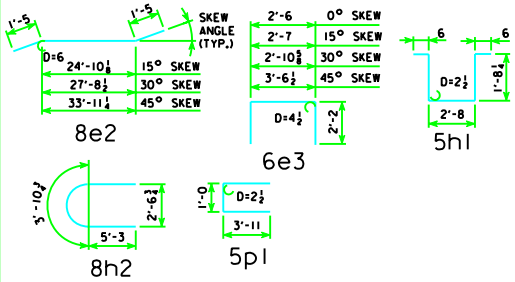
BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 80' BRIDGE

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	18'-4	1518	31	18'-4	1518	31	18'-4	1518	31	18'-4	1518
SLAB LONGITUDINAL BOTTOM		8a2	31	25'-0	2070	31	25'-0	2070	31	25'-0	2070	31	25'-0	2070
SLAB LONGITUDINAL BOTTOM		8a3	31	28'-1	2325	31	28'-1	2325	31	28'-1	2325	31	28'-1	2325
SLAB LONGITUDINAL BOTTOM		7a4	32	23'-4	1527	32	23'-4	1527	32	23'-4	1527	32	23'-4	1527
SLAB LONGITUDINAL BOTTOM		7a5	16	23'-0	753	16	23'-0	753	16	23'-0	753	16	23'-0	753
SLAB LONGITUDINAL BOTTOM, AT RAIL		7a6	8	29'-10	488	8	29'-10	488	8	29'-10	488	8	29'-10	488
SLAB LONGITUDINAL BOTTOM, AT RAIL		7a7	4	27'-4	224	4	27'-4	224	4	27'-4	224	4	27'-4	224
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a8	8	20'-10	445	8	20'-10	445	8	20'-10	445	8	20'-10	445
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	4	23'-6	251	4	23'-6	251	4	23'-6	251	4	23'-6	251
SLAB LONGITUDINAL TOP		6b1	31	18'-1	842	31	18'-1	842	31	18'-1	842	31	18'-1	842
SLAB LONGITUDINAL TOP		9b2	31	20'-3	2135	31	20'-3	2135	31	20'-3	2135	31	20'-3	2135
SLAB LONGITUDINAL TOP		9b3	31	30'-0	3162	31	30'-0	3162	31	30'-0	3162	31	30'-0	3162
SLAB LONGITUDINAL TOP		6b4	32	6'-1	293	32	6'-1	293	32	6'-1	293	32	6'-1	293
SLAB LONGITUDINAL TOP		8b5	32	20'-3	1731	32	20'-3	1731	32	20'-3	1731	32	20'-3	1731
SLAB LONGITUDINAL TOP		6b6	16	16'-6	397	16	16'-6	397	16	16'-6	397	16	16'-6	397
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	24'-7	296	8	24'-7	296	8	24'-7	296	8	24'-7	296
SLAB LONGITUDINAL TOP, AT RAIL		9b9	8	22'-2	603	8	22'-2	603	8	22'-2	603	8	22'-2	603
SLAB LONGITUDINAL TOP, AT RAIL		8b10	8	32'-4	691	8	32'-4	691	8	32'-4	691	8	32'-4	691
SLAB TRANSVERSE, BOTTOM		6c1	77	26'-10	3104	77	27'-9	3210	70	26'-10	2822	60	26'-10	2419
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	20	VARIES	494	40	VARIES	916
SLAB TRANSVERSE, TOP		5d1	77	26'-10	2156	77	27'-9	2229	70	26'-10	1960	60	26'-10	1680
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	1478	20	30'-7	1634	20	36'-9	1963
SLAB, HAIRPINS, AT ABUTMENT		6e3	60	6'-10	616	60	6'-11	624	60	7'-3	654	60	7'-11	714
PIER CAP HOOPS		5h1	40	7'-1	296	40	7'-1	296	50	7'-1	370	60	7'-1	444
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	510	8	24'-8	527	8	27'-6	588	8	33'-8	720
PIER CAP, TOP LONGITUDINAL		8h4	4	26'-10	287	4	27'-9	297	4	30'-11	331	4	37'-11	405
TOP OF SLAB, TRANSVERSE, AT RAIL		5j1	152	8'-6	1348	152	8'-6	1348	152	8'-6	1348	150	8'-6	1330
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	222	26	8'-10	240	28	8'-10	258	34	8'-10	314
PAVING SUPPORT LONGITUDINAL		5p3	6	24'-2	152	6	25'-0	157	6	27'-11	175	6	34'-1	214
SUB TOTAL - LBS.					30,313			30,595			31,166			31,944
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					5261			5261			5261			5261
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					35,574			35,856			36,427			37,205
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL SAME AS ABOVE EXCEPT ALL "h" BARS DELETED					34,327			34,582			34,984			35,482

BENT BAR DETAILS



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

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 80' 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.	130.2	131.0	134.0	140.3	126.0	126.7	129.2	134.5
	REINFORCING STEEL	LBS.	35,574	35,856	36,427	37,205	34,327	34,582	34,984	35,482
OPEN RAIL		LIN. FT.	182.0	182.2	182.9	184.5	182.0	182.2	182.9	184.5

* 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 - 24' ROADWAY, 3 SPAN BRIDGES

CONTINUOUS CONCRETE SLAB BRIDGES

NOVEMBER, 2006

SUPERSTRUCTURE DETAILS
80'-0 BRIDGE

J24-05-06