

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 100' 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			8a1	39 22'-3 2317	39 22'-3 2317	39 22'-3 2317	39 22'-3 2317	39 22'-3 2317	39 22'-3 2317	39 22'-3 2317
SLAB LONGITUDINAL BOTTOM			8a2	39 33'-6 3489	39 33'-6 3489	39 33'-6 3489	39 33'-6 3489	39 33'-6 3489	39 33'-6 3489	39 33'-6 3489
SLAB LONGITUDINAL BOTTOM			8a3	39 31'-6 3281	39 31'-6 3281	39 31'-6 3281	39 31'-6 3281	39 31'-6 3281	39 31'-6 3281	39 31'-6 3281
SLAB LONGITUDINAL BOTTOM			9a4	40 28'-9 3910	40 28'-9 3910	40 28'-9 3910	40 28'-9 3910	40 28'-9 3910	40 28'-9 3910	40 28'-9 3910
SLAB LONGITUDINAL BOTTOM			9a5	20 32'-0 2176	20 32'-0 2176	20 32'-0 2176	20 32'-0 2176	20 32'-0 2176	20 32'-0 2176	20 32'-0 2176
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a6	8 35'-9 764	8 35'-9 764	8 35'-9 764	8 35'-9 764	8 35'-9 764	8 35'-9 764	8 35'-9 764
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a7	4 37'-4 399	4 37'-4 399	4 37'-4 399	4 37'-4 399	4 37'-4 399	4 37'-4 399	4 37'-4 399
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a8	8 25'-0 534	8 25'-0 534	8 25'-0 534	8 25'-0 534	8 25'-0 534	8 25'-0 534	8 25'-0 534
SLAB LONGITUDINAL BOTTOM, AT RAIL			8a9	4 22'-6 241	4 22'-6 241	4 22'-6 241	4 22'-6 241	4 22'-6 241	4 22'-6 241	4 22'-6 241
SLAB LONGITUDINAL TOP			6b1	39 7'-0 411	39 7'-0 411	39 7'-0 411	39 7'-0 411	39 7'-0 411	39 7'-0 411	39 7'-0 411
SLAB LONGITUDINAL TOP			10b2	39 26'-9 4490	39 26'-9 4490	39 26'-9 4490	39 26'-9 4490	39 26'-9 4490	39 26'-9 4490	39 26'-9 4490
SLAB LONGITUDINAL TOP			10b3	39 27'-6 4615	39 27'-6 4615	39 27'-6 4615	39 27'-6 4615	39 27'-6 4615	39 27'-6 4615	39 27'-6 4615
SLAB LONGITUDINAL TOP			7b4	39 16'-6 1316	39 16'-6 1316	39 16'-6 1316	39 16'-6 1316	39 16'-6 1316	39 16'-6 1316	39 16'-6 1316
SLAB LONGITUDINAL TOP			6b5	40 13'-9 827	40 13'-9 827	40 13'-9 827	40 13'-9 827	40 13'-9 827	40 13'-9 827	40 13'-9 827
SLAB LONGITUDINAL TOP			9b6	40 22'-9 3094	40 22'-9 3094	40 22'-9 3094	40 22'-9 3094	40 22'-9 3094	40 22'-9 3094	40 22'-9 3094
SLAB LONGITUDINAL TOP			6b7	20 26'-10 807	20 26'-10 807	20 26'-10 807	20 26'-10 807	20 26'-10 807	20 26'-10 807	20 26'-10 807
SLAB LONGITUDINAL TOP, AT RAIL			6b8	8 25'-6 307	8 25'-6 307	8 25'-6 307	8 25'-6 307	8 25'-6 307	8 25'-6 307	8 25'-6 307
SLAB LONGITUDINAL TOP, AT RAIL			9b9	8 23'-6 640	8 23'-6 640	8 23'-6 640	8 23'-6 640	8 23'-6 640	8 23'-6 640	8 23'-6 640
SLAB LONGITUDINAL TOP, AT RAIL			6b10	4 21'-0 127	4 21'-0 127	4 21'-0 127	4 21'-0 127	4 21'-0 127	4 21'-0 127	4 21'-0 127
SLAB LONGITUDINAL TOP, AT RAIL			6b11	8 27'-6 331	8 27'-6 331	8 27'-6 331	8 27'-6 331	8 27'-6 331	8 27'-6 331	8 27'-6 331
SLAB LONGITUDINAL TOP, AT RAIL			10b12	8 19'-0 655	8 19'-0 655	8 19'-0 655	8 19'-0 655	8 19'-0 655	8 19'-0 655	8 19'-0 655
SLAB TRANSVERSE, BOTTOM			6c1	97 32'-10 4784	97 34'-0 4954	84 32'-10 4143	70 32'-10 2398	56 32'-10 1032	56 32'-10 1032	56 32'-10 1032
SLAB TRANSVERSE ENDS, BOTTOM			6c2	- - -	- - -	30 VARIES	797	56 VARIES	1486	56 VARIES
SLAB TRANSVERSE, TOP			5d1	97 32'-10 3322	97 34'-0 3440	84 32'-10 2877	70 32'-10 2398	56 32'-10 1032	56 32'-10 1032	56 32'-10 1032
SLAB TRANSVERSE ENDS, TOP			5d2	- - -	- - -	30 VARIES	553	56 VARIES	1032	56 VARIES
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	72 5'-11 640	72 5'-11 640	72 5'-11 640
PIER CAP HOOPS			5h1	48 7'-5 372	48 7'-5 372	64 7'-5 496	64 7'-5 496	64 7'-5 496	64 7'-5 496	64 7'-5 496
PIER CAP ENDS			8h2	4 14'-5 154	4 14'-5 154	4 14'-5 154	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	192 8'-6 1703	192 8'-6 1703	192 8'-6 1703	190 8'-6 1685	- - -	- - -	- - -
WING, VERTICAL			5m1	40 4'-5 185	40 4'-5 185	40 4'-5 185	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	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	24 6'-9 169	24 6'-9 169	24 6'-9 169
** PAVING BLOCK LIFTING HOOPS			5x1	10 2'-10 30	10 2'-10 30	10 2'-10 30	10 2'-10 30	10 2'-10 30	10 2'-10 30	10 2'-10 30
SUB TOTAL - LBS.				49,365	49,751	50,175	50,861			
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06				6461	6461	6461	6461			
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06				6794	6794	6794	6794			
TOTAL - LBS.				55,826	56,212	56,636	57,322			
WITH MONOLITHIC PIER CAP				56,159	56,545	56,969	57,655			
TOTAL - LBS.				54,311	54,661	54,845	55,274			
WITH NON-MONOLITHIC PIER CAP				54,644	54,994	55,178	55,607			
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED										

