

SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)

SPAN	PRESTRESSED CONCRETE BEAM TYPE	ABUTMENT TO ABUTMENT								ABUTMENT TO STANDARD PIER								ABUTMENT TO STEPPED PIER							
		PRESTRESSED CONCRETE BEAMS (TYPE ①)	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL ②	WEATHERING STEEL FIXED BEARING ASSEMBLY ③	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ③	CLASS AA CONCRETE	REINFORCING STEEL ④	PRESTRESSED CONCRETE BEAMS (TYPE ①)	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL ②	WEATHERING STEEL FIXED BEARING ASSEMBLY ③	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ③	CLASS AA CONCRETE	REINFORCING STEEL ⑤	PRESTRESSED CONCRETE BEAMS (TYPE ①)	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL ②	WEATHERING STEEL FIXED BEARING ASSEMBLY ③	WEATHERING STEEL EXPANSION BEARING ASSEMBLY ③	CLASS AA CONCRETE	REINFORCING STEEL ⑤
		(LF)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	(LF)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	(LF)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)
30'	II	118.67	100.1	66.4	630	4	4	34.0	7,440	118.67	95.2	63.2	500	4	4	31.9	6,930	118.67	96.2	63.9	500	4	4	32.2	6,960
	B	118.67	100.1	66.4	630	4	4	33.8	7,430	118.67	95.2	63.2	500	4	4	31.7	6,920	118.67	96.2	63.9	500	4	4	32.1	6,950
35'	II	138.67	115.7	76.4	630	4	4	38.3	8,280	138.67	110.8	73.2	500	4	4	36.2	7,770	138.67	111.8	73.9	500	4	4	36.6	7,800
	B	138.67	115.7	76.4	630	4	4	38.1	8,270	138.67	110.8	73.2	500	4	4	36.1	7,760	138.67	111.8	73.9	500	4	4	36.4	7,790
40'	II	158.67	131.2	86.4	630	4	4	42.7	9,270	158.67	126.3	83.2	500	4	4	40.6	8,760	158.67	127.3	83.9	500	4	4	41.0	8,790
	B	158.67	131.2	86.4	630	4	4	42.5	9,260	158.67	126.3	83.2	500	4	4	40.4	8,750	158.67	127.3	83.9	500	4	4	40.8	8,780
45'	II	178.67	146.8	96.4	630	4	4	47.0	10,110	178.67	141.9	93.2	500	4	4	45.0	9,600	178.67	142.9	93.9	500	4	4	45.3	9,640
	B	178.67	146.8	96.4	630	4	4	46.9	10,100	178.67	141.9	93.2	500	4	4	44.8	9,590	178.67	142.9	93.9	500	4	4	45.1	9,630
50'	II	198.67	162.3	106.4	630	4	4	51.4	11,110	198.67	157.4	103.2	500	4	4	49.3	10,670	198.67	158.5	103.9	500	4	4	49.7	10,700
	B	198.67	162.3	106.4	630	4	4	51.2	11,100	198.67	157.4	103.2	500	4	4	49.1	10,660	198.67	158.5	103.9	500	4	4	49.5	10,690
55'	II	218.67	177.9	116.4	630	4	4	55.8	11,950	218.67	173.0	113.2	500	4	4	53.7	11,510	218.67	174.0	113.9	500	4	4	54.0	11,540
	B	218.67	177.9	116.4	630	4	4	55.6	11,940	218.67	173.0	113.2	500	4	4	53.5	11,500	218.67	174.0	113.9	500	4	4	53.9	11,530
60'	II	238.67	193.5	126.4	630	4	4	60.1	13,090	238.67	188.5	123.2	500	4	4	58.0	12,510	238.67	189.6	123.9	500	4	4	58.4	12,540
	C	238.67	193.5	126.4	630	4	4	60.9	13,100	238.67	188.5	123.2	500	4	4	58.8	12,520	238.67	189.6	123.9	500	4	4	59.1	12,550
65'	II	258.67	209.0	136.4	630	4	4	64.5	13,930	258.67	204.1	133.2	500	4	4	62.4	13,340	258.67	205.1	133.9	500	4	4	62.8	13,380
	C	258.67	209.0	136.4	630	4	4	65.2	13,940	258.67	204.1	133.2	500	4	4	63.2	13,350	258.67	205.1	133.9	500	4	4	63.5	13,390
