

REVISED 07-09 - OPEN RAIL REIN. QTY'S CHANGED WHICH CHANGED TOTAL REIN. QTY'S.
REVISED 08-2022: UPDATED BRIDGE ENGINEER SIGNATURE. CHANGED PAVING BLOCK LIFTING HOOP BAR MARK, WAS SK1.

BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 130' BRIDGE

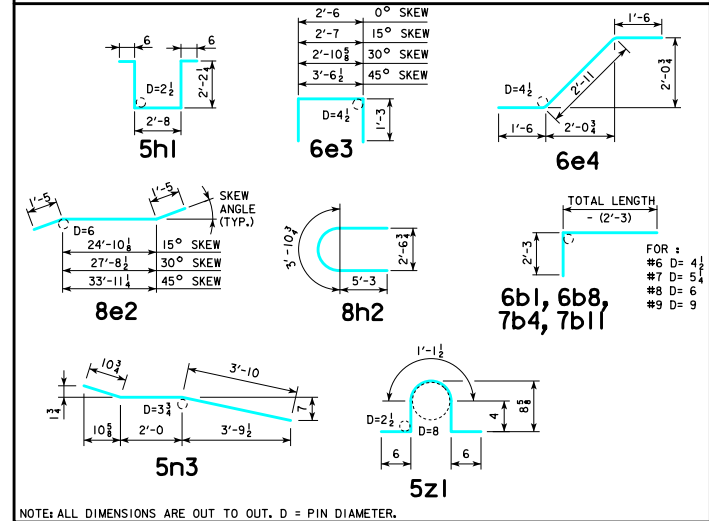
LOCATION	SKEW	SHAPE	0°		15°		30°		45°					
			BAR NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT
SLAB LONGITUDINAL BOTTOM		9a1	31	27'-6"	2899	31	27'-6"	2899	31	27'-6"	2899	31	27'-6"	2899
SLAB LONGITUDINAL BOTTOM		9a2	31	42'-0"	4427	31	42'-0"	4427	31	42'-0"	4427	31	42'-0"	4427
SLAB LONGITUDINAL BOTTOM		9a3	31	38'-9"	4085	31	38'-9"	4085	31	38'-9"	4085	31	38'-9"	4085
SLAB LONGITUDINAL BOTTOM		9a4	32	31'-6"	3428	32	31'-6"	3428	32	31'-6"	3428	32	31'-6"	3428
SLAB LONGITUDINAL BOTTOM		10a5	16	38'-0"	2617	16	38'-0"	2617	16	38'-0"	2617	16	38'-0"	2617
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	36'-10"	1002	8	36'-10"	1002	8	36'-10"	1002	8	36'-10"	1002
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	45'-2"	615	4	45'-2"	615	4	45'-2"	615	4	45'-2"	615
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a9	8	30'-3"	647	8	30'-3"	647	8	30'-3"	647	8	30'-3"	647
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a10	4	26'-4"	359	4	26'-4"	359	4	26'-4"	359	4	26'-4"	359
SLAB LONGITUDINAL TOP		6b1	31	7'-6"	350	31	7'-6"	350	31	7'-6"	350	31	7'-6"	350
SLAB LONGITUDINAL TOP		11b2	31	26'-3"	4324	31	26'-3"	4324	31	26'-3"	4324	31	26'-3"	4324
SLAB LONGITUDINAL TOP		11b3	31	28'-0"	4612	31	28'-0"	4612	31	28'-0"	4612	31	28'-0"	4612
SLAB LONGITUDINAL TOP		7b4	31	24'-2"	1532	31	24'-2"	1532	31	24'-2"	1532	31	24'-2"	1532
SLAB LONGITUDINAL TOP		10b5	32	23'-6"	3236	32	23'-6"	3236	32	23'-6"	3236	32	23'-6"	3236
SLAB LONGITUDINAL TOP		6b6	16	35'-6"	854	16	35'-6"	854	16	35'-6"	854	16	35'-6"	854
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	30'-11"	372	8	30'-11"	372	8	30'-11"	372	8	30'-11"	372
SLAB LONGITUDINAL TOP, AT RAIL		11b9	8	30'-3"	1286	8	30'-3"	1286	8	30'-3"	1286	8	30'-3"	1286
SLAB LONGITUDINAL TOP, AT RAIL		6b10	4	24'-4"	147	4	24'-4"	147	4	24'-4"	147	4	24'-4"	147
SLAB LONGITUDINAL TOP, AT RAIL		7b11	8	35'-11"	588	8	35'-11"	588	8	35'-11"	588	8	35'-11"	588
SLAB LONGITUDINAL TOP, AT RAIL		11b12	8	21'-3"	904	8	21'-3"	904	8	21'-3"	904	8	21'-3"	904
