

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 SX11.

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 140' BRIDGE

LOCATION	SKEW	SHAPE	0°				15°				30°				45°			
			BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT	
SLAB LONGITUDINAL BOTTOM			9a1	39	30'-6"	4045	39	30'-6"	4045	39	30'-6"	4045	39	30'-6"	4045	39	30'-6"	4045
SLAB LONGITUDINAL BOTTOM			10a2	39	48'-6"	8140	39	48'-6"	8140	39	48'-6"	8140	39	48'-6"	8140	39	48'-6"	8140
SLAB LONGITUDINAL BOTTOM			9a3	39	43'-9"	5802	39	43'-9"	5802	39	43'-9"	5802	39	43'-9"	5802	39	43'-9"	5802
SLAB LONGITUDINAL BOTTOM			10a4	40	35'-3"	6068	40	35'-3"	6068	40	35'-3"	6068	40	35'-3"	6068	40	35'-3"	6068
SLAB LONGITUDINAL BOTTOM			9a5	20	43'-0"	2924	20	43'-0"	2924	20	43'-0"	2924	20	43'-0"	2924	20	43'-0"	2924
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a6	8	41'-7"	1132	8	41'-7"	1132	8	41'-7"	1132	8	41'-7"	1132	8	41'-7"	1132
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a7	8	13'-0"	354	8	13'-0"	354	8	13'-0"	354	8	13'-0"	354	8	13'-0"	354
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a8	4	52'-8"	717	4	52'-8"	717	4	52'-8"	717	4	52'-8"	717	4	52'-8"	717
SLAB LONGITUDINAL BOTTOM, AT RAIL			9a9	8	34'-3"	932	8	34'-3"	932	8	34'-3"	932	8	34'-3"	932	8	34'-3"	932
SLAB LONGITUDINAL BOTTOM, AT RAIL			10a10	4	33'-0"	568	4	33'-0"	568	4	33'-0"	568	4	33'-0"	568	4	33'-0"	568
SLAB LONGITUDINAL TOP			6b1	39	7'-9"	454	39	7'-9"	454	39	7'-9"	454	39	7'-9"	454	39	7'-9"	454
SLAB LONGITUDINAL TOP			11b2	39	26'-0"	5388	39	26'-0"	5388	39	26'-0"	5388	39	26'-0"	5388	39	26'-0"	5388
SLAB LONGITUDINAL TOP			11b3	39	31'-9"	6579	39	31'-9"	6579	39	31'-9"	6579	39	31'-9"	6579	39	31'-9"	6579
SLAB LONGITUDINAL TOP			7b4	39	25'-6"	2033	39	25'-6"	2033	39	25'-6"	2033	39	25'-6"	2033	39	25'-6"	2033
SLAB LONGITUDINAL TOP			11b5	40	29'-0"	6164	40	29'-0"	6164	40	29'-0"	6164	40	29'-0"	6164	40	29'-0"	6164
SLAB LONGITUDINAL TOP			6b6	20	34'-4"	1032	20	34'-4"	1032	20	34'-4"	1032	20	34'-4"	1032	20	34'-4"	1032
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8	32'-9"	394	8	32'-9"	394	8	32'-9"	394	8	32'-9"	394	8	32'-9"	394
SLAB LONGITUDINAL TOP, AT RAIL			11b9	8	34'-0"	1446	8	34'-0"	1446	8	34'-0"	1446	8	34'-0"	1446	8	34'-0"	1446
SLAB LONGITUDINAL TOP, AT RAIL			6b10	4	25'-6"	154	4	25'-6"	154	4	25'-6"	154	4	25'-6"	154	4	25'-6"	154
SLAB LONGITUDINAL TOP, AT RAIL			7b11	8	38'-3"	626	8	38'-3"	626	8	38'-3"	626	8	38'-3"	626	8	38'-3"	626
SLAB LONGITUDINAL TOP, AT RAIL			11b12	8	24'-3"	1031	8	24'-3"	1031	8	24'-3"	1031	8	24'-3"	1031	8	24'-3"	1031
SLAB TRANSVERSE, BOTTOM			6c1	137	32'-10"	6757	137	34'-0"	6997	124	32'-10"	6116	110	32'-10"	5425			
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	-	30	VARIABLES	797	56	VARIABLES	1486			
SLAB TRANSVERSE, TOP			5d1	137	32'-10"	4692	137	34'-0"	4859	124	32'-10"	4247	110	32'-10"	3767			
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	44	8'-3"	379	44	8'-3"	379	44	8'-3"	379	66	8'-3"	568			
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	272	8'-6"	2412	272	8'-6"	2412	272	8'-6"	2412	270	8'-6"	2394			
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.						74,676			75,181			75,362			76,235			
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06						8602			8602			8602			8602			
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06						9057			9057			9057			9057			
TOTAL - LBS.			WITH MONOLITHIC PIER CAP			83,278			83,783			83,964			84,837			
			WITH OPEN RAIL			83,733			84,238			84,419			85,292			
TOTAL - LBS.			WITH NON-MONOLITHIC PIER CAP			81,756			82,225			82,290			82,717			
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED			WITH OPEN RAIL			82,211			82,680			82,745			83,172			

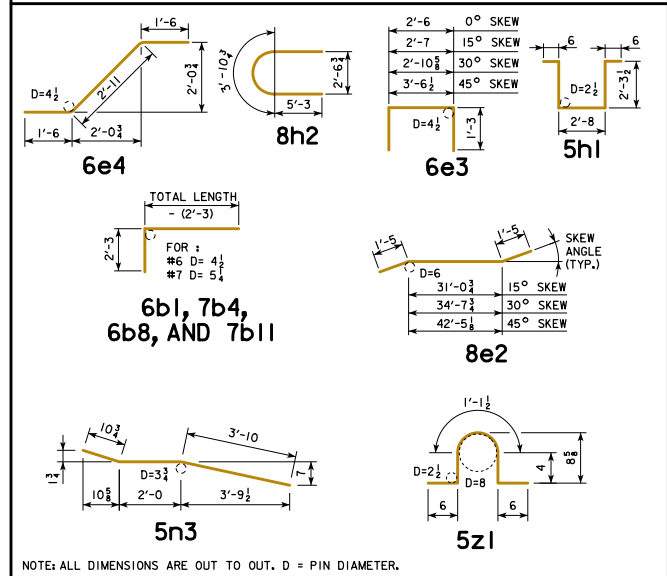
** BARS MAY BE NON-COATED AT CONTRACTOR'S OPTION.

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 140' 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.		347.4	348.1	350.7	356.2	342.8	343.4	345.5	349.8
BARRIER RAIL REINFORCING STEEL EPOXY COATED LBS.		83,278	83,783	83,964	84,837	81,756	82,225	82,290	82,717
CONCRETE BARRIER OR OPEN RAIL LIN. FT.		302.0	302.2	302.9	304.5	302.0	302.2	302.9	304.5
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		347.2	347.9	350.5	355.9	342.6	343.1	345.2	349.5
OPEN RAIL REINFORCING STEEL EPOXY COATED LBS.		83,733	84,238	84,419	85,292	82,211	82,680	82,745	83,172

* 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 CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006
	SUPERSTRUCTURE DETAILS 140'-0 BRIDGE
	J30-17E-06 EPOXY COATED REINFORCING