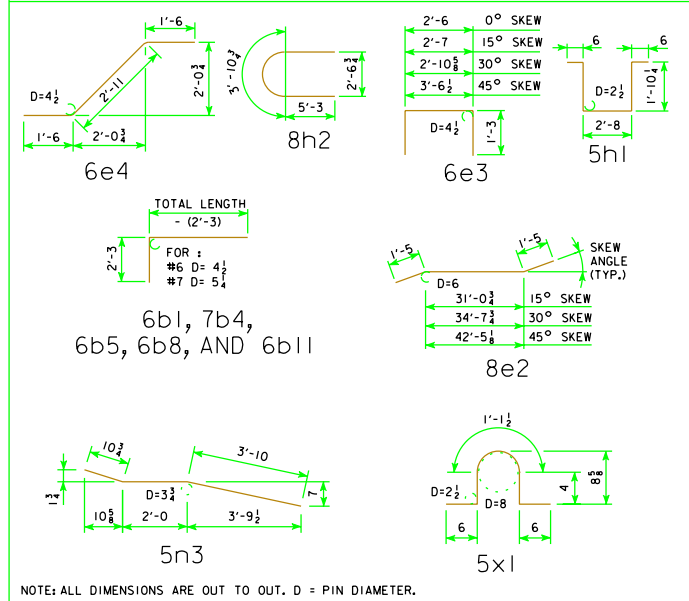
** BARS MAY BE NON-COATED AT CONTRACTOR'S OPTION.

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 100' 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.		205.6	206.4	209.1	215.0	201.0	201.6	203.9	208.6
BARRIER RAIL REINFORCING STEEL EPOXY COATED LBS.		55,826	56,212	56,636	57,322	54,311	54,661	54,845	55,274
CONCRETE BARRIER OR OPEN RAIL LIN. FT.		222.0	222.2	222.9	224.5	222.0	222.2	222.9	224.5
WITH STRUCTURAL CONCRETE (BRIDGE) C.Y.		205.4	206.2	208.9	214.8	200.8	201.4	203.7	208.4
OPEN RAIL REINFORCING STEEL EPOXY COATED LBS.		56,159	56,545	56,969	57,655	54,644	54,994	55,178	55,607

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

BENT BAR DETAILS



07-09 LATEST REVISION DATE	M. C. M. M. M. APPROVED BY BRIDGE ENGINEER	<p>Iowa Department of Transportation Highway Division</p>
		STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006
		SUPERSTRUCTURE DETAILS 100'-0 BRIDGE
EPOXY COATED REINFORCING		

REVISED 07-09 - OPEN RAIL REINF. QTY'S. CHANGED WHICH CHANGED TOTAL REINF. QTY'S.