SLAB TRANSVERSE, BOTTOM		6c1	127	26'-10"	5119	127	27'-9"	5294	116	26'-10"	4676	106	26'-10"	4273
SLAB TRANSVERSE, ENDS, BOTTOM		6c2	-	-	-	-	-	-	24	VARIES	579	44	VARIES	870
SLAB TRANSVERSE, TOP		5d1	127	26'-10"	3555	127	27'-9"	3676	116	26'-10"	3247	106	26'-10"	2967
SLAB TRANSVERSE, ENDS, TOP		5d2	-	-	-	-	-	-	24	VARIES	402	44	VARIES	674
SLAB, TRANSVERSE AT ABUTMENT		8e1	18	26'-10"	1290	-	-	-	-	-	-	-	-	-
SLAB, TRANSVERSE AT ABUTMENT		8e2	-	-	-	18	27'-8"	1330	18	30'-7"	1470	18	36'-9"	1767
SLAB, HAIRPINS, AT ABUTMENT		6e3	60	5'-0"	451	60	5'-1"	459	60	5'-5"	489	60	6'-1"	549
SLAB, DIAGONALS, AT ABUTMENT		6e4	60	5'-11"	534	60	5'-11"	534	60	5'-11"	534	60	5'-11"	534
PIER CAP HOOPS		5h1	36	8'-1"	304	36	8'-1"	304	36	8'-1"	304	54	8'-1"	456
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	252	8'-6"	2235	252	8'-6"	2235	252	8'-6"	2235	250	8'-6"	2217
WING, VERTICAL		5m1	40	4'-5"	185	40	4'-5"	185	40	4'-5"	185	40	4'-5"	185
WING, HORIZONTAL BACK FACE		5n1	24	6'-8"	167	24	6'-8"	167	24	6'-8"	167	24	6'-8"	167
WING, HORIZONTAL TRAFFIC FACE		5n3	24	6'-9"	169	24	6'-9"	169	24	6'-9"	169	24	6'-9"	169
PAVING BLOCK LIFTING HOOPS		5z1	8	2'-10"	24	8	2'-10"	24	8	2'-10"	24	8	2'-10"	24
SUB TOTAL - LBS.					53,622			53,993			54,192			54,869
OPEN RAIL - SEE LIST ON RAIL SHEET J24-11-06					8573			8573			8573			8573
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					62,195			62,566			62,765			63,442
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL					60,940			61,284			61,388			61,707
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED														

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 130' BRIDGE

ITEM	SKEW	WITH MONOLITHIC PIER CAP				WITH NON-MONOLITHIC PIER CAP			
		0°	15°	30°	45°	0°	15°	30°	45°
OPEN RAIL	STRUCTURAL CONCRETE (BRIDGE) C.Y.	252.6	253.2	255.4	259.9	248.4	248.8	250.5	254.1
OPEN RAIL	REINFORCING STEEL LBS.	62,195	62,566	62,765	63,442	60,940	61,284	61,388	61,707
OPEN RAIL	LIN. FT.	282.0	282.2	282.9	284.5	282.0	282.2	282.9	284.5

* INCLUDES 4 WINGS @ 0.68 C.Y. EACH AND 2 TEMPORARY PAVING BLOCKS; EXCLUDES RAIL CONCRETE.

BENT BAR DETAILS



08-2022 LATEST REVISION DATE	APPROVED BY BRIDGE ENGINEER	IOWA DOT	
		STANDARD DESIGN - 24'-0" ROADWAY, 3 SPAN BRIDGES	
		CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006	
SUPERSTRUCTURE DETAILS 130'-0" BRIDGE		J24-15-06	