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	106.0	70.5	730	4	4	36.6	10,830	118.67	97.9	65.3	580	4	4	33.4	10,250	118.67	101.5	67.6	580	4	4	34.7	10,520
	B	118.67	106.0	70.5	730	4	4	36.4	10,820	118.67	97.9	65.3	580	4	4	33.2	10,240	118.67	101.5	67.6	580	4	4	34.5	10,510
35'	II	138.67	121.6	80.5	730	4	4	41.0	11,830	138.67	113.5	75.3	580	4	4	37.8	11,200	138.67	117.1	77.6	580	4	4	39.0	11,420
	B	138.67	121.6	80.5	730	4	4	40.8	11,810	138.67	113.5	75.3	580	4	4	37.6	11,190	138.67	117.1	77.6	580	4	4	38.8	11,410
40'	II	158.67	137.1	90.5	730	4	4	45.4	12,660	158.67	129.0	85.3	580	4	4	42.1	12,200	158.67	132.6	87.6	580	4	4	43.4	12,410
	B	158.67	137.1	90.5	730	4	4	45.1	12,650	158.67	129.0	85.3	580	4	4	41.9	12,190	158.67	132.6	87.6	580	4	4	43.2	12,400
45'	II	178.67	152.7	100.5	730	4	4	49.7	13,660	178.67	144.6	95.3	580	4	4	46.5	13,040	178.67	148.2	97.6	580	4	4	47.7	13,250
	B	178.67	152.7	100.5	730	4	4	49.5	13,650	178.67	144.6	95.3	580	4	4	46.3	13,030	178.67	148.2	97.6	580	4	4	47.5	13,240
50'	II	198.67	168.2	110.5	730	4	4	54.1	14,500	198.67	160.1	105.3	580	4	4	50.9	14,110	198.67	163.8	107.6	580	4	4	52.1	14,320
	B	198.67	168.2	110.5	730	4	4	53.9	14,490	198.67	160.1	105.3	580	4	4	50.6	14,100	198.67	163.8	107.6	580	4	4	51.9	14,310
55'	II	218.67	183.8	120.5	730	4	4	58.4	15,490	218.67	175.7	115.3	580	4	4	55.2	14,950	218.67	179.3	117.6	580	4	4	56.5	15,160
	B	218.67	183.8	120.5	730	4	4	58.2	15,480	218.67	175.7	115.3	580	4	4	55.0	14,940	218.67	179.3	117.6	580	4	4	56.3	15,150
60'	II	238.67	199.4	130.5	730	4	4	62.8	16,480	238.67	191.2	125.3	580	4	4	59.6	15,940	238.67	194.9	127.6	580	4	4	60.8	16,160
	C	238.67	199.4	130.5	730	4	4	63.7	16,500	238.67	191.2	125.3	580	4	4	60.4	15,960	238.67	194.9	127.6	580	4	4	61.7	16,170
65'	II	258.67	214.9	140.5	730	4	4	67.1	17,480	258.67	206.8	135.3	580	4	4	63.9	16,780	258.67	210.4	137.6	580	4	4	65.2	17,000
	C	258.67	214.9	140.5	730	4	4	68.0	17,490	258.67	206.8	135.3	580	4	4	64.8	16,800	258.67	210.4	137.6	580	4	4	66.1	17,010
70'	III	278.67	230.5	150.5	730	4	4	73.0	18,350	278.67	222.4	145.3	580	4	4	69.7	17,890	278.67	226.0	147.6	580	4	4	71.0	18,100
	C	278.67	230.5	150.5	730	4	4	72.4	18,330	278.67	222.4	145.3	580	4	4	69.2	17,870	278.67	226.0	147.6	580	4	4	70.5	18,080
75'	III	298.67	246.0	160.5	730	4	4	77.4	19,350	298.67	237.9	155.3	580	4	4	74.1	18,730	298.67	241.5	157.6	580	4	4	75.4	18,940
	C	298.67	246.0	160.5	730	4	4	76.8	19,330	298.67	237.9	155.3	580	4	4	73.5	18,710	298.67	241.5	157.6	580	4	4	74.9	18,920
80'	III	318.67	261.6	170.5	730	4	4	81.8	20,180	318.67	253.5	165.3	580	4	4	78.5	19,720	318.67	257.1	167.6	580	4	4	79.8	19,940
	C	318.67	261.6	170.5	730	4	4	81.2	20,170	318.67	253.5	165.3	580	4	4	77.9	19,700	318.67	257.1	167.6	580	4	4	79.2	19,920
85'	III	338.67	277.1	180.5	730	4	4	86.2	21,180	338.67	269.0	175.3	580	4	4	82.9	20,560	338.67	272.6	177.6	580	4	4	84.2	20,780
