

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 SXL1.

### BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 150' BRIDGE

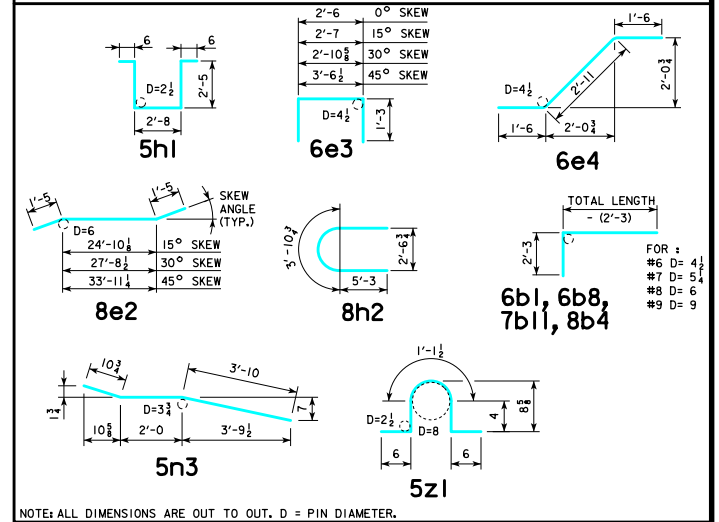
LOCATION	SKEW	SHAPE	0°				15°				30°				45°			
			BAR NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	
SLAB LONGITUDINAL BOTTOM		10a1	31	31'-3	4169	31	31'-3	4169	31	31'-3	4169	31	31'-3	4169	31	31'-3	4169	
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a2	31	48'-4	6448	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	31	45'-4	6048	
SLAB LONGITUDINAL BOTTOM		9a4	32	35'-0	3808	32	35'-0	3808	32	35'-0	3808	32	35'-0	3808	32	35'-0	3808	
SLAB LONGITUDINAL BOTTOM		9a5	16	42'-6	2312	16	42'-6	2312	16	42'-6	2312	16	42'-6	2312	16	42'-6	2312	
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a6	8	42'-10	1166	8	42'-10	1166	8	42'-10	1166	8	42'-10	1166	8	42'-10	1166	
SLAB LONGITUDINAL BOTTOM, AT RAIL		9a7	8	13'-0	354	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	4	53'-2	724	
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a9	8	36'-0	1240	8	36'-0	1240	8	36'-0	1240	8	36'-0	1240	8	36'-0	1240	
SLAB LONGITUDINAL BOTTOM, AT RAIL		10a10	4	32'-0	551	4	32'-0	551	4	32'-0	551	4	32'-0	551	4	32'-0	551	
SLAB LONGITUDINAL TOP		6b1	31	7'-6	350	31	7'-6	350	31	7'-6	350	31	7'-6	350	31	7'-6	350	
SLAB LONGITUDINAL TOP		11b2	31	30'-3	4983	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	31	26'-0	4283	
SLAB LONGITUDINAL TOP		8b4	31	33'-4	2759	31	33'-4	2759	31	33'-4	2759	31	33'-4	2759	31	33'-4	2759	
SLAB LONGITUDINAL TOP		11b5	32	27'-6	4676	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	16	39'-0	938	
SLAB LONGITUDINAL TOP, AT RAIL		6b8	8	35'-8	429	8	35'-8	429	8	35'-8	429	8	35'-8	429	8	35'-8	429	
SLAB LONGITUDINAL TOP, AT RAIL		11b9	8	33'-0	1403	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	4	29'-4	177	
SLAB LONGITUDINAL TOP, AT RAIL		7b11	8	41'-2	674	8	41'-2	674	8	41'-2	674	8	41'-2	674	8	41'-2	674	
SLAB LONGITUDINAL TOP, AT RAIL		11b12	8	23'-0	978	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	136	26'-10	5482	126	26'-10	5079				
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	24	VARIABLES	579	44	VARIABLES	970				
SLAB TRANSVERSE, TOP		5d1	147	26'-10	4115	147	27'-9	4255	136	26'-10	3807	126	26'-10	3527				
SLAB TRANSVERSE ENDS, TOP		5d2	-	-	-	-	-	-	24	VARIABLES	402	44	VARIABLES	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'-6	320	36	8'-6	320	36	8'-6	320	36	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	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.					65,190			65,608			65,760			66,444				
OPEN RAIL - SEE LIST ON RAIL SHEET J24-11-06					9605			9605			9605			9605				
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					74,795			75,213			75,365			76,049				
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL					73,524			73,915			73,972			74,291				
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED																		

### ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 150' 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.	322.1	322.7	324.8	329.1	317.9	318.3	320.0	323.3
OPEN RAIL	REINFORCING STEEL LBS.	74,795	75,213	75,365	76,049	73,524	73,915	73,972	74,291
OPEN RAIL	LIN. FT.	322.0	322.2	322.9	324.5	322.0	322.2	322.9	324.5

\* 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 <i>[Signature]</i>	<b>IOWA DOT</b>	
		STANDARD DESIGN - 24'-0 ROADWAY, 3 SPAN BRIDGES	
		<b>CONTINUOUS CONCRETE SLAB BRIDGES</b> NOVEMBER, 2006	
<b>SUPERSTRUCTURE DETAILS 150'-0 BRIDGE</b>		<b>J24-19-06</b>	