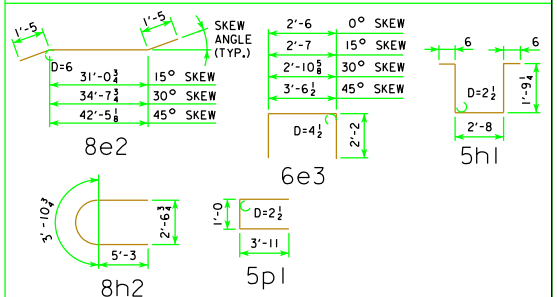
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 90' BRIDGE

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	21'-1	2195	39	21'-1	2195	39	21'-1	2195	39	21'-1	2195
SLAB LONGITUDINAL BOTTOM		8a2	39	30'-3	3150	39	30'-3	3150	39	30'-3	3150	39	30'-3	3150
SLAB LONGITUDINAL BOTTOM		8a3	39	28'-6	2968	39	28'-6	2968	39	28'-6	2968	39	28'-6	2968
SLAB LONGITUDINAL BOTTOM		8a4	40	26'-7	2839	40	26'-7	2839	40	26'-7	2839	40	26'-7	2839
SLAB LONGITUDINAL BOTTOM		8a5	20	28'-0	1495	20	28'-0	1495	20	28'-0	1495	20	28'-0	1495
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a6	8	33'-4	712	8	33'-4	712	8	33'-4	712	8	33'-4	712
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a7	4	34'-4	367	4	34'-4	367	4	34'-4	367	4	34'-4	367
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	21'-0	224	4	21'-0	224	4	21'-0	224	4	21'-0	224
SLAB LONGITUDINAL TOP		6b1	39	6'-10	400	39	6'-10	400	39	6'-10	400	39	6'-10	400
SLAB LONGITUDINAL TOP		9b2	39	22'-9	3017	39	22'-9	3017	39	22'-9	3017	39	22'-9	3017
SLAB LONGITUDINAL TOP		9b3	39	33'-10	4486	39	33'-10	4486	39	33'-10	4486	39	33'-10	4486
SLAB LONGITUDINAL TOP		6b4	40	11'-10	711	40	11'-10	711	40	11'-10	711	40	11'-10	711
SLAB LONGITUDINAL TOP		9b5	40	27'-6	3740	40	27'-6	3740	40	27'-6	3740	40	27'-6	3740
SLAB LONGITUDINAL TOP		6b6	20	16'-10	506	20	16'-10	506	20	16'-10	506	20	16'-10	506
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	24'-10	298	8	24'-10	298	8	24'-10	298	8	24'-10	298
SLAB LONGITUDINAL TOP, AT RAIL		9b9	8	19'-6	530	8	19'-6	530	8	19'-6	530	8	19'-6	530
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	18'-0	108	4	18'-0	108	4	18'-0	108	4	18'-0	108
SLAB LONGITUDINAL TOP, AT RAIL		6b11	8	27'-4	328	8	27'-4	328	8	27'-4	328	8	27'-4	328
SLAB LONGITUDINAL TOP, AT RAIL		10b12	8	13'-3	456	8	13'-3	456	8	13'-3	456	8	13'-3	456
SLAB TRANSVERSE, BOTTOM		6c1	87	32'-10	4290	87	34'-0	4443	76	32'-10	3748	64	32'-10	3156
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	28	VARIES	800	52	VARIES	1426
SLAB TRANSVERSE, TOP		5d1	87	32'-10	2979	87	34'-0	3085	76	32'-10	2603	64	32'-10	2192
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	28	VARIES	555	52	VARIES	990
SLAB, TRANSVERSE AT ABUTMENT		8e1	20	32'-10	1753	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT		8e2	-	-	-	20	33'-11	1811	20	37'-6	2003	20	45'-4	2421
SLAB HAIRPINS, AT ABUTMENT		6e3	72	6'-10	739	72	6'-11	748	72	7'-3	784	72	7'-11	856
PIER CAP HOOPS		5h1	56	7'-3	423	56	7'-3	423	56	7'-3	423	70	7'-3	529
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	637	8	30'-11	660	8	34'-5	735	8	42'-2	901
PIER CAP,TOP LONGITUDINAL		8h4	4	32'-10	351	4	34'-0	363	4	37'-11	405	4	46'-6	497
TOP OF SLAB, TRANSVERSE, AT RAIL		5j1	172	8'-6	1525	172	8'-6	1525	172	8'-6	1525	170	8'-6	1507
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	276	32	8'-10	295	34	8'-10	313	42	8'-10	387
PAVING SUPPORT, LONGITUDINAL		5p3	6	30'-2	189	6	31'-3	196	6	34'-10	218	6	42'-7	266
SUB TOTAL - LBS.					42,639			43,026			43,589			44,605
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					5642			5642			5642			5642
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					5907			5907			5907			5907
TOTAL - LBS. WITH MONOLITHIC PIER CAP		WITH BARRIER RAIL			48,281			48,668			49,231			50,247
		WITH OPEN RAIL			48,546			48,933			49,496			50,512
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP		WITH BARRIER RAIL			46,716			47,068			47,514			48,166
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			46,981			47,333			47,779			48,431

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 90' 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.	183.2	184.3	187.8	195.6	178.2	179.1	182.2	188.7
	REINFORCING STEEL EPOXY COATED LBS.	48,281	48,668	49,231	50,247	46,716	47,068	47,514	48,166
	CONCRETE BARRIER OR OPEN RAIL LIN. FT.	202.0	202.2	202.9	204.5	202.0	202.2	202.9	204.5
WITH OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE) C.Y.	183.0	184.1	187.7	195.4	178.1	179.0	182.0	188.6
	REINFORCING STEEL EPOXY COATED LBS.	48,546	48,933	49,496	50,512	46,981	47,333	47,779	48,431

* 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 - 30' ROADWAY, 3 SPAN BRIDGES

CONTINUOUS CONCRETE SLAB BRIDGES

NOVEMBER, 2006

SUPERSTRUCTURE DETAILS
90'-0 BRIDGE

EPOXY COATED REINFORCING

J30-07E-06