	SUMMARY OF QUANTITIES - SUPERSTRUCTURE (PER SPAN)																				
	ABUTMENT TO ABUTMENT						ABUTMENT TO STANDARD PIER							ABUTMENT TO STEPPED PIER							
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 FIXED OR 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 FIXED OR EXPANSION BEARING ASSEMBLY	CLASS AA CONCRETE	REINFORCING STEEL 4
	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)	(SY)	(LF)	(LB)	(EA)	(EA)	(CY)	(LB)
30'	78.7	66.4	10,330	3	3	25.1	6,200	74.8	63.2	10,220	3	3	23.4	5,750	75.6	63.9	10,220	3	3	23.7	5,780
35'	90.9	76.4	12,430	3	3	28.6	6,950	87.0	73.2	12,320	3	3	26.9	6,500	87.8	73.9	12,320	3	3	27.2	6,530
40'	103.1	86.4	14,510	3	3	32.2	7,850	99.3	83.2	14,400	3	3	30.4	7,400	100.1	83.9	14,400	3	3	30.8	7,430
45'	115.3	96.4	17,210	3	3	35.7	8,600	111.5	93.2	17,100	3	3	33.9	8,150	112.3	93.9	17,100	3	3	34.3	8,180
50'	127.6	106.4	20,160	3	3	39.2	9,510	123.7	103.2	20,050	3	3	37.5	9,120	124.5	103.9	20,050	3	3	37.8	9,140
55'	139.8	116.4	24,430	3	3	42.8	10,260	135.9	113.2	24,320	3	3	41.0	9,860	136.7	113.9	24,320	3	3	41.3	9,890
60.	152.0	126.4	29,390	3	3	46.3	11,280	148.1	123.2	29,280	3	3	44.6	10,770	149.0	123.9	29,280	3	3	44.9	10,800
65'	164.2	136.4	34,400	3	3	49.8	12,030	160.4	133.2	34,290	3	3	48.1	11,520	161.2	133.9	34,290	3	3	48.4	11,550
70'	176.5	146.4	38,820	3	3	53.3	12,940	172.6	143.2	38,710	3	3	51.6	12,480	173.4	143.9	38,710	3	3	51.9	12,510
75'	188.7	156.4	46,610	3	3	56.9	13,680	184.8	153.2	46,500	3	3	55.1	12,480	185.6	153.9	46,500	3	3	55.4	13,260
80'	200.9	166.4	54,400	3	3	60.6	14,590	197.0	163.2	54,290	3	3	58.9	13,230	197.8	163.9	54,290	3	3	59.2	14,170
85'	213.1	176.4	61,520	3	3	64.2	15,340	209.3	173.2	61,410	3	3	62.4	14,140	210.1	173.9	61,410	3	3	62.7	14,920
90.	225.3	186.4	73,960	3	3	67.7	16,240	221.5	183.2	73,850	3	3	65.9	14,890	222.3	183.9	73,850	3	3	66.3	15,820
95'	237.6	196.4	85,640	3	3	71.2	16,990	233.7	193.2	85,530	3	3	69.5	15,790	234.5	193.9	85,530	3	3	69.8	16,570
100'	249.8	206.4	89,860	3	3	74.8	17,900	245.9	203.2	89,750	3	3	73.0	17,450	246.7	203.9	89,750	3	3	73.4	17,470

CLIMMARY OF CLIMATITIES CLIPERSTRUCTURE (PER CRAM)																		
	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'	70.9	60.0	10,110	6	21.6	5,340	71.8	60.7	10,110	6	21.9	5,360	72.6	61.4	10,110	6	22.3	5,390
35'	83.2	70.0	12,210	6	25.1	6,080	84.0	70.7	12,210	6	25.5	6,110	84.8	71.4	12,210	6	25.8	6,140
40'	95.4	80.0	14,290	6	28.7	6,990	96.2	80.7	14,290	6	29.0	7,020	97.0	81.4	14,290	6	29.3	7,050
45'	107.6	90.0	16,990	6	32.2	7,740	108.4	90.7	16,990	6	32.5	7,770	109.2	91.4	16,990	6	32.9	7,790
50'	119.8	100.0	19,940	6	35.7	8,700	120.6	100.7	19,940	6	36.0	8,730	121.5	101.4	19,940	6	36.4	8,760
55'	132.0	110.0	24,210	6	39.3	9,450	132.9	110.7	24,210	6	39.6	9,480	133.7	111.4	24,210	6	39.9	9,510
60'	144.3	120.0	29,170	6	42.8	10,360	145.1	120.7	29,170	6	43.1	10,380	145.9	121.4	29,170	6	43.5	10,410
65	156.5	130.0	34,180	6	46.3	11,100	157.3	130.7	34,180	6	46.7	11,130	158.1	131.4	34,180	6	47.0	11,160
70'	168.7	140.0	38,600	6	49.9	12,070	169.5	140.7	38,600	6	50.2	12,100	170.3	141.4	38,600	6	50.5	12,130
75	180.9	150.0	46,390	6	53.4	12,820	181.8	150.7	46,390	6	53.7	12,850	182.6	151.4	46,390	6	54.0	12,870
80.	193.2	160.0	54,180	6	57.1	13,730	194.0	160.7	54,180	6	57.5	13,750	194.8	161.4	54,180	6	57.8	13,780
85	205.4	170.0	61,300	6	60.7	14,470	206.2	170.7	61,300	6	61.0	14,500	207.0	171.4	61,300	6	61.3	14,530
90.	217.6	180.0	73,740	6	64.2	15,380	218.4	180.7	73,740	6	64.5	15,410	219.2	181.4	73,740	6	64.9	15,440
95	229.8	190.0	85,420	6	67.7	16,130	230.6	190.7	85,420	6	68.1	16,160	231.5	191.4	85,420	6	68.4	16,180
100	242.0	200.0	89,640	6	71.3	17,030	242.9	200.7	89,640	6	71.6	17,060	243.7	201.4	89,640	6	71.9	17,090

SUMMARY OF QUANTITIES BEARING ASSEMBLY STRUCTURAL STEEL (PER EACH ASSEMBLY)							
SPAN	WEATHERING STEEL FIXED OR EXPANSION BEARING ASSEMBLY (LB)						
30' THRU 70'	150						
75 <sup>-</sup>	160						
80'	150						
85' THRU 95'	160						
100'	170						

SUMMARY OF QU SEALED EXPANSION (PER EXPANSION	) N	OINT
ITEM	UNIT	TOTAL
SEALED EXPANSION JOINT	LF	29.17

- 1) 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 110 POUNDS FROM THE QUANTITIES SHOWN.
- 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, 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"
- (3) 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
- 4 QUANTITY INCLUDES PROVISION FOR LAP SPLICES REQUIRED IN THE LONGITUDINAL REINFORCING STEEL AS FOLLOWS:
  30' THRU 45' SPANS ½2 LAP SPLICE
  50' THRU 65' SPANS 1 LAP SPLICE
  70' THRU 100' SPANS 1½2 LAP SPLICES
  LAP SPLICES ACCOUNT FOR ADJACENT SPAN COMBINATIONS
  AND ARE APPROXIMATE. PAYMENT FOR "REINFORCING
  STEEL" WILL BE BASED ON PLAN QUANTITY.

## <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

26' CLEAR ROADWAY - CONVENTIONAL - SKEWED O°