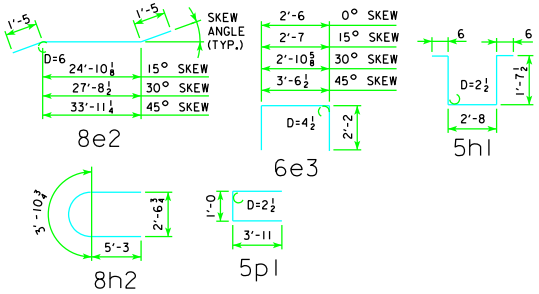
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 70' BRIDGE

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		7a1	31	16'-4	1035	31	16'-4	1035	31	16'-4	1035	31	16'-4	1035
SLAB LONGITUDINAL BOTTOM		8a2	31	23'-0	1904	31	23'-0	1904	31	23'-0	1904	31	23'-0	1904
SLAB LONGITUDINAL BOTTOM		7a3	31	24'-7	1558	31	24'-7	1558	31	24'-7	1558	31	24'-7	1558
SLAB LONGITUDINAL BOTTOM		8a4	32	20'-10	1780	32	20'-10	1780	32	20'-10	1780	32	20'-10	1780
SLAB LONGITUDINAL BOTTOM		7a5	16	20'-6	670	16	20'-6	670	16	20'-6	670	16	20'-6	670
SLAB LONGITUDINAL BOTTOM, AT RAIL		7a6	8	25'-10	422	8	25'-10	422	8	25'-10	422	8	25'-10	422
SLAB LONGITUDINAL BOTTOM, AT RAIL		7a7	4	25'-4	207	4	25'-4	207	4	25'-4	207	4	25'-4	207
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a8	8	18'-4	392	8	18'-4	392	8	18'-4	392	8	18'-4	392
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	4	21'-6	230	4	21'-6	230	4	21'-6	230	4	21'-6	230
SLAB LONGITUDINAL TOP		6b1	31	7'-7	353	31	7'-7	353	31	7'-7	353	31	7'-7	353
SLAB LONGITUDINAL TOP		8b2	31	17'-3	1428	31	17'-3	1428	31	17'-3	1428	31	17'-3	1428
SLAB LONGITUDINAL TOP		8b3	31	25'-8	2124	31	25'-8	2124	31	25'-8	2124	31	25'-8	2124
SLAB LONGITUDINAL TOP		7b4	32	21'-0	1374	32	21'-0	1374	32	21'-0	1374	32	21'-0	1374
SLAB LONGITUDINAL TOP		8b5	32	11'-4	968	32	11'-4	968	32	11'-4	968	32	11'-4	968
SLAB LONGITUDINAL TOP		6b6	16	20'-6	493	16	20'-6	493	16	20'-6	493	16	20'-6	493
SLAB LONGITUDINAL TOP, AT RAIL		8b8	8	38'-4	819	8	38'-4	819	8	38'-4	819	8	38'-4	819
SLAB LONGITUDINAL TOP, AT RAIL		8b9	8	28'-4	605	8	28'-4	605	8	28'-4	605	8	28'-4	605
SLAB TRANSVERSE, BOTTOM		6c1	67	26'-10	2700	67	27'-9	2793	60	26'-10	2418	50	26'-10	2015
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	20	VARIES	494	40	VARIES	916
SLAB TRANSVERSE, TOP		5d1	67	26'-10	1875	67	27'-9	1939	60	26'-10	1679	50	26'-10	1399
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	40	6'-11	289	40	6'-11	289	50	6'-11	361	60	6'-11	433
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	132	8'-6	1170	132	8'-6	1170	132	8'-6	1170	130	8'-6	1153
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.					26,051			26,310			26,901			27,677
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					4677			4677			4677			4677
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					30,728			30,987			31,578			32,354
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL SAME AS ABOVE EXCEPT ALL "h" BARS DELETED					29,489			29,721			30,146			30,643

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 70' 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.	113.2	114.0	117.0	123.4	109.0	109.7	112.2	117.6
	REINFORCING STEEL	LBS.	30,728	30,987	31,578	32,354	29,489	29,721	30,146	30,643
OPEN RAIL		LIN. FT.	162.0	162.2	162.9	164.5	162.0	162.2	162.9	164.5

* 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
70'-0 BRIDGE

J24-03-06