

REVISED 07-2009; OPEN RAIL REINF. QTY'S CHANGED WHICH CHANGED TOTAL REINF. QTY'S.  
REVISED 09-2020; UPDATED BRIDGE ENGINEER SIGNATURE. CHANGED PAVING BLOCK LIFTING HOOP BAR MARK WAS 5X11.

### BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 120' BRIDGE

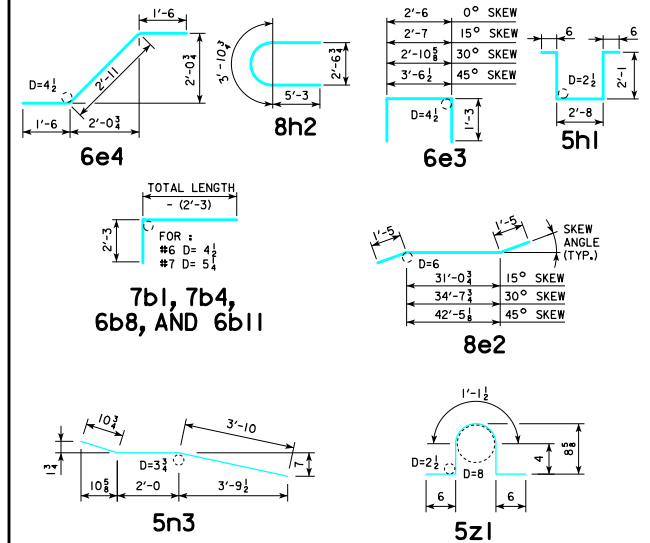
LOCATION	SKEW	SHAPE	0°				15°				30°				45°			
			BAR NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	
SLAB LONGITUDINAL BOTTOM			9a1	39	25'-9"	3415	39	25'-9"	3415	39	25'-9"	3415	39	25'-9"	3415	39	25'-9"	3415
SLAB LONGITUDINAL BOTTOM			9a2	39	38'-9"	5139	39	38'-9"	5139	39	38'-9"	5139	39	38'-9"	5139	39	38'-9"	5139
SLAB LONGITUDINAL BOTTOM			9a3	39	36'-2"	4796	39	36'-2"	4796	39	36'-2"	4796	39	36'-2"	4796	39	36'-2"	4796
SLAB LONGITUDINAL BOTTOM			8a4	40	28'-3"	3018	40	28'-3"	3018	40	28'-3"	3018	40	28'-3"	3018	40	28'-3"	3018
SLAB LONGITUDINAL BOTTOM			9a5	20	34'-0"	2312	20	34'-0"	2312	20	34'-0"	2312	20	34'-0"	2312	20	34'-0"	2312
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a6	8	34'-4"	934	8	34'-4"	934	8	34'-4"	934	8	34'-4"	934	8	34'-4"	934
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a7	8	12'-0"	327	8	12'-0"	327	8	12'-0"	327	8	12'-0"	327	8	12'-0"	327
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a8	4	42'-2"	574	4	42'-2"	574	4	42'-2"	574	4	42'-2"	574	4	42'-2"	574
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	8	24'-6"	524	8	24'-6"	524	8	24'-6"	524	8	24'-6"	524	8	24'-6"	524
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a10	4	23'-6"	251	4	23'-6"	251	4	23'-6"	251	4	23'-6"	251	4	23'-6"	251
SLAB LONGITUDINAL TOP			7b1	39	8'-6"	678	39	8'-6"	678	39	8'-6"	678	39	8'-6"	678	39	8'-6"	678
SLAB LONGITUDINAL TOP			10b2	39	27'-6"	4615	39	27'-6"	4615	39	27'-6"	4615	39	27'-6"	4615	39	27'-6"	4615
SLAB LONGITUDINAL TOP			10b3	39	24'-9"	4154	39	24'-9"	4154	39	24'-9"	4154	39	24'-9"	4154	39	24'-9"	4154
SLAB LONGITUDINAL TOP			7b4	39	23'-5"	1867	39	23'-5"	1867	39	23'-5"	1867	39	23'-5"	1867	39	23'-5"	1867
SLAB LONGITUDINAL TOP			11b5	40	27'-9"	5898	40	27'-9"	5898	40	27'-9"	5898	40	27'-9"	5898	40	27'-9"	5898
SLAB LONGITUDINAL TOP			6b6	20	30'-0"	902	20	30'-0"	902	20	30'-0"	902	20	30'-0"	902	20	30'-0"	902
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8	29'-5"	354	8	29'-5"	354	8	29'-5"	354	8	29'-5"	354	8	29'-5"	354
SLAB LONGITUDINAL TOP, AT RAIL			10b9	8	27'-0"	930	8	27'-0"	930	8	27'-0"	930	8	27'-0"	930	8	27'-0"	930
SLAB LONGITUDINAL TOP, AT RAIL			6b10	4	23'-10"	144	4	23'-10"	144	4	23'-10"	144	4	23'-10"	144	4	23'-10"	144
SLAB LONGITUDINAL TOP, AT RAIL			6b11	8	31'-11"	384	8	31'-11"	384	8	31'-11"	384	8	31'-11"	384	8	31'-11"	384
SLAB LONGITUDINAL TOP, AT RAIL			11b12	8	21'-0"	893	8	21'-0"	893	8	21'-0"	893	8	21'-0"	893	8	21'-0"	893
SLAB TRANSVERSE, BOTTOM			6c1	117	32'-10"	5770	117	34'-0"	5975	104	32'-10"	5129	90	32'-10"	4439			
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	-	30	VARIABLES	797	56	VARIABLES	1486			
SLAB TRANSVERSE, TOP			5d1	117	32'-10"	4007	117	34'-0"	4150	104	32'-10"	3562	90	32'-10"	3083			
SLAB TRANSVERSE ENDS, TOP			5d2	-	-	-	-	-	-	30	VARIABLES	553	56	VARIABLES	1032			
SLAB, TRANSVERSE AT ABUTMENT			8e1	18	32'-10"	1578	-	-	-	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT			8e2	-	-	-	18	33'-11"	1631	18	37'-6"	1803	18	45'-4"	2179			
SLAB, HAIRPINS, AT ABUTMENT			6e3	72	5'-0"	541	72	5'-1"	550	72	5'-5"	586	72	6'-1"	658			
SLAB, DIAGONALS, AT ABUTMENT			6e4	72	5'-11"	640	72	5'-11"	640	72	5'-11"	640	72	5'-11"	640			
PIER CAP HOOPS			5h1	40	7'-10"	327	40	7'-10"	327	60	7'-10"	491	60	7'-10"	491			
PIER CAP ENDS			8h2	4	14'-5"	154	4	14'-5"	154	4	14'-5"	154	4	14'-5"	154			
PIER CAP, BOTTOM LONGITUDINAL			8h3	8	29'-10"	638	8	30'-11"	661	8	34'-5"	736	8	42'-2"	901			
PIER CAP, TOP LONGITUDINAL			8h4	4	32'-10"	351	4	34'-0"	364	4	37'-11"	405	4	46'-6"	497			
TOP OF SLAB, TRANSVERSE, AT RAIL			5j1	232	8'-6"	2057	232	8'-6"	2057	232	8'-6"	2057	230	8'-6"	2040			
WING, VERTICAL			5m1	40	4'-5"	185	40	4'-5"	185	40	4'-5"	185	40	4'-5"	185			
WING, HORIZONTAL BACK FACE			5n1	24	6'-8"	167	24	6'-8"	167	24	6'-8"	167	24	6'-8"	167			
WING, HORIZONTAL TRAFFIC FACE			5n3	24	6'-9"	169	24	6'-9"	169	24	6'-9"	169	24	6'-9"	169			
PAVING BLOCK LIFTING HOOPS			5z1	10	2'-10"	30	10	2'-10"	30	10	2'-10"	30	10	2'-10"	30			
SUB TOTAL - LBS.						58,723			59,169			59,573			60,260			
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06						7536			7536			7536			7536			
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06						8061			8061			8061			8061			
TOTAL - LBS.						66,259			66,705			67,109			67,796			
WITH MONOLITHIC PIER CAP						66,784			67,230			67,634			68,321			
TOTAL - LBS.						64,789			65,199			65,323			65,753			
WITH NON-MONOLITHIC PIER CAP						65,314			65,724			65,848			66,278			
SAME AS ABOVE EXCEPT ALL "H" BARS DELETED						65,314			65,724			65,848			66,278			

### ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 120' BRIDGE

ITEM	SKEW	WITH MONOLITHIC PIER CAP				WITH NON-MONOLITHIC PIER CAP			
		0°	15°	30°	45°	0°	15°	30°	45°
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		271.4	272.1	274.8	280.4	266.8	267.4	269.6	274.1
BARRIER RAIL REINFORCING STEEL LBS.		66,259	66,705	67,109	67,796	64,789	65,199	65,323	65,753
CONCRETE BARRIER OR OPEN RAIL LIN. FT.		262.0	262.2	262.9	264.5	262.0	262.2	262.9	264.5
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		271.2	271.9	274.6	280.2	266.6	267.1	269.3	273.8
OPEN RAIL REINFORCING STEEL LBS.		66,784	67,230	67,634	68,321	65,314	65,724	65,848	66,278

\* INCLUDES 4 WINGS @ 0.68 C.Y. EACH AND 2 TEMPORARY PAVING BLOCKS; EXCLUDES RAIL CONCRETE.

### BENT BAR DETAILS



08-2020 LATEST REVISION DATE  APPROVED BY BRIDGE ENGINEER 	
	STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES <b>CONTINUOUS CONCRETE SLAB BRIDGES</b> NOVEMBER, 2006
	<div style="text-align: center;"> <b>SUPERSTRUCTURE DETAILS 120'-0 BRIDGE</b> </div> <div style="text-align: right;"> <b>J30-13B-06</b> </div>
NON-EPOXY COATED REINFORCING	