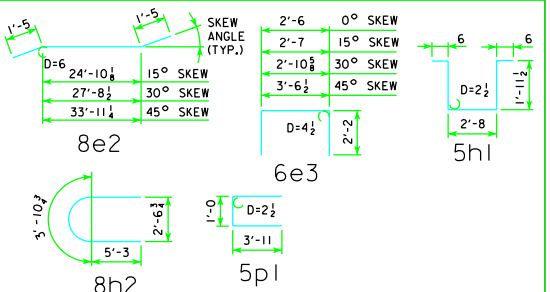
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 110' BRIDGE

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	31	24'-4	2014	31	24'-4	2014	31	24'-4	2014	31	24'-4	2014
SLAB LONGITUDINAL BOTTOM		9a2	31	35'-9	3768	31	35'-9	3768	31	35'-9	3768	31	35'-9	3768
SLAB LONGITUDINAL BOTTOM		8a3	31	32'-2	2662	31	32'-2	2662	31	32'-2	2662	31	32'-2	2662
SLAB LONGITUDINAL BOTTOM		9a4	32	31'-7	3436	32	31'-7	3436	32	31'-7	3436	32	31'-7	3436
SLAB LONGITUDINAL BOTTOM		8a5	16	39'-0	1666	16	39'-0	1666	16	39'-0	1666	16	39'-0	1666
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	40'-4	1097	8	40'-4	1097	8	40'-4	1097	8	40'-4	1097
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a7	4	39'-2	533	4	39'-2	533	4	39'-2	533	4	39'-2	533
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a8	8	23'-10	509	8	23'-10	509	8	23'-10	509	8	23'-10	509
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	4	23'-0	246	4	23'-0	246	4	23'-0	246	4	23'-0	246
SLAB LONGITUDINAL TOP		8b1	31	11'-4	938	31	11'-4	938	31	11'-4	938	31	11'-4	938
SLAB LONGITUDINAL TOP		10b2	31	26'-4	3513	31	26'-4	3513	31	26'-4	3513	31	26'-4	3513
SLAB LONGITUDINAL TOP		10b3	31	23'-7	3146	31	23'-7	3146	31	23'-7	3146	31	23'-7	3146
SLAB LONGITUDINAL TOP		7b4	31	20'-5	1294	31	20'-5	1294	31	20'-5	1294	31	20'-5	1294
SLAB LONGITUDINAL TOP		10b5	32	24'-6	3374	32	24'-6	3374	32	24'-6	3374	32	24'-6	3374
SLAB LONGITUDINAL TOP		6b6	16	28'-6	685	16	28'-6	685	16	28'-6	685	16	28'-6	685
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	26'-0	312	8	26'-0	312	8	26'-0	312	8	26'-0	312
SLAB LONGITUDINAL TOP, AT RAIL		10b9	8	25'-3	869	8	25'-3	869	8	25'-3	869	8	25'-3	869
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	21'-10	131	4	21'-10	131	4	21'-10	131	4	21'-10	131
SLAB LONGITUDINAL TOP, AT RAIL		6b11	8	29'-6	354	8	29'-6	354	8	29'-6	354	8	29'-6	354
SLAB LONGITUDINAL TOP, AT RAIL		10b12	8	17'-6	602	8	17'-6	602	8	17'-6	602	8	17'-6	602
SLAB TRANSVERSE, BOTTOM		6c1	107	26'-10	4312	107	27'-9	4460	100	26'-10	4030	90	26'-10	3627
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	20	VARIES	494	40	VARIES	916
SLAB TRANSVERSE, TOP		5d1	107	26'-10	2995	107	27'-9	3097	100	26'-10	2799	90	26'-10	2519
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	42	7'-7	332	42	7'-7	332	42	7'-7	332	56	7'-7	443
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	212	8'-6	1879	212	8'-6	1879	212	8'-6	1879	210	8'-6	1862
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.					44,322			44,674			45,100			45,915
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					6838			6838			6838			6838
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					51,160			51,512			51,938			52,753
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL SAME AS ABOVE EXCEPT ALL "h" BARS DELETED					49,878			50,203			50,535			51,032

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 110' 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.	197.7	198.5	201.4	207.5	193.5	194.2	196.6	201.7
	REINFORCING STEEL	LBS.	51,160	51,512	51,938	52,753	49,878	50,203	50,535	51,032
OPEN RAIL		LIN. FT.	242.0	242.2	242.9	244.5	242.0	242.2	242.9	244.5

* 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
110'-0 BRIDGE

J24-11-06