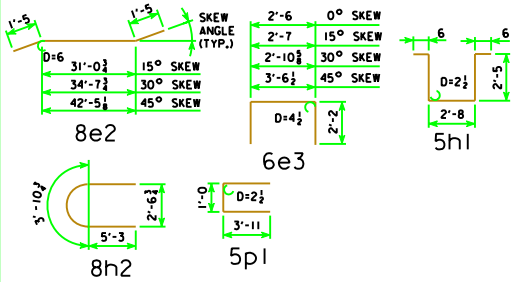
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 150' BRIDGE

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		10a1	39	33'-10	5678	39	33'-10	5678	39	33'-10	5678	39	33'-10	5678
SLAB LONGITUDINAL BOTTOM		10a2	39	51'-6	8643	39	51'-6	8643	39	51'-6	8643	39	51'-6	8643
SLAB LONGITUDINAL BOTTOM		10a3	39	48'-6	8140	39	48'-6	8140	39	48'-6	8140	39	48'-6	8140
SLAB LONGITUDINAL BOTTOM		9a4	40	37'-4	5078	40	37'-4	5078	40	37'-4	5078	40	37'-4	5078
SLAB LONGITUDINAL BOTTOM		9a5	20	45'-0	3060	20	45'-0	3060	20	45'-0	3060	20	45'-0	3060
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	45'-8	1243	8	45'-8	1243	8	45'-8	1243	8	45'-8	1243
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a7	8	13'-0	354	8	13'-0	354	8	13'-0	354	8	13'-0	354
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a8	4	56'-8	771	4	56'-8	771	4	56'-8	771	4	56'-8	771
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a9	8	38'-7	1329	8	38'-7	1329	8	38'-7	1329	8	38'-7	1329
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a10	4	35'-0	603	4	35'-0	603	4	35'-0	603	4	35'-0	603
SLAB LONGITUDINAL TOP		6b1	39	6'-7	386	39	6'-7	386	39	6'-7	386	39	6'-7	386
SLAB LONGITUDINAL TOP		11b2	39	32'-9	6787	39	32'-9	6787	39	32'-9	6787	39	32'-9	6787
SLAB LONGITUDINAL TOP		11b3	39	28'-6	5906	39	28'-6	5906	39	28'-6	5906	39	28'-6	5906
SLAB LONGITUDINAL TOP		8b4	39	32'-0	3333	39	32'-0	3333	39	32'-0	3333	39	32'-0	3333
SLAB LONGITUDINAL TOP		11b5	40	30'-0	6376	40	30'-0	6376	40	30'-0	6376	40	30'-0	6376
SLAB LONGITUDINAL TOP		6b6	20	37'-4	1122	20	37'-4	1122	20	37'-4	1122	20	37'-4	1122
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	33'-10	407	8	33'-10	407	8	33'-10	407	8	33'-10	407
SLAB LONGITUDINAL TOP, AT RAIL		11b9	8	35'-6	1509	8	35'-6	1509	8	35'-6	1509	8	35'-6	1509
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	28'-0	169	4	28'-0	169	4	28'-0	169	4	28'-0	169
SLAB LONGITUDINAL TOP, AT RAIL		7b11	8	39'-7	648	8	39'-7	648	8	39'-7	648	8	39'-7	648
SLAB LONGITUDINAL TOP, AT RAIL		11b12	8	25'-6	1084	8	25'-6	1084	8	25'-6	1084	8	25'-6	1084
SLAB TRANSVERSE BOTTOM		6c1	147	32'-10	7250	147	34'-0	7507	136	32'-10	6707	124	32'-10	6116
SLAB TRANSVERSE BOTTOM		6c2	-	-	-	-	-	-	28	VARIES	800	52	VARIES	1426
SLAB TRANSVERSE, TOP		5d1	147	32'-10	5035	147	34'-0	5213	136	32'-10	4658	124	32'-10	4247
SLAB TRANSVERSE, 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	44	8'-6	391	44	8'-6	391	44	8'-6	391	66	8'-6	586
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	292	8'-6	2589	292	8'-6	2589	292	8'-6	2589	290	8'-6	2571
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'-10	218	6	42'-7	267
SUB TOTAL - LBS.					82,277			82,840			83,225			84,330
BARRIER RAIL - SEE LIST ON RAIL SHEET J30-41-06					8853			8853			8853			8853
OPEN RAIL - SEE LIST ON RAIL SHEET J30-44-06					8675			8675			8675			8675
TOTAL - LBS. WITH MONOLITHIC PIER CAP		WITH BARRIER RAIL			91,130			91,693			92,078			93,183
		WITH OPEN RAIL			90,952			91,515			91,900			93,005
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP		WITH BARRIER RAIL			89,596			90,123			90,392			91,045
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED		WITH OPEN RAIL			89,418			89,945			90,214			90,867

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 150' 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.	399.8	400.7	404.0	411.2	394.8	395.6	398.4	404.3
	REINFORCING STEEL EPOXY COATED LBS.	91,130	91,693	92,078	93,183	89,596	90,123	90,392	91,045
CONCRETE BARRIER OR OPEN RAIL	LIN. FT.	322.0	322.2	322.9	324.5	322.0	322.2	322.9	324.5
WITH OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE) C.Y.	399.5	400.5	403.8	410.9	394.5	395.3	398.1	404.0
	REINFORCING STEEL EPOXY COATED LBS.	90,952	91,515	91,900	93,005	89,418	89,945	90,214	90,867

* 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
150'-0 BRIDGE

EPOXY COATED REINFORCING

J30-19E-06