BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 150' BRIDGE

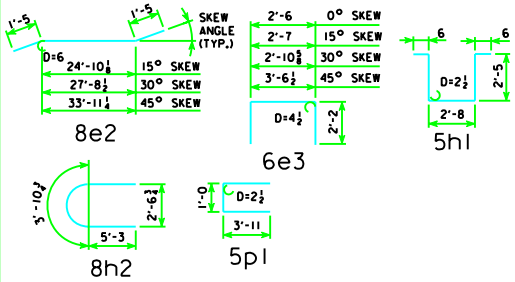
LOCATION \ SKEW	SHAPE	BAR	0° NO.	0° LENGTH	0° WEIGHT	15° NO.	15° LENGTH	15° WEIGHT	30° NO.	30° LENGTH	30° WEIGHT	45° NO.	45° LENGTH	45° WEIGHT
SLAB LONGITUDINAL BOTTOM		10a1	31	32'-4	4314	31	32'-4	4314	31	32'-4	4314	31	32'-4	4314
SLAB LONGITUDINAL BOTTOM		10a2	31	48'-4	6448	31	48'-4	6448	31	48'-4	6448	31	48'-4	6448
SLAB LONGITUDINAL BOTTOM		10a3	31	45'-4	6048	31	45'-4	6048	31	45'-4	6048	31	45'-4	6048
SLAB LONGITUDINAL BOTTOM		9a4	32	36'-1	3926	32	36'-1	3926	32	36'-1	3926	32	36'-1	3926
SLAB LONGITUDINAL BOTTOM		9a5	16	42'-6	2312	16	42'-6	2312	16	42'-6	2312	16	42'-6	2312
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	43'-11	1195	8	43'-11	1195	8	43'-11	1195	8	43'-11	1195
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	53'-2	724	4	53'-2	724	4	53'-2	724	4	53'-2	724
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a9	8	37'-1	1277	8	37'-1	1277	8	37'-1	1277	8	37'-1	1277
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a10	4	32'-0	551	4	32'-0	551	4	32'-0	551	4	32'-0	551
SLAB LONGITUDINAL TOP		6b1	31	6'-4	295	31	6'-4	295	31	6'-4	295	31	6'-4	295
SLAB LONGITUDINAL TOP		11b2	31	30'-3	4983	31	30'-3	4983	31	30'-3	4983	31	30'-3	4983
SLAB LONGITUDINAL TOP		11b3	31	26'-0	4283	31	26'-0	4283	31	26'-0	4283	31	26'-0	4283
SLAB LONGITUDINAL TOP		8b4	31	32'-2	2663	31	32'-2	2663	31	32'-2	2663	31	32'-2	2663
SLAB LONGITUDINAL TOP		11b5	32	27'-6	4676	32	27'-6	4676	32	27'-6	4676	32	27'-6	4676
SLAB LONGITUDINAL TOP		6b6	16	39'-0	938	16	39'-0	938	16	39'-0	938	16	39'-0	938
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	34'-6	415	8	34'-6	415	8	34'-6	415	8	34'-6	415
SLAB LONGITUDINAL TOP, AT RAIL		11b9	8	33'-0	1403	8	33'-0	1403	8	33'-0	1403	8	33'-0	1403
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	29'-4	177	4	29'-4	177	4	29'-4	177	4	29'-4	177
SLAB LONGITUDINAL TOP, AT RAIL		7b11	8	40'-0	655	8	40'-0	655	8	40'-0	655	8	40'-0	655
SLAB LONGITUDINAL TOP, AT RAIL		11b12	8	23'-0	978	8	23'-0	978	8	23'-0	978	8	23'-0	978
SLAB TRANSVERSE, BOTTOM		6c1	147	26'-10	5925	147	27'-9	6128	140	26'-10	5643	130	26'-10	5240
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	20	VARIES	494	40	VARIES	916
SLAB TRANSVERSE, TOP		5d1	147	26'-10	4115	147	27'-9	4255	140	26'-10	3919	130	26'-10	3639
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	36	8'-6	320	36	8'-6	320	36	8'-6	320	54	8'-6	479
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	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	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.					65,222			65,668			66,001			66,864
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					8675			8675			8675			8675
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					73,897			74,343			74,676			75,539
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL SAME AS ABOVE EXCEPT ALL "h" BARS DELETED					72,626			73,045			73,283			73,781

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°
OPEN RAIL	*STRUCTURAL CONCRETE (BRIDGE)	C.Y.	327.5	328.3	331.0	336.8	323.3	324.0	326.2	331.0
	REINFORCING STEEL	LBS.	73,897	74,343	74,676	75,539	72,626	73,045	73,283	73,781
OPEN RAIL		LIN. FT.	322.0	322.2	322.9	324.5	322.0	322.2	322.9	324.5

* INCLUDES 4 WINGS @ 0.71 C.Y. EACH; EXCLUDES RAIL CONCRETE.

BENT BAR DETAILS



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

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 150'-0 BRIDGE

J24-19-06