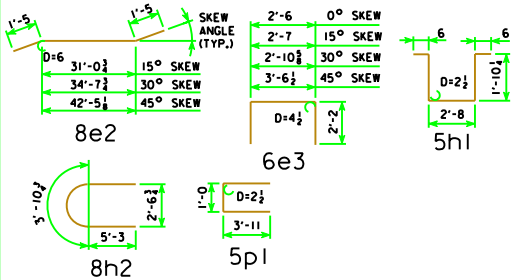
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 100' BRIDGE

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		8a1	39	23'-4	2430	39	23'-4	2430	39	23'-4	2430	39	23'-4	2430
SLAB LONGITUDINAL BOTTOM		8a2	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
SLAB LONGITUDINAL BOTTOM		9a4	40	29'-10	4058	40	29'-10	4058	40	29'-10	4058	40	29'-10	4058
SLAB LONGITUDINAL BOTTOM		9a5	20	32'-0	2176	20	32'-0	2176	20	32'-0	2176	20	32'-0	2176
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a6	8	36'-10	787	8	36'-10	787	8	36'-10	787	8	36'-10	787
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a7	4	37'-4	399	4	37'-4	399	4	37'-4	399	4	37'-4	399
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a8	8	26'-1	558	8	26'-1	558	8	26'-1	558	8	26'-1	558
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	4	22'-6	241	4	22'-6	241	4	22'-6	241	4	22'-6	241
SLAB LONGITUDINAL TOP		6b1	39	5'-10	342	39	5'-10	342	39	5'-10	342	39	5'-10	342
SLAB LONGITUDINAL TOP		10b2	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
SLAB LONGITUDINAL TOP		7b4	39	15'-4	1223	39	15'-4	1223	39	15'-4	1223	39	15'-4	1223
SLAB LONGITUDINAL TOP		6b5	40	12'-7	757	40	12'-7	757	40	12'-7	757	40	12'-7	757
SLAB LONGITUDINAL TOP		9b6	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
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	24'-4	293	8	24'-4	293	8	24'-4	293	8	24'-4	293
SLAB LONGITUDINAL TOP, AT RAIL		9b9	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
SLAB LONGITUDINAL TOP, AT RAIL		6b11	8	26'-4	317	8	26'-4	317	8	26'-4	317	8	26'-4	317
SLAB LONGITUDINAL TOP, AT RAIL		10b12	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	86	32'-10	4242	74	32'-10	3650
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	28	VARIES	800	52	VARIES	1426
SLAB TRANSVERSE, TOP		5d1	97	32'-10	3322	97	34'-0	3440	86	32'-10	2946	74	32'-10	2535
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	28	VARIES	555	52	VARIES	990
SLAB, TRANSVERSE AT ABUTMENT		8e1	20	32'-10	1754	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT		8e2	-	-	-	20	33'-11	1812	20	37'-6	2003	20	45'-4	2421
SLAB, HAIRPINS, AT ABUTMENT		6e3	72	6'-10	739	72	6'-11	748	72	7'-3	785	72	7'-11	857
PIER CAP HOOPS		5h1	56	7'-5	434	56	7'-5	434	56	7'-5	434	70	7'-5	542
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	192	8'-6	1703	192	8'-6	1703	192	8'-6	1703	190	8'-6	1685
WING, VERTICAL		5m1-4	32	SHOWN	117	32	SHOWN	117	32	SHOWN	117	32	SHOWN	117
WING, HORIZONTAL		5n1	24	6'-8	167	24	6'-8	167	24	6'-8	167	24	6'-8	167
PAVING SUPPORT, TRANSVERSE		5p1	30	8'-10	277	32	8'-10	295	34	8'-10	314	42	8'-10	387
PAVING SUPPORT LONGITUDINAL		5p3	6	30'-2	189	6	31'-3	196	6	34'-6	218	6	42'-7	267
SUB TOTAL - LBS.					49,408			49,824			50,358			51,375
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					6153			6153			6153			6153
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					6182			6182			6182			6182
TOTAL - LBS. WITH MONOLITHIC PIER CAP		WITH BARRIER RAIL			55,561			55,977			56,511			57,528
		WITH OPEN RAIL			55,590			56,006			56,540			57,557
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP		WITH BARRIER RAIL			53,984			54,364			54,782			55,434
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			54,013			54,393			54,811			55,463

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 100' 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.	212.3	213.3	216.8	224.5	207.3	208.2	211.2	217.6
	REINFORCING STEEL EPOXY COATED LBS.	55,561	55,977	56,511	57,528	53,984	54,364	54,782	55,434
CONCRETE BARRIER OR OPEN RAIL	LIN. FT.	222.0	222.2	222.9	224.5	222.0	222.2	222.9	224.5
WITH OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE) C.Y.	212.1	213.1	216.6	224.3	207.1	208.0	211.0	217.5
	REINFORCING STEEL EPOXY COATED LBS.	55,590	56,006	56,540	57,557	54,013	54,393	54,811	55,463

* INCLUDES 4 WINGS @ 0.71 C.Y. EACH; EXCLUDES RAIL CONCRETE.

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
100'-0 BRIDGE

EPOXY COATED REINFORCING

J30-09E-06