

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 5X1.

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 70' 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			7a1	39	16'-0	1276	39	16'-0	1276	39	16'-0	1276	39	16'-0	1276	39	16'-0	1276
SLAB LONGITUDINAL BOTTOM			8a2	39	25'-0	2604	39	25'-0	2604	39	25'-0	2604	39	25'-0	2604	39	25'-0	2604
SLAB LONGITUDINAL BOTTOM			7a3	39	24'-3	1934	39	24'-3	1934	39	24'-3	1934	39	24'-3	1934	39	24'-3	1934
SLAB LONGITUDINAL BOTTOM			8a4	40	20'-9	2217	40	20'-9	2217	40	20'-9	2217	40	20'-9	2217	40	20'-9	2217
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a5	20	22'-0	900	20	22'-0	900	20	22'-0	900	20	22'-0	900	20	22'-0	900
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a6	8	24'-9	405	8	24'-9	405	8	24'-9	405	8	24'-9	405	8	24'-9	405
SLAB LONGITUDINAL BOTTOM, AT RAIL			7a7	4	27'-4	224	4	27'-4	224	4	27'-4	224	4	27'-4	224	4	27'-4	224
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a8	8	18'-3	390	8	18'-3	390	8	18'-3	390	8	18'-3	390	8	18'-3	390
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	4	23'-6	251	4	23'-6	251	4	23'-6	251	4	23'-6	251	4	23'-6	251
SLAB LONGITUDINAL TOP			6b1	39	9'-0	528	39	9'-0	528	39	9'-0	528	39	9'-0	528	39	9'-0	528
SLAB LONGITUDINAL TOP			8b2	39	18'-3	1901	39	18'-3	1901	39	18'-3	1901	39	18'-3	1901	39	18'-3	1901
SLAB LONGITUDINAL TOP			8b3	39	27'-6	2864	39	27'-6	2864	39	27'-6	2864	39	27'-6	2864	39	27'-6	2864
SLAB LONGITUDINAL TOP			7b4	40	22'-3	1820	40	22'-3	1820	40	22'-3	1820	40	22'-3	1820	40	22'-3	1820
SLAB LONGITUDINAL TOP			8b5	40	12'-6	1335	40	12'-6	1335	40	12'-6	1335	40	12'-6	1335	40	12'-6	1335
SLAB LONGITUDINAL TOP			6b6	20	20'-4	611	20	20'-4	611	20	20'-4	611	20	20'-4	611	20	20'-4	611
SLAB LONGITUDINAL TOP, AT RAIL			8b8	8	40'-0	855	8	40'-0	855	8	40'-0	855	8	40'-0	855	8	40'-0	855
SLAB LONGITUDINAL TOP, AT RAIL			8b9	8	30'-0	641	8	30'-0	641	8	30'-0	641	8	30'-0	641	8	30'-0	641
SLAB TRANSVERSE, BOTTOM			6c1	67	32'-10	3305	67	34'-0	3422	54	32'-10	2664	40	32'-10	1913			
SLAB TRANSVERSE ENDS, BOTTOM			6c2	-	-	-	-	-	-	30	VARIABLES	797	56	VARIABLES	1486			
SLAB TRANSVERSE, TOP			5d1	67	32'-10	2295	67	34'-0	2376	54	32'-10	1850	40	32'-10	1370			
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	48	6'-11	347	48	6'-11	347	60	6'-11	433	72	6'-11	520			
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	132	8'-6	1171	132	8'-6	1171	132	8'-6	1171	130	8'-6	1153			
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.					32,327			32,623			33,099			33,870				
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					4957			4957			4957			4957				
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					5100			5100			5100			5100				
TOTAL - LBS.					37,284			37,580			38,056			38,827				
WITH MONOLITHIC PIER CAP					37,427			37,723			38,199			38,970				
TOTAL - LBS.					35,794			36,054			36,328			36,755				
WITH NON-MONOLITHIC PIER CAP					35,937			36,197			36,471			36,898				
SAME AS ABOVE EXCEPT ALL "H" BARS DELETED					35,937			36,197			36,471			36,898				

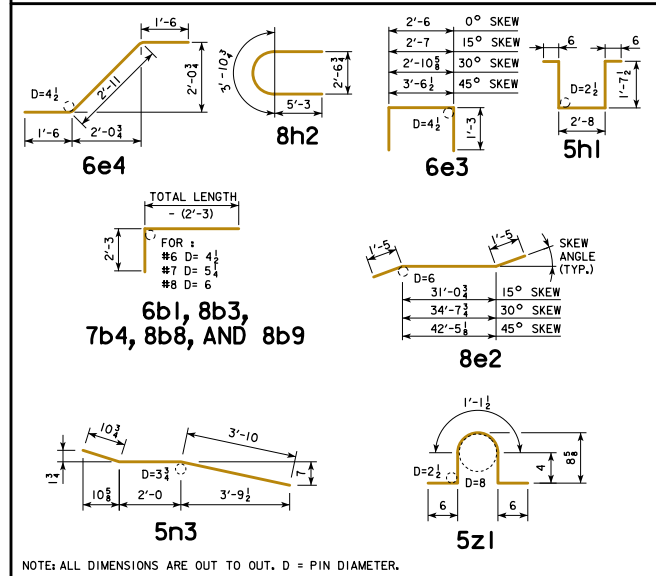
** BARS MAY BE NON-COATED AT CONTRACTOR'S OPTION.

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 70' 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.		131.2	132.0	134.9	141.0	126.6	127.3	129.6	134.6
BARRIER RAIL REINFORCING STEEL EPOXY COATED LBS.		37,284	37,580	38,056	38,827	35,794	36,054	36,328	36,755
CONCRETE BARRIER OR OPEN RAIL LIN. FT.		162.0	162.2	162.9	164.5	162.0	162.2	162.9	164.5
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		131.1	131.9	134.8	140.8	125.5	127.1	129.5	134.5
OPEN RAIL REINFORCING STEEL EPOXY COATED LBS.		37,427	37,723	38,199	38,970	35,937	36,197	36,471	36,898

* 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 70'-0 BRIDGE
J30-03E-06	
EPOXY COATED REINFORCING	