BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 130' BRIDGE

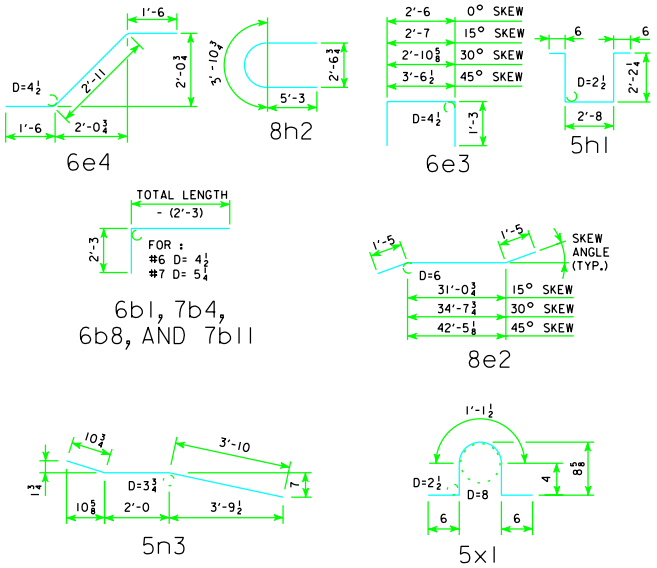
LOCATION \ SKEW	SHAPE	BAR	0° NO.	0° LENGTH	0° WEIGHT	15° NO.	15° LENGTH	15° WEIGHT	30° NO.	30° LENGTH	30° WEIGHT	45° NO.	45° LENGTH	45° WEIGHT
SLAB LONGITUDINAL BOTTOM		9a1	39	27'-6	3647	39	27'-6	3647	39	27'-6	3647	39	27'-6	3647
SLAB LONGITUDINAL BOTTOM		9a2	39	42'-0	5570	39	42'-0	5570	39	42'-0	5570	39	42'-0	5570
SLAB LONGITUDINAL BOTTOM		9a3	39	38'-9	5139	39	38'-9	5139	39	38'-9	5139	39	38'-9	5139
SLAB LONGITUDINAL BOTTOM		9a4	40	31'-6	4284	40	31'-6	4284	40	31'-6	4284	40	31'-6	4284
SLAB LONGITUDINAL BOTTOM		10a5	20	38'-0	3271	20	38'-0	3271	20	38'-0	3271	20	38'-0	3271
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	36'-10	1002	8	36'-10	1002	8	36'-10	1002	8	36'-10	1002
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a7	8	13'-0	354	8	13'-0	354	8	13'-0	354	8	13'-0	354
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a8	4	45'-2	615	4	45'-2	615	4	45'-2	615	4	45'-2	615
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	8	30'-3	647	8	30'-3	647	8	30'-3	647	8	30'-3	647
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a10	4	26'-4	359	4	26'-4	359	4	26'-4	359	4	26'-4	359
SLAB LONGITUDINAL TOP		6b1	39	7'-6	440	39	7'-6	440	39	7'-6	440	39	7'-6	440
SLAB LONGITUDINAL TOP		11b2	39	26'-3	5440	39	26'-3	5440	39	26'-3	5440	39	26'-3	5440
SLAB LONGITUDINAL TOP		11b3	39	28'-0	5802	39	28'-0	5802	39	28'-0	5802	39	28'-0	5802
SLAB LONGITUDINAL TOP		7b4	39	24'-2	1927	39	24'-2	1927	39	24'-2	1927	39	24'-2	1927
SLAB LONGITUDINAL TOP		10b5	40	23'-6	4045	40	23'-6	4045	40	23'-6	4045	40	23'-6	4045
SLAB LONGITUDINAL TOP		6b6	20	35'-6	1067	20	35'-6	1067	20	35'-6	1067	20	35'-6	1067
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	30'-11	372	8	30'-11	372	8	30'-11	372	8	30'-11	372
SLAB LONGITUDINAL TOP, AT RAIL		11b9	8	30'-3	1286	8	30'-3	1286	8	30'-3	1286	8	30'-3	1286
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	24'-4	147	4	24'-4	147	4	24'-4	147	4	24'-4	147
SLAB LONGITUDINAL TOP, AT RAIL		7b11	8	35'-11	588	8	35'-11	588	8	35'-11	588	8	35'-11	588
SLAB LONGITUDINAL TOP, AT RAIL		11b12	8	21'-3	904	8	21'-3	904	8	21'-3	904	8	21'-3	904
SLAB TRANSVERSE, BOTTOM		6c1	127	32'-10	6264	127	34'-0	6486	114	32'-10	5622	100	32'-10	4932
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	30	VARIES	797	56	VARIES	1486
SLAB TRANSVERSE, TOP		5d1	127	32'-10	4350	127	34'-0	4504	114	32'-10	3904	100	32'-10	3425
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	30	VARIES	553	56	VARIES	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	7	5'-11	640
PIER CAP HOOPS		5h1	44	8'-1	371	44	8'-1	371	44	8'-1	371	66	8'-1	557
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	252	8'-6	2235	252	8'-6	2235	252	8'-6	2235	250	8'-6	2217
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		5x1	10	2'-10	30	10	2'-10	30	10	2'-10	30	10	2'-10	30
SUB TOTAL - LBS.					64,579			65,053			65,263			66,135
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					8054			8054			8054			8054
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					8573			8573			8573			8573
TOTAL - LBS.	WITH MONOLITHIC PIER CAP	WITH BARRIER RAIL			72,636			73,107			73,317			74,189
		WITH OPEN RAIL			73,152			73,626			73,836			74,708
TOTAL - LBS.	WITH NON-MONOLITHIC PIER CAP	WITH BARRIER RAIL			71,119			71,557			71,651			72,080
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			71,638			72,076			72,170			72,599

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 130' BRIDGE

ITEM		SKEW	WITH MONOLITHIC PIER CAP 0°	15°	30°	45°	WITH NON-MONOLITHIC PIER CAP 0°	15°	30°	45°
WITH BARRIER RAIL	*STRUCTURAL CONCRETE (BRIDGE)	C.Y.	308.1	308.9	311.5	317.0	303.5	304.1	306.2	310.7
	REINFORCING STEEL	LBS.	72,636	73,107	73,317	74,189	71,119	71,557	71,651	72,080
CONCRETE BARRIER OR OPEN RAIL		LIN. FT.	282.0	282.2	282.9	284.5	282.0	282.2	282.9	284.5
WITH OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE)	C.Y.	307.9	308.6	311.3	316.8	303.3	303.9	306.0	310.4
	REINFORCING STEEL	LBS.	73,152	73,626	73,836	74,708	71,638	72,076	72,170	72,599

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

BENT BAR DETAILS



NOTE: ALL DIMENSIONS ARE OUT TO OUT. D = PIN DIAMETER.

REVISED 07-09 - OPEN RAIL REINF. QTYS. CHANGED WHICH CHANGED TOTAL REINF. QTYS.

07-09
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES

CONTINUOUS CONCRETE SLAB BRIDGES

NOVEMBER, 2006

SUPERSTRUCTURE DETAILS
130'-0 BRIDGE

NON-EPOXY COATED REINFORCING

J30-15B-06