEVATION AT ABUTMENT

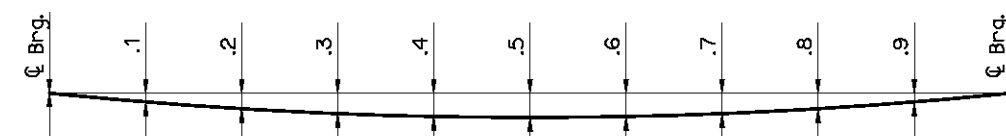
HALF ELEVATION AT PIER

ELEVATION

① Provide Elastomeric Pad with a 50 durometer hardness and consisting of a single layer. Extend pad 1/2" beyond the end of the beam as shown.

Information shown on this sheet is applicable only to the standard bridge cross-section with 40' Clear Roadway, 8" Deck Slab and 4 Beams at 11'-10" spacing. Any deviation requires custom design and details with an appropriate Dead Load Deflection Diagram.

BEAM SCHEDULE																		
SPAN	BEAM	BEAM LENGTH	A	N1	S1	L1	S2	N3	S3	L3	S4	N5	S5	L5	L6	BEARING STIFFENER	ELASTOMERIC PAD	LFD OPERATING RATING
55'	W36x135	54'-8"	17'-10"	27	6"	13'-6"	7"	19	8"	12'-8"	-	19	6"	9'-6"	3'-0"	R 3/4"x5"	7/8"x1'-0"x2'-10 1/2"	HS 34.3
60'	W36x150	59'-8"	19'-6"	30	6"	15'-0"	7"	20	8"	13'-4"	4"	22	6"	11'-0"	3'-0"	R 3/4"x5"	7/8"x1'-0"x2'-10 1/2"	HS 33.3
65'	W40x167	64'-8"	21'-2"	29	6"	14'-6"	7"	25	8"	16'-8"	-	17	6"	8'-6"	5'-0"	R 7/8"x5"	7/8"x11 3/4"x4'-10 1/2"	HS 35.1
70'	W40x183	69'-8"	22'-10"	32	6"	16'-0"	7"	26	8"	17'-4"	4"	20	6"	10'-0"	5'-0"	R 7/8"x5"	7/8"x11 3/4"x4'-10 1/2"	HS 34.5
75'	W40x199	74'-8"	24'-6"	22	8"	14'-8"	10"	25	10"	20'-10"	5"	13	8"	8'-8"	5'-0"	R 3/4"x7"	1"x1'-3 3/4"x4'-10 1/2"	HS 34.0



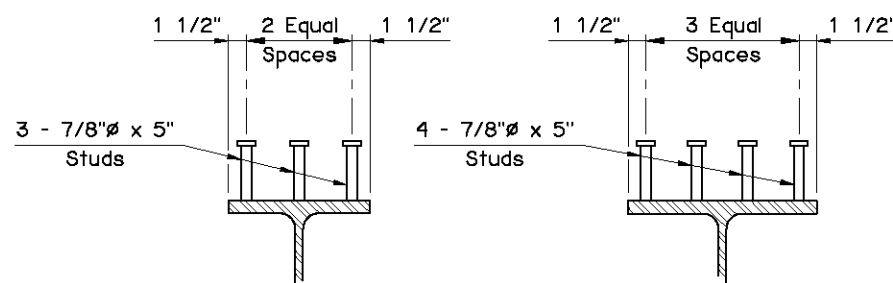
DEAD LOAD DEFLECTION DIAGRAM

ROLLED BEAM NOTES

Provide structural steel for Rolled Beam and all stiffener plates in accordance with AASHTO M270 (ASTM A709), Grade 50WT2 (Weathering Steel, Non-Fracture Critical Charpy V-Notch tested for Zone 2). Use Shear Connectors conforming to AASHTO M169 (ASTM A108), Grade 1015, 1018 or 1020. Provide welding with weathering characteristics. Camber Beams to account for vertical curve and dead load deflection. The Contractor may substitute Plate Girders using equivalent plate sizes in lieu of the Rolled Beam shape shown at no additional cost to the Department. Provide 5/16" minimum fillet welds between web and flanges. Non-destructive testing will be required as appropriate.

DEFLECTION SCHEDULE												
SPAN	BEAM AND DIAPHRAGM DEFLECTION						DECK SLAB, HAUNCH, S.I.P. STEEL DECK FORMS AND TRAFFIC RAIL DEFLECTION ②					
	¢ BRG.	.1 & .9	.2 & .8	.3 & .7	.4 & .6	.5	¢ BRG.	.1 & .9	.2 & .8	.3 & .7	.4 & .6	.5
55'	0.00"	0.03"	0.06"	0.09"	0.10"	0.11"	0.00"	0.30"	0.57"	0.78"	0.92"	0.97"
60'	0.00"	0.05"	0.09"	0.12"	0.14"	0.15"	0.00"	0.37"	0.71"	0.97"	1.14"	1.19"
65'	0.00"	0.06"	0.11"	0.15"	0.17"	0.18"	0.00"	0.41"	0.77"	1.05"	1.23"	1.29"
70'	0.00"	0.07"	0.14"	0.19"	0.22"	0.23"	0.00"	0.48"	0.91"	1.25"	1.46"	1.53"
75'	0.00"	0.10"	0.18"	0.25"	0.29"	0.30"	0.00"	0.57"	1.08"	1.48"	1.73"	1.82"

② The Dead Load Deflection shown at the tenth points are the deflections due to Deck Slab + Haunch + S.I.P. Steel Deck Form Allowance + Concrete Traffic Rail. It does not include the Beam weight, Diaphragms or Future Wearing Surface.



55' THRU 70' SPANS

75' SPAN

SHEAR CONNECTOR DETAIL

NOTE:
For additional details, see DIAPHRAGM DETAILS.

APPROVED BY BRIDGE ENGINEER *David J. Smith* DATE *4/2/10*

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)
ROLLED BEAM DETAILS
55' THRU 75' SPANS
INTEGRAL

2009 SPECIFICATIONS | B40-I-RB-5575 | 02E | B-147E