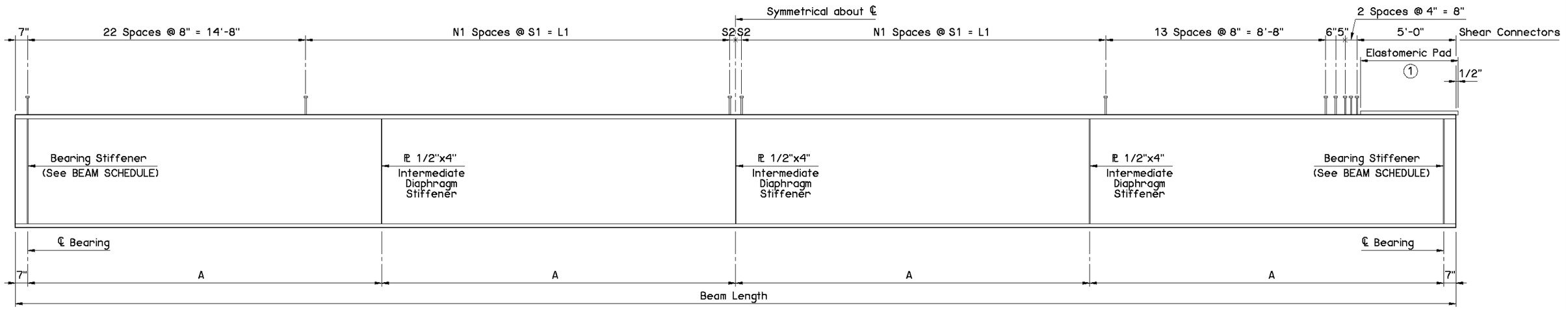


HALF ELEVATION AT ABUTMENT

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.

ROLLED BEAM NOTES

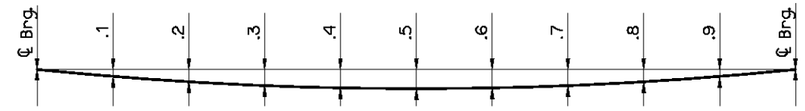
Provide structural steel for Rolled Beam and all stiffener plates in accordance with AASHTO M270 (ASTM A709), Grade 50WT2 (Weathering Steel, Non-Fracture Critical Charpy V-Notch tested for Zone 2). Use Shear Connectors conforming to AASHTO M169 (ASTM A108), Grade 1015, 1018 or 1020. Provide welding with weathering characteristics.

Camber Beams to account for vertical curve and dead load deflection.

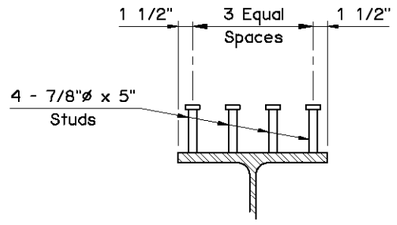
The Contractor may substitute Plate Girders using equivalent plate sizes in lieu of the Rolled Beam shape shown at no additional cost to the Department. Provide 5/16" minimum fillet welds between web and flanges. Non-destructive testing will be required as appropriate.

BEAM SCHEDULE

SPAN	BEAM	BEAM LENGTH	A	N1	S1	L1	S2	BEARING STIFFENER	ELASTOMERIC PAD	LFD OPERATING RATING
80'	W40x215	79'-8"	19'-7 1/2"	29	10"	24'-2"	5"	PL 3/4"x7"	1"x1'-3 3/4"x4'-10 1/2"	HS 33.5
85'	W40x249	84'-8"	20'-10 1/2"	32	10"	26'-8"	5"	PL 3/4"x7"	1"x1'-3 3/4"x4'-10 1/2"	HS 36.0
90'	W40x277	89'-8"	22'-1 1/2"	35	10"	29'-2"	5"	PL 3/4"x7"	1"x1'-3 7/8"x4'-10 1/2"	HS 36.6
95'	W40x297	94'-8"	23'-4 1/2"	38	10"	31'-8"	5"	PL 3/4"x7"	1"x1'-3 7/8"x4'-10 1/2"	HS 34.5
100'	W40x324	99'-8"	24'-7 1/2"	41	10"	34'-2"	5"	PL 3/4"x7"	1"x1'-3 7/8"x4'-10 1/2"	HS 34.4



DEAD LOAD DEFLECTION DIAGRAM



SHEAR CONNECTOR DETAIL

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
80'	0.00"	0.12"	0.22"	0.31"	0.36"	0.38"	0.00"	0.67"	1.26"	1.72"	2.02"	2.12"
85'	0.00"	0.15"	0.28"	0.39"	0.46"	0.48"	0.00"	0.73"	1.38"	1.89"	2.22"	2.33"
90'	0.00"	0.19"	0.36"	0.49"	0.57"	0.60"	0.00"	0.82"	1.56"	2.13"	2.49"	2.62"
95'	0.00"	0.24"	0.45"	0.61"	0.72"	0.76"	0.00"	0.97"	1.83"	2.51"	2.94"	3.08"
100'	0.00"	0.29"	0.55"	0.75"	0.88"	0.92"	0.00"	1.08"	2.05"	2.80"	3.28"	3.45"

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.

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.

NOTE:
For additional details, see DIAPHRAGM DETAILS.

APPROVED BY BRIDGE ENGINEER Scott K. Loach DATE 4/2/10

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)

ROLLED BEAM DETAILS 80' THRU 100' SPANS INTEGRAL

2009 SPECIFICATIONS	B40-I-RB-80100	02E

B-148E