

W33x130, W33x141, W36x135 or W36x150

DEFLECTION SCHEDULE FOR COMPOSITE APPLICATION OF BEAMS							
DUE TO SIP FORMS, DECK SLAB, HAUNCH, AND TR3 RAIL DEFLECTION							
BEAM	MAX. SPAN	CL BRG.	0.1 & 0.9	0.2 & 0.8	0.3 & 0.7	0.4 & 0.6	0.5
W33x130	50'-0"	0.00"	0.18"	0.35"	0.47"	0.55"	0.58"
W33x141	55'-0"	0.00"	0.24"	0.46"	0.63"	0.74"	0.78"
W36x135	55'-0"	0.00"	0.23"	0.44"	0.61"	0.71"	0.74"
W36x150	60'-0"	0.00"	0.29"	0.55"	0.75"	0.88"	0.92"

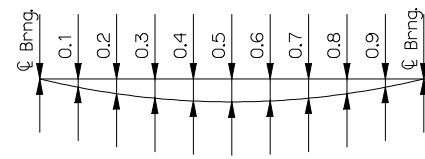
DEFLECTION SCHEDULE FOR NON-COMPOSITE APPLICATION OF BEAMS							
DUE TO SIP FORMS, DECK SLAB, HAUNCH, AND TR3 RAIL DEFLECTION							
BEAM	MAX. SPAN	CL BRG.	0.1 & 0.9	0.2 & 0.8	0.3 & 0.7	0.4 & 0.6	0.5
W33x130	35'-0"	0.00"	0.04"	0.08"	0.11"	0.13"	0.14"
W33x141	40'-0"	0.00"	0.07"	0.13"	0.18"	0.21"	0.22"
W36x135	40'-0"	0.00"	0.07"	0.13"	0.17"	0.20"	0.21"
W36x150	45'-0"	0.00"	0.09"	0.17"	0.24"	0.28"	0.29"

COMPOSITE SECTION BEAM SCHEDULE - CONCRETE ABUTMENT						
BEAM	MAX. SPAN	BEAM LENGTH	A	B	C	LFD OPERATING RATING
W33x130	50'-0"	48'-2"	15'-8"	7'-10"	7"	HS 40.2
W33x141	55'-0"	53'-2"	17'-4"	8'-8"	7"	HS 37.4
W36x135	55'-0"	53'-2"	17'-4"	8'-8"	7"	HS 36.8
W36x150	60'-0"	58'-2"	19'-0"	9'-6"	7"	HS 38.2

NON-COMPOSITE SECTION BEAM SCHEDULE - CONCRETE ABUTMENT						
BEAM	MAX. SPAN	BEAM LENGTH	A	B	C	LFD OPERATING RATING
W33x130	35'-0"	33'-2"	10'-8"	5'-4"	7"	HS 41.2
W33x141	40'-0"	38'-2"	12'-4"	6'-2"	7"	HS 37.2
W36x135	40'-0"	38'-2"	12'-4"	6'-2"	7"	HS 36.0
W36x150	45'-0"	43'-2"	14'-0"	7'-0"	7"	HS 42.6

COMPOSITE SECTION BEAM SCHEDULE - STEEL ABUTMENT						
BEAM	MAX. SPAN	BEAM LENGTH	A	B	C	LFD OPERATING RATING
W33x130	50'-0"	49'-10"	16'-3"	8'-2"	6"	HS 40.2
W33x141	55'-0"	54'-10"	17'-11"	9'-0"	6"	HS 37.4
W36x135	55'-0"	54'-10"	17'-11"	9'-0"	6"	HS 36.8
W36x150	60'-0"	59'-10"	19'-7"	9'-10"	6"	HS 38.2

NON-COMPOSITE SECTION BEAM SCHEDULE - STEEL ABUTMENT						
BEAM	MAX. SPAN	BEAM LENGTH	A	B	C	LFD OPERATING RATING
W33x130	35'-0"	34'-10"	11'-3"	5'-8"	6"	HS 41.2
W33x141	40'-0"	39'-10"	12'-11"	6'-6"	6"	HS 37.2
W36x135	40'-0"	39'-10"	12'-11"	6'-6"	6"	HS 36.0
W36x150	45'-0"	44'-10"	14'-7"	7'-4"	6"	HS 42.6



DEAD LOAD DEFLECTION DIAGRAM

NOTES:

- TERMINATE FILLET WELDS 3/8" FROM THE EDGES OF CLIPPED CORNERS AND NON-CLIPPED CORNERS OF STIFFENER PLATES.
- THE LFD OPERATING RATING SHOWN IN THE TABLE APPLIES ONLY TO THE ROLLED BEAMS OF A BRIDGE CONSTRUCTED IN STRICT CONFORMANCE TO ALL RELEVANT DETAILS CONTAINED IN THESE COUNTY BRIDGE STANDARDS AND TO THE ODOT STANDARD SPECIFICATIONS.
- DEAD LOAD DEFLECTIONS SHOWN AT TENTH POINTS ARE THE THEORETICAL BEAM DEFLECTIONS DUE TO A 5 PSF SIP FORMS ALLOWANCE, DECK SLAB, HAUNCH AND CONCRETE TRAFFIC RAIL (TR-3). THE DEAD LOAD DEFLECTIONS SHALL BE ACCOUNTED FOR IN THE HAUNCH DEPTH CALCULATIONS. DEAD LOAD DEFLECTIONS ABOVE ARE BASED UPON THE MAXIMUM SPAN AS SHOWN IN THE TABLES. SHOULD THE BEAMS BE USED FOR SPANS SHORTER THAN THE MAXIMUM SHOWN, DEAD LOAD DEFLECTIONS SHALL BE RECALCULATED AND APPROVED BY THE ENGINEER PRIOR TO SETTING THE HAUNCH DEPTH.
- COMPOSITE SECTION VALUES SHOULD BE USED WHEN SHEAR CONNECTORS ARE PRESENT AT 12" MAXIMUM SPACING. USE NON-COMPOSITE VALUES WHEN BEAMS DO NOT HAVE SHEAR CONNECTORS, OR WHEN THEIR SPACING EXCEEDS 12".
- BOLTS SHALL CONFORM TO AASHTO M 164 (ASTM A 325), TYPE 3. HEX NUTS SHALL CONFORM TO AASHTO M 291 (ASTM A 563), PROPERTY CLASS 8S3 OR 10S3. WASHERS SHALL CONFORM TO AASHTO M 293 (ASTM F 436), TYPE 3.

APPROVED BY BRIDGE ENGINEER *Robert J. Neuch* DATE 4-27-2012

OKLAHOMA DEPARTMENT OF TRANSPORTATION
COUNTY BRIDGE STANDARDS (ENGLISH)

ROLLED BEAM DETAILS
32' CLEAR ROADWAY, 0° SKEW

2009 SPECIFICATIONS CB32-XTBM-SKO-DTL OOE CB-978E