70'	III	278.67	224.6	146.4	630	4	4	70.2	14,960	278.67	219.6	143.2	500	4	4	68.1	14,450	278.67	220.7	143.9	500	4	4	68.5	14,480
	C	278.67	224.6	146.4	630	4	4	69.6	14,940	278.67	219.6	143.2	500	4	4	67.5	14,430	278.67	220.7	143.9	500	4	4	67.9	14,460
75'	III	298.67	240.1	156.4	630	4	4	74.6	15,800	298.67	235.2	153.2	500	4	4	72.5	15,290	298.67	236.2	153.9	500	4	4	72.9	15,320
	C	298.67	240.1	156.4	630	4	4	74.0	15,770	298.67	235.2	153.2	500	4	4	71.9	15,260	298.67	236.2	153.9	500	4	4	72.3	15,300
80'	III	318.67	255.7	166.4	630	4	4	79.0	16,790	318.67	250.8	163.2	500	4	4	76.9	16,280	318.67	251.8	163.9	500	4	4	77.3	16,310
	C	318.67	255.7	166.4	630	4	4	78.4	16,770	318.67	250.8	163.2	500	4	4	76.3	16,260	318.67	251.8	163.9	500	4	4	76.7	16,290
85'	III	338.67	271.2	176.4	630	4	4	83.4	17,630	338.67	266.3	173.2	500	4	4	81.3	17,120	338.67	267.3	173.9	500	4	4	81.7	17,150
	IV	338.67	271.2	176.4	630	4	4	84.8	17,650	338.67	266.3	173.2	500	4	4	82.7	17,140	338.67	267.3	173.9	500	4	4	83.0	17,170
90'	III	358.67	286.8	186.4	630	4	4	87.8	18,630	358.67	281.9	183.2	500	4	4	85.7	18,120	358.67	282.9	183.9	500	4	4	86.1	18,150
	IV	358.67	286.8	186.4	630	4	4	89.2	18,650	358.67	281.9	183.2	500	4	4	87.1	18,140	358.67	282.9	183.9	500	4	4	87.5	18,170
95'	IV	378.67	302.3	196.4	630	4	4	93.7	19,490	378.67	297.4	193.2	500	4	4	91.6	18,970	378.67	298.5	193.9	500	4	4	91.9	19,010
100'	IV	398.67	317.9	206.4	630	4	4	98.1	20,480	398.67	313.0	203.2	500	4	4	96.0	19,970	398.67	314.0	203.9	500	4	4	96.4	20,000
105'	IV	418.67	333.5	216.4	760	4	4	104.0	21,500	418.67	328.5	213.2	630	4	4	101.9	20,990	418.67	329.6	213.9	630	4	4	102.3	21,030
110'	IV	438.67	349.0	226.4	760	4	4	108.5	22,500	438.67	344.1	223.2	630	4	4	106.4	22,060	438.67	345.1	223.9	630	4	4	106.8	22,100
115'	IV	458.67	364.6	236.4	760	4	4	112.9	23,490	458.67	359.6	233.2	630	4	4	110.8	22,900	458.67	360.7	233.9	630	4	4	111.2	22,940
120'	BT-72	478.67	380.1	246.4	1,240	4	4	132.4	25,970	478.67	375.2	243.2	1,110	4	4	130.2	25,390	478.67	376.2	243.9	1,110	4	4	130.6	25,420
	J	478.67	380.1	246.4	1,240	4	4	132.3	25,970	478.67	375.2	243.2	1,110	4	4	130.2	25,390	478.67	376.2	243.9	1,110	4	4	130.6	25,420
125'	BT-72	498.67	395.7	256.4	1,240	4	4	137.1	26,810	498.67	390.8	253.2	1,110	4	4	134.9	26,230	498.67	391.8	253.9	1,110	4	4	135.4	26,260
	J	498.67	395.7	256.4	1,240	4	4	137.1	26,810	498.67	390.8	253.2	1,110	4	4	134.9	26,230	498.67	391.8	253.9	1,110	4	4	135.4	26,260
130'	BT-72	518.67	411.2	266.4	1,240	4	4	141.8	27,810	518.67	406.3	263.2	1,110	4	4	139.7	27,220	518.67	407.3	263.9	1,110	4	4	140.1	27,250
	J	518.67	411.2	266.4	1,240	4	4	141.8	27,810	518.67	406.3	263.2	1,110	4	4	139.7	27,220	518.67	407.3	263.9	1,110	4	4	140.1	27,250
135'	J	538.67	426.8	276.4	1,240	4	4	146.5	28,650	538.67	421.9	273.2	1,110	4	4	144.4	28,060	538.67	422.9	273.9	1,110	4	4	144.8	28,100
140'	J	558.67	442.3	286.4	1,240	4	4	151.3	29,640	558.67	437.4	283.2	1,110	4	4	149.1	29,060	558.67	438.5	283.9	1,110	4	4	149.6	29,090
145'	J	578.67	457.9	296.4	1,240	4	4	156.0	30,480	578.67	453.0	293.2	1,110	4	4	153.9	29,900	578.67	454.0	293.9	1,110	4	4	154.3	29,930

