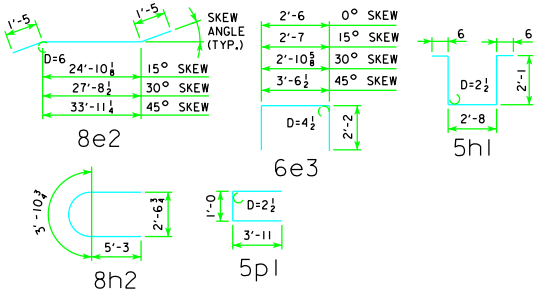
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 120' BRIDGE

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	31	26'-10	2828	31	26'-10	2828	31	26'-10	2828	31	26'-10	2828
SLAB LONGITUDINAL BOTTOM		9a2	31	38'-9	4084	31	38'-9	4084	31	38'-9	4084	31	38'-9	4084
SLAB LONGITUDINAL BOTTOM		9a3	31	36'-2	3812	31	36'-2	3812	31	36'-2	3812	31	36'-2	3812
SLAB LONGITUDINAL BOTTOM		8a4	32	29'-4	2506	32	29'-4	2506	32	29'-4	2506	32	29'-4	2506
SLAB LONGITUDINAL BOTTOM		9a5	16	34'-0	1850	16	34'-0	1850	16	34'-0	1850	16	34'-0	1850
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	35'-5	963	8	35'-5	963	8	35'-5	963	8	35'-5	963
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a7	8	12'-0	326	8	12'-0	326	8	12'-0	326	8	12'-0	326
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a8	4	42'-2	573	4	42'-2	573	4	42'-2	573	4	42'-2	573
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	8	25'-7	546	8	25'-7	546	8	25'-7	546	8	25'-7	546
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a10	4	23'-6	251	4	23'-6	251	4	23'-6	251	4	23'-6	251
SLAB LONGITUDINAL TOP		7b1	31	7'-4	465	31	7'-4	465	31	7'-4	465	31	7'-4	465
SLAB LONGITUDINAL TOP		10b2	31	27'-6	3668	31	27'-6	3668	31	27'-6	3668	31	27'-6	3668
SLAB LONGITUDINAL TOP		10b3	31	24'-9	3301	31	24'-9	3301	31	24'-9	3301	31	24'-9	3301
SLAB LONGITUDINAL TOP		7b4	31	22'-3	1410	31	22'-3	1410	31	22'-3	1410	31	22'-3	1410
SLAB LONGITUDINAL TOP		11b5	32	27'-9	4718	32	27'-9	4718	32	27'-9	4718	32	27'-9	4718
SLAB LONGITUDINAL TOP		6b6	16	30'-0	721	16	30'-0	721	16	30'-0	721	16	30'-0	721
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	28'-3	339	8	28'-3	339	8	28'-3	339	8	28'-3	339
SLAB LONGITUDINAL TOP, AT RAIL		10b9	8	27'-0	929	8	27'-0	929	8	27'-0	929	8	27'-0	929
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	23'-10	143	4	23'-10	143	4	23'-10	143	4	23'-10	143
SLAB LONGITUDINAL TOP, AT RAIL		6b11	8	30'-9	369	8	30'-9	369	8	30'-9	369	8	30'-9	369
SLAB LONGITUDINAL TOP, AT RAIL		11b12	8	21'-0	893	8	21'-0	893	8	21'-0	893	8	21'-0	893
SLAB TRANSVERSE, BOTTOM		6c1	117	26'-10	4716	117	27'-9	4877	110	26'-10	4433	100	26'-10	4030
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	20	VARIES	494	40	VARIES	916
SLAB TRANSVERSE, TOP		5d1	117	26'-10	3274	117	27'-9	3386	110	26'-10	3079	100	26'-10	2799
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	20	VARIES	343	40	VARIES	636
SLAB, TRANSVERSE AT ABUTMENT		8e1	20	26'-10	1433	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT		8e2	-	-	-	20	27'-8	1477	20	30'-7	1633	20	36'-9	1962
SLAB, HAIRPINS, AT ABUTMENT		6e3	60	6'-10	616	60	6'-11	623	60	7'-3	653	60	7'-11	713
PIER CAP HOOPS		5h1	32	7'-10	261	32	7'-10	261	48	7'-10	392	48	7'-10	392
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	23'-10	509	8	24'-8	527	8	27'-6	587	8	33'-8	719
PIER CAP, TOP LONGITUDINAL		8h4	4	26'-10	287	4	27'-9	296	4	30'-11	330	4	37'-11	405
TOP OF SLAB, TRANSVERSE, AT RAIL		5j1	232	8'-6	2057	232	8'-6	2057	232	8'-6	2057	230	8'-6	2039
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	24	8'-10	221	26	8'-10	240	28	8'-10	258	34	8'-10	313
PAVING SUPPORT LONGITUDINAL		5p3	6	24'-2	151	6	25'-0	156	6	27'-11	175	6	34'-1	213
SUB TOTAL - LBS.					48,658			49,033			49,567			50,270
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					7638			7638			7638			7638
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					56,296			56,671			57,205			57,908
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL SAME AS ABOVE EXCEPT ALL "h" BARS DELETED					55,085			55,433			55,742			56,238

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 120' BRIDGE

ITEM		SKEW	WITH MONOLITHIC PIER CAP 0°	15°	30°	45°	WITH NON-MONOLITHIC PIER CAP 0°	15°	30°	45°
OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE) C.Y.		227.9	228.7	231.5	237.6	223.7	224.4	226.7	231.8
	REINFORCING STEEL LBS.		56,296	56,671	57,205	57,908	55,085	55,433	55,742	56,238
OPEN RAIL	LIN. FT.		262.0	262.2	262.9	264.5	262.0	262.2	262.9	264.5

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

REVISED 12-07 - OPEN RAIL REINFORCING QUANTITY CHANGED

12-07
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 24' ROADWAY, 3 SPAN BRIDGES

CONTINUOUS CONCRETE SLAB BRIDGES

NOVEMBER, 2006

SUPERSTRUCTURE DETAILS
120'-0 BRIDGE

J24-13-06