

SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)																			
SPAN	ABUTMENT TO ABUTMENT					ABUTMENT TO STANDARD PIER							ABUTMENT TO STEPPED PIER						
	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	CLASS AA CONCRETE	REINFORCING STEEL ①	(PL) FIXED BEARING ASSEMBLY ③	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	CLASS AA CONCRETE	REINFORCING STEEL ②	(PL) FIXED BEARING ASSEMBLY ③	(PL) EXPANSION BEARING ASSEMBLY ④	(PL) ELASTOMERIC BEARING PADS ⑤	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	CLASS AA CONCRETE	REINFORCING STEEL ②	(PL) FIXED BEARING ASSEMBLY ③	(PL) EXPANSION BEARING ASSEMBLY ④	(PL) ELASTOMERIC BEARING PADS ⑤
	(LF)	(LB)	(CY)	(LB)	(EA)	(LF)	(LB)	(CY)	(LB)	(EA)	(EA)	(EA)	(LF)	(LB)	(CY)	(LB)	(EA)	(EA)	(EA)
30'	63.0	8,300	33.3	6,010	6	61.5	9,180	27.2	7,460	3	3	3	62.2	9,180	27.5	9,120	3	3	3
35'	73.0	10,360	37.0	6,760	6	71.5	11,240	30.8	8,210	3	3	3	72.2	11,240	31.1	9,880	3	3	3
40'	83.0	12,420	40.8	7,660	6	81.5	13,310	34.5	9,110	3	3	3	82.2	13,310	34.7	10,780	3	3	3
45'	93.0	15,140	44.0	8,410	6	91.5	16,030	37.9	9,860	3	3	3	92.2	16,030	38.1	11,530	3	3	3
50'	103.0	18,080	47.2	9,310	6	101.5	18,970	41.2	10,830	3	3	3	102.2	18,970	41.4	12,490	3	3	3
55'	113.0	22,340	53.7	10,260	6	111.5	23,250	46.2	11,770	3	3	3	112.2	23,250	46.5	13,440	3	3	3
60'	123.0	27,260	57.1	11,290	6	121.5	28,190	49.7	12,680	3	3	3	122.2	28,190	49.9	14,340	3	3	3
65'	133.0	32,260	60.0	12,040	6	131.5	33,190	52.9	13,430	3	3	3	132.2	33,190	53.2	15,100	3	3	3
70'	143.0	36,680	63.2	12,940	6	141.5	37,610	56.3	14,390	3	3	3	142.2	37,610	56.5	16,060	3	3	3
75'	153.0	44,340	66.4	13,690	6	151.5	45,330	59.7	14,390	3	3	3	152.2	45,330	59.9	16,810	3	3	3
80'	163.0	52,130	69.0	14,590	6	161.5	53,120	62.8	15,140	3	3	3	162.2	53,120	63.0	17,710	3	3	3
85'	173.0	59,250	71.9	15,350	6	171.5	60,230	66.0	16,050	3	3	3	172.2	60,230	66.3	18,460	3	3	3
90'	183.0	71,680	74.2	16,250	6	181.5	72,670	68.9	16,790	3	3	3	182.2	72,670	69.2	19,370	3	3	3
95'	193.0	83,360	76.7	17,000	6	191.5	84,350	72.0	17,700	3	3	3	192.2	84,350	72.2	20,120	3	3	3
100'	203.0	87,580	80.2	17,900	6	201.5	88,570	75.5	19,350	3	3	3	202.2	88,570	75.7	21,020	3	3	3

- ① QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:  
30' THRU 55' SPANS - NO LAP SPLICES  
60' THRU 100' SPANS - 1 LAP SPLICE
- ② 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 100' SPANS - 1 1/2 LAP SPLICES  
LAP SPLICES ACCOUNT FOR ADJACENT SPAN COMBINATIONS AND ARE APPROXIMATE. PAYMENT FOR "REINFORCING STEEL" WILL BE BASED ON PLAN QUANTITY.
- ③ AT THE ABUTMENTS, PROVIDE AND INSTALL FIXED 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 BEARING ASSEMBLY. ALL COST OF PROVIDING AND INSTALLING THE FIXED BEARING ASSEMBLIES INCLUDING THE COST OF ANCHOR PLATES, ANCHOR BARS, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF "FIXED BEARING ASSEMBLY."
- ④ AT THE PIERS, PROVIDE AND INSTALL 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 EXPANSION BEARING ASSEMBLY. ALL COST OF PROVIDING AND INSTALLING THE EXPANSION BEARING ASSEMBLIES INCLUDING THE COST OF STEEL REINFORCED ELASTOMERIC BEARING PADS, ANCHOR PLATES, CONTACT PLATES, ANCHOR BOLTS, NUTS, WASHERS, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF "EXPANSION BEARING ASSEMBLY."
- ⑤ PROVIDE AND INSTALL ELASTOMERIC BEARING PADS BETWEEN THE TOP SURFACE OF THE ROLLED BEAMS AND THE BOTTOM SURFACE OF THE DECK SLAB. THE ELASTOMERIC BEARING PADS ARE TO BE OF THE SIZE AND SHAPE AS DETAILED IN THE PLANS AND LOCATED AT EACH BEAM END ABOVE THE PIERS. ALL COST OF PROVIDING AND INSTALLING THE ELASTOMERIC BEARING PADS INCLUDING THE COST OF ELASTOMERIC BEARING PADS, MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF "ELASTOMERIC BEARING PADS."

SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)																		
SPAN	STANDARD PIER TO STANDARD PIER						STANDARD PIER TO STEPPED PIER						STEPPED PIER TO STEPPED PIER					
	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	CLASS AA CONCRETE	REINFORCING STEEL ②	(PL) EXPANSION BEARING ASSEMBLY ④	(PL) ELASTOMERIC BEARING PADS ⑤	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	CLASS AA CONCRETE	REINFORCING STEEL ②	(PL) EXPANSION BEARING ASSEMBLY ④	(PL) ELASTOMERIC BEARING PADS ⑤	CONCRETE RAIL (TR3)	STRUCTURAL STEEL	CLASS AA CONCRETE	REINFORCING STEEL ②	(PL) EXPANSION BEARING ASSEMBLY ④	(PL) ELASTOMERIC BEARING PADS ⑤
	(LF)	(LB)	(CY)	(LB)	(EA)	(EA)	(LF)	(LB)	(CY)	(LB)	(EA)	(EA)	(LF)	(LB)	(CY)	(LB)	(EA)	(EA)
30'	60.0	10,060	21.1	8,850	6	6	60.7	10,060	21.4	8,870	6	6	61.4	10,060	21.6	8,900	6	6
35'	70.0	12,120	24.7	9,590	6	6	70.7	12,120	24.9	9,620	6	6	71.4	12,120	25.1	9,650	6	6
40'	80.0	14,200	28.2	10,500	6	6	80.7	14,200	28.4	10,530	6	6	81.4	14,200	28.7	10,560	6	6
45'	90.0	16,920	31.7	11,250	6	6	90.7	16,920	31.9	11,280	6	6	91.4	16,920	32.2	11,300	6	6
50'	100.0	19,860	35.2	12,210	6	6	100.7	19,860	35.5	12,240	6	6	101.4	19,860	35.7	12,270	6	6
55'	110.0	24,160	38.8	13,160	6	6	110.7	24,160	39.0	13,190	6	6	111.4	24,160	39.2	13,220	6	6
60'	120.0	29,120	42.3	14,070	6	6	120.7	29,120	42.6	14,090	6	6	121.4	29,120	42.8	14,120	6	6
65'	130.0	34,110	45.9	14,810	6	6	130.7	34,110	46.1	14,840	6	6	131.4	34,110	46.3	14,870	6	6
70'	140.0	38,540	49.4	15,780	6	6	140.7	38,540	49.6	15,810	6	6	141.4	38,540	49.8	15,840	6	6
75'	150.0	46,320	52.9	16,530	6	6	150.7	46,320	53.1	16,560	6	6	151.4	46,320	53.4	16,580	6	6
80'	160.0	54,100	56.7	17,430	6	6	160.7	54,100	56.9	17,460	6	6	161.4	54,100	57.1	17,490	6	6
85'	170.0	61,220	60.2	18,180	6	6	170.7	61,220	60.4	18,210	6	6	171.4	61,220	60.7	18,240	6	6
90'	180.0	73,650	63.7	19,090	6	6	180.7	73,650	64.0	19,110	6	6	181.4	73,650	64.2	19,150	6	6
95'	190.0	85,330	67.3	19,840	6	6	190.7	85,330	67.5	19,870	6	6	191.4	85,330	67.7	19,890	6	6
100'	200.0	89,560	70.8	20,740	6	6	200.7	89,560	71.0	20,770	6	6	201.4	89,560	71.3	20,800	6	6

SUMMARY OF QUANTITIES BEARING ASSEMBLY STRUCTURAL STEEL (PER EACH ASSEMBLY)		
SPAN	FIXED BEARING ASSEMBLY	EXPANSION BEARING ASSEMBLY
	(LB)	(LB)
30'	80	160
35'	80	160
40'	80	160
45'	80	160
50'	80	160
55'	80	170
60'	80	170
65'	80	170
70'	80	180
75'	80	180
80'	80	180
85'	80	190
90'	80	190
95'	80	190
100'	80	200

**NOTES**

QUANTITY CALCULATIONS ASSUME ALL PIERS ARE FIXED PIERS. ANY ADJUSTMENTS TO THE QUANTITIES OF "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 "CONCRETE RAIL (TR3)", "CLASS AA CONCRETE" AND "REINFORCING STEEL" WILL BE BASED ON PLAN QUANTITY.

APPROVED BY BRIDGE ENGINEER	<i>Robert J. Rusch</i>	DATE	10/16/08
OKLAHOMA DEPARTMENT OF TRANSPORTATION COUNTY BRIDGE STANDARD (ENGLISH)			
<b>SUPERSTRUCTURE QUANTITIES ROLLED BEAMS</b>			
<b>26' CLEAR ROADWAY - INTEGRAL - SKEWED 0°</b>			
1999 STANDARD SPECIFICATIONS	CB26-I-SKO-SPR-QUAN-RB	00E	CB-517E