- ① PRESTRESSED CONCRETE BEAM TYPE SHALL BE TYPE II, TYPE B, TYPE III, TYPE C, TYPE IV, TYPE 72 BT OR TYPE J BT AS APPLICABLE.
- ② QUANTITIES SHOWN INCLUDE WEIGHT OF STEEL ANGLE BUMPERS AT ABUTMENT ENDS OF DECK SLAB. FOR EACH STEEL ANGLE BUMPER OMITTED FROM END OF DECK SLAB, DEDUCT 130 POUNDS FROM THE QUANTITIES SHOWN.
- ③ PROVIDE AND INSTALL FIXED OR EXPANSION BEARING ASSEMBLIES OF THE SIZE, SHAPE AND LOCATION AS DETAILED IN THE PLANS. SEE SUMMARY FOR THE ESTIMATED TOTAL AMOUNT OF STRUCTURAL STEEL PER EACH FIXED OR EXPANSION BEARING ASSEMBLY. ALL COST OF PROVIDING AND INSTALLING THE FIXED OR EXPANSION BEARING ASSEMBLIES INCLUDING THE COST OF STEEL REINFORCED ELASTOMERIC BEARING PADS, ANCHOR PLATES, CONTACT PLATES, CONTACT ANGLES, ANCHOR BOLTS, NUTS, WASHERS, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF "WEATHERING STEEL FIXED BEARING ASSEMBLY" OR "WEATHERING STEEL EXPANSION BEARING ASSEMBLY."
- ④ QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:
30' THRU 55' SPANS - NO LAP SPLICES
60' THRU 110' SPANS - 1 LAP SPLICE
115' THRU 145' SPANS - 2 LAP SPLICES
- ⑤ QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:
30' THRU 45' SPANS - 1/2 LAP SPLICE
50' THRU 65' SPANS - 1 LAP SPLICE
70' THRU 105' SPANS - 1 1/2 LAP SPLICES
110' THRU 145' SPANS - 2 LAP SPLICES
LAP SPLICES ACCOUNT FOR ADJACENT SPAN COMBINATIONS AND ARE APPROXIMATE. PAYMENT FOR "REINFORCING STEEL" WILL BE BASED ON PLAN QUANTITY.

PRESTRESSED CONCRETE BEAM TYPE	SPAN	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY (LB)
II AND B	30' THRU 65'	150
	60' THRU 75'	160
III AND C	80' THRU 90'	170
	85' THRU 95'	190
IV AND BT-72	100' THRU 120'	200
	125' THRU 130'	210
J	120' THRU 145'	220

ITEM	UNIT	TOTAL
SEALED EXPANSION JOINT	LF	35.17

NOTES

QUANTITY CALCULATIONS ASSUME ALL PIERS ARE FIXED PIERS. ANY ADJUSTMENTS TO THE QUANTITIES OF "SAW-CUT GROOVING", "CONCRETE RAIL (TR3)", "CLASS AA CONCRETE" AND "REINFORCING STEEL" NECESSARY TO ACCOUNT FOR EXPANSION JOINT OPENINGS WITHIN THE BRIDGE ARE MINOR AND HAVE NOT BEEN CONSIDERED. PAYMENT FOR "SAW-CUT GROOVING", "CONCRETE RAIL (TR3)", "CLASS AA CONCRETE" AND "REINFORCING STEEL" WILL BE BASED ON PLAN QUANTITY.

APPROVED BY BRIDGE ENGINEER <i>Robert J. Dusch</i>	DATE 9-9-2011
OKLAHOMA DEPARTMENT OF TRANSPORTATION COUNTY BRIDGE STANDARD (ENGLISH)	
SUPERSTRUCTURE QUANTITIES	
P.C. BEAMS	
(SHEET NO. 1 OF 2)	
32' CLEAR ROADWAY - CONVENTIONAL - SKEWED 0°	
2009 SPECIFICATIONS	CB32-C-SKO-SPR-QUAN-PCB-1 01E
	CB-565E