SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)													① QUANTITIES SHOWN INCLUDE WEIGHT OF STEEL ANGLE BUMPERS AT ABUTMENT ENDS OF DECK SLAB. FOR EACH STEEL ANGLE BUMPER									
	ABUTMENT TO ABUTMENT								ABUTMENT TO STANDARD PIER						ABUTMENT TO STEPPED PIER						OMITTED FROM END OF DECK SLAB, DEDUCT 130 POUNDS FROM	
SPAN	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL 1	WEATHERING STEEL FIXED BEARING ASSEMBLY	WEATHERING STEEL EXPANSION BEARING ASSEMBLY	CLASS AA CONCRETE	REINFORCING STEEL 3	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL 1	WEATHERING STEEL FIXED BEARING ASSEMBLY	WEATHERING STEEL EXPANSION BEARING ASSEMBLY	CLASS AA CONCRETE	REINFORCING STEEL 4	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL 1	WEATHERING STEEL FIXED BEARING ASSEMBLY	WEATHERING STEEL EXPANSION BEARING ASSEMBLY	CLASS AA CONCRETE	REINFORCING STEEL 4	THE QUANTITIES SHOWN. 2 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 ASSEMBLY.
	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	ELASTOMERIC BEARING PADS, ANCHOR PLATES, CONTACT PLATES, ANCHOR BOLTS, NUTS, WASHERS, MATERIAL, LABOR, EQUIPMENT AND
30'	100.1	66.4	12,790	4	4	31.0	6,900	95.2	63.2	12,660	4	4	28.9	6,390	96.2	63.9	12,660	4	4	29.3	6,420	INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH
35'	115.7	76.4	14,250	4	4	35.3	7,740	110.8	73.2	14,120	4	4	33.2	7,230	111.8	73.9	14,120	4	4	33.6	7,260	OF "WEATHERING STEEL FIXED BEARING ASSEMBLY" OR "WEATHERING STEEL EXPANSION BEARING ASSEMBLY."
40'	131.2	86.4	16,980	4	4	39.7	8,740	126.3	83.2	16,850	4	4	37.6	8,230	127.3	83.9	16,850	4	4	38.0	8,260	STEEL EXPANSION BEAKING ASSEMBLY.
45	146.8	96.4	20,100	4	4	44.1	9,570	141.9	93.2	19,970	4	4	41.9	9,060	142.9	93.9	19,970	4	4	42.4	9,100	3 QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED
50'	162.3	106.4	24,930	4	4	48.4	10,570	157.4	103.2	24,800	4	4	46.3	10,130	158.5	103.9	24,800	4	4	46.7	10,170	IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:
55'	177.9	116.4	31,990	4	4	52.8	11,410	173.0	113.2	31,860	4	4	50.7	10,970	174.0	113.9	31,860	4	4	51.1	11,010	30' THRU 55' SPANS - NO LAP SPLICES 60' THRU 100' SPANS - 1 LAP SPLICE
60'	193.5	126.4	37,910	4	4	57.2	12,550	188.5	123.2	37,780	4	4	55.1	11,970	189.6	123.9	37,780	4	4	55.5	12,000	
65'	209.0	136.4	41,950	4	4	61.6	13,390	204.1	133.2	41,820	4	4	59.5	12,810	205.1	133.9	41,820	4	4	59.9	12,840	(4) QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:
70'	224.6	146.4	48,920	4	4	65.9	14,390	219.6	143.2	48,790	4	4	63.8	13,880	220.7	143.9	48,790	4	4	64.2	13,910	IN THE LONGITUDINAL REINFORCING STEEL AS FULLOWS:
75	240.1	156.4	57,250	4	4	70.3	15,230	235.2	153.2	57,120	4	4	68.2	14,720	236.2	153.9	57,120	4	4	68.6	14,750	30' THRU 45' SPANS - 1/2 LAP SPLICE 50' THRU 65' SPANS - 1 LAP SPLICE
80'	255.7	166.4	67,090	4	4	74.7	16,220	250.8	163.2	66,960	4	4	72.5	15,710	251.8	163.9	66,960	4	4	72.9	15,740	70' THRU 100' SPANS - 11/2 LAP SPLICES
85	271.2	176.4	76,490	4	4	79.3	17,060	266.3	173.2	76,360	4	4	77.2	16,550	267.3	173.9	76,360	4	4	77.6	16,580	LAP SPLICES ACCOUNT FOR ADJACENT SPAN COMBINATIONS AND ARE APPROXIMATE. PAYMENT FOR "REINFORCING"
90.	286.8	186.4	86,290	4	4	83.7	18,060	281.9	183.2	86,160	4	4	81.6	17,550	282.9	183.9	86,160	4	4	82.0	17,580	STEEL" WILL BE BASED ON PLAN QUANTITY.
95	302.3	196.4	103,470	4	4	88.1	18,900	297.4	193.2	103,340	4	4	86.0	18,380	298.5	193.9	103,340	4	4	86.4	18,420	
100	317.9	206.4	108,360	4	4	92.5	19,890	313.0	203.2	108,230	4	4	90.3	19,380	314.0	203.9	108,230	4	4	90.8	19,410	

	SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)																		
	STANDARD PIER TO STANDARD PIER						STANDARD PIER TO STEPPED PIER							STEPPED PIER TO STEPPED PIER					
SPAN	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY	CLASS AA CONCRETE	REINFORCING STEEL 4	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY	CLASS AA CONCRETE	REINFORCING STEEL 4	SAW-CUT GROOVING	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY	CLASS AA CONCRETE	REINFORCING STEEL 4	
	(SY)	(LF)	(LB)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(CY)	(LB)	
30'	90.3	60.0	12,530	8	26.7	5,910	91.3	60.7	12,530	8	27.2	5,940	92.3	61.4	12,530	8	27.6	5,970	
35'	105.8	70.0	13,990	8	31.1	6,740	106.9	70.7	13,990	8	31.5	6,780	107.9	71.4	13,990	8	31.9	6,810	
40	121.4	80.0	16,720	8	35.4	7,740	122.4	80.7	16,720	8	35.8	7,770	123.5	81.4	16,720	8	36.3	7,810	
45'	136.9	90.0	19,840	8	39.8	8,580	138.0	90.7	19,840	8	40.2	8,610	139.0	91.4	19,840	8	40.6	8,640	
50'	152.5	100.0	24,670	8	44.2	9,650	153.5	100.7	24,670	8	44.6	9,680	154.6	101.4	24,670	8	45.0	9,720	
55'	168.0	110.0	31,730	8	48.5	10,490	169.1	110.7	31,730	8	49.0	10,520	170.1	111.4	31,730	8	49.4	10,550	
60	183.6	120.0	37,650	8	53.0	11,480	184.6	120.7	37,650	8	53.4	11,520	185.7	121.4	37,650	8	53.8	11,550	
65	199.2	130.0	41,690	8	57.3	12,320	200.2	130.7	41,690	8	57.7	12,360	201.2	131.4	41,690	8	58.2	12,390	
70	214.7	140.0	48,660	8	61.7	13,390	215.8	140.7	48,660	8	62.1	13,420	216.8	141.4	48,660	8	62.5	13,460	
75	230.3	150.0	56,990	8	66.0	14,230	231.3	150.7	56,990	8	66.5	14,270	232.3	151.4	56,990	8	66.9	14,300	
80.	245.8	160.0	66,830	8	70.4	15,230	246.9	160.7	66,830	8	70.8	15,260	247.9	161.4	66,830	8	71.2	15,290	
85	261.4	170.0	76,230	8	75.1	16,070	262.4	170.7	76,230	8	75.5	16,100	263.5	171.4	76,230	8	75.9	16,130	
90.	276.9	180.0	86,030	8	79.5	17,060	278.0	180.7	86,030	8	79.9	17,090	279.0	181.4	86,030	8	80.3	17,130	
95'	292.5	190.0	103,210	8	83.8	17,900	293.5	190.7	103,210	8	84.3	17,930	294.6	191.4	103,210	8	84.7	17,970	
100	308.0	200.0	108,100	8	88.2	18,900	309.1	200.7	108,100	8	88.6	18,930	310.1	201.4	108,100	8	89.0	18,960	

BEARING STRUCTU	F QUANTITIES ASSEMBLY RAL STEEL I ASSEMBLY)
SPAN	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY (LB)
30' THRU 90'	150
95' AND 100'	160

SUMMARY OF QU SEALED EXPANSION (PER EXPANSION) N	OINT
ITEM	UNIT	TOTAL
SEALED EXPANSION JOINT	LF	35.17

<u>NOTES</u>

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 Kolent & durch

DATE **9-9-2011**

OKLAHOMA DEPARTMENT OF TRANSPORTATION COUNTY BRIDGE STANDARD (ENGLISH)

SUPERSTRUCTURE QUANTITIES ROLLED BEAMS

32' CLEAR ROADWAY - CONVENTIONAL - SKEWED O°