	IV	338.67	277.1	180.5	730	4	4	87.7	21,200	338.67	269.0	175.3	580	4	4	84.4	20,580	338.67	272.6	177.6	580	4	4	85.7	20,800
90'	III	358.67	292.7	190.5	730	4	4	90.6	22,020	358.67	284.6	185.3	580	4	4	87.3	21,560	358.67	288.2	187.6	580	4	4	88.7	21,770
	IV	358.67	292.7	190.5	730	4	4	92.2	22,040	358.67	284.6	185.3	580	4	4	88.8	21,580	358.67	288.2	187.6	580	4	4	90.2	21,790
95'	IV	378.67	308.2	200.5	730	4	4	96.6	23,040	378.67	300.1	195.3	580	4	4	93.3	22,420	378.67	303.8	197.6	580	4	4	94.6	22,630
100'	IV	398.67	323.8	210.5	730	4	4	101.1	23,870	398.67	315.7	205.3	580	4	4	97.7	23,410	398.67	319.3	207.6	580	4	4	99.1	23,630
105'	IV	418.67	339.4	220.5	870	4	4	107.0	25,060	418.67	331.2	215.3	720	4	4	103.7	24,430	418.67	334.9	217.6	720	4	4	105.0	24,650
110'	IV	438.67	354.9	230.5	870	4	4	111.4	25,890	438.67	346.8	225.3	720	4	4	108.1	25,510	438.67	350.4	227.6	720	4	4	109.5	25,720
115'	IV	458.67	370.5	240.5	870	4	4	115.9	27,040	458.67	362.4	235.3	720	4	4	112.6	26,340	458.67	366.0	237.6	720	4	4	113.9	26,560
120'	BT-72	478.67	386.0	250.5	1,420	4	4	136.5	29,520	478.67	377.9	245.3	1,270	4	4	133.0	28,990	478.67	381.5	247.6	1,270	4	4	134.5	29,200
	J	478.67	386.0	250.5	1,420	4	4	136.4	29,520	478.67	377.9	245.3	1,270	4	4	133.0	28,990	478.67	381.5	247.6	1,270	4	4	134.5	29,200
125'	BT-72	498.67	401.6	260.5	1,420	4	4	141.2	30,520	498.67	393.5	255.3	1,270	4	4	137.7	29,820	498.67	397.1	257.6	1,270	4	4	139.2	30,040
	J	498.67	401.6	260.5	1,420	4	4	141.2	30,520	498.67	393.5	255.3	1,270	4	4	137.7	29,820	498.67	397.1	257.6	1,270	4	4	139.2	30,040
130'	BT-72	518.67	417.1	270.5	1,420	4	4	145.9	31,360	518.67	409.0	265.3	1,270	4	4	142.5	30,820	518.67	412.6	267.6	1,270	4	4	144.0	31,030
	J	518.67	417.1	270.5	1,420	4	4	145.9	31,360	518.67	409.0	265.3	1,270	4	4	142.4	30,820	518.67	412.6	267.6	1,270	4	4	143.9	31,030
135'	J	538.67	432.7	280.5	1,420	4	4	150.6	32,350	538.67	424.6	275.3	1,270	4	4	147.2	31,660	538.67	428.2	277.6	1,270	4	4	148.7	31,870
140'	J	558.67	448.2	290.5	1,420	4	4	155.4	33,190	558.67	440.1	285.3	1,270	4	4	151.9	32,650	558.67	443.8	287.6	1,270	4	4	153.4	32,870
145'	J	578.67	463.8	300.5	1,420	4	4	160.1	34,190	578.67	455.7	295.3	1,270	4	4	156.6	33,490	578.67	459.3	297.6	1,270	4	4	158.1	33,710

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 150 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.

SUMMARY OF QUANTITIES - BEARING ASSEMBLY STRUCTURAL STEEL (PER EACH ASSEMBLY)

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

SUMMARY OF QUANTITIES SEALED EXPANSION JOINT (PER EXPANSION JOINT)

ITEM	UNIT	TOTAL
SEALED EXPANSION JOINT	LF	39.99

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 Robert J. Lusch 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 30°

2009 SPECIFICATIONS	CB32-C-SK30-SPR-QUAN-PCB-1	01E
		CB-631E