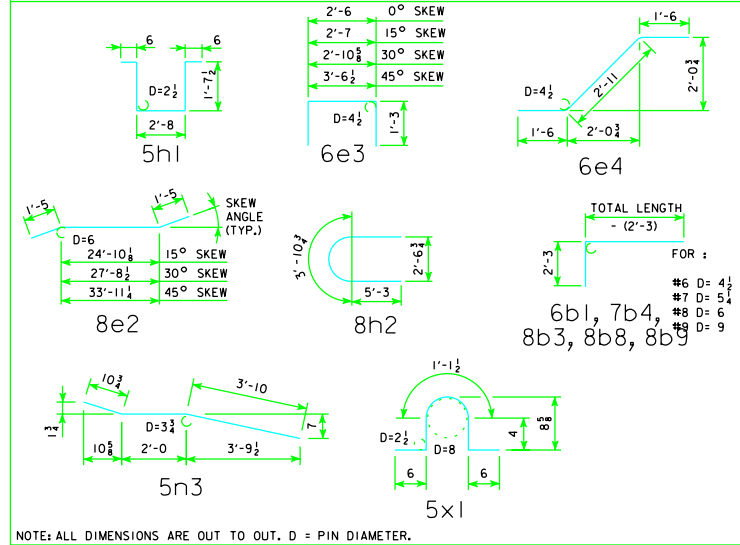


BILL OF REINFORCING STEEL FOR SUPERSTRUCTURE - 70' BRIDGE

LOCATION	SKEW	SHAPE	0°				15°				30°				45°			
			BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT		BAR NO.	LENGTH	WEIGHT	
SLAB LONGITUDINAL BOTTOM		7a1	31	15'-3	967	31	15'-3	967	31	15'-3	967	31	15'-3	967				
SLAB LONGITUDINAL BOTTOM		8a2	31	23'-0	1904	31	23'-0	1904	31	23'-0	1904	31	23'-0	1904				
SLAB LONGITUDINAL BOTTOM		7a3	31	23'-6	1490	31	23'-6	1490	31	23'-6	1490	31	23'-6	1490				
SLAB LONGITUDINAL BOTTOM		8a4	32	19'-9	1688	32	19'-9	1688	32	19'-9	1688	32	19'-9	1688				
SLAB LONGITUDINAL BOTTOM		7a5	16	20'-6	671	16	20'-6	671	16	20'-6	671	16	20'-6	671				
SLAB LONGITUDINAL BOTTOM, AT RAIL		7a6	8	24'-9	405	8	24'-9	405	8	24'-9	405	8	24'-9	405				
SLAB LONGITUDINAL BOTTOM, AT RAIL		7a7	4	25'-4	208	4	25'-4	208	4	25'-4	208	4	25'-4	208				
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a8	8	17'-3	369	8	17'-3	369	8	17'-3	369	8	17'-3	369				
SLAB LONGITUDINAL BOTTOM, AT RAIL		8a9	4	21'-6	230	4	21'-6	230	4	21'-6	230	4	21'-6	230				
SLAB LONGITUDINAL TOP		6b1	31	8'-9	408	31	8'-9	408	31	8'-9	408	31	8'-9	408				
SLAB LONGITUDINAL TOP		8b2	31	17'-3	1428	31	17'-3	1428	31	17'-3	1428	31	17'-3	1428				
SLAB LONGITUDINAL TOP		8b3	31	26'-10	2221	31	26'-10	2221	31	26'-10	2221	31	26'-10	2221				
SLAB LONGITUDINAL TOP		7b4	32	22'-2	1450	32	22'-2	1450	32	22'-2	1450	32	22'-2	1450				
SLAB LONGITUDINAL TOP		8b5	32	11'-4	969	32	11'-4	969	32	11'-4	969	32	11'-4	969				
SLAB LONGITUDINAL TOP		6b6	16	20'-6	493	16	20'-6	493	16	20'-6	493	16	20'-6	493				
SLAB LONGITUDINAL TOP, AT RAIL		8b8	8	39'-6	844	8	39'-6	844	8	39'-6	844	8	39'-6	844				
SLAB LONGITUDINAL TOP, AT RAIL		8b9	8	29'-6	631	8	29'-6	631	8	29'-6	631	8	29'-6	631				
SLAB TRANSVERSE, BOTTOM		6c1	67	26'-10	2701	67	27'-9	2793	56	26'-10	2258	46	26'-10	1854				
SLAB TRANSVERSE ENDS, BOTTOM		6c2	-	-	-	-	-	-	24	VARIABLES	579	44	VARIABLES	970				
SLAB TRANSVERSE, TOP		5d1	67	26'-10	1876	67	27'-9	1940	56	26'-10	1568	46	26'-10	1288				
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	40	6'-11	289	40	6'-11	289	50	6'-11	361	60	6'-11	433				
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	132	8'-6	1171	132	8'-6	1171	132	8'-6	1171	130	8'-6	1153				
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		5x1	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24				
SUB TOTAL - LBS.					26,184			26,415			26,826			27,422				
OPEN RAIL - SEE LIST ON RAIL SHEET J24-41-06					5100			5100			5100			5100				
TOTAL - LBS. WITH MONOLITHIC PIER CAP AND OPEN RAIL					31,284			31,515			31,926			32,522				
TOTAL - LBS. WITH NON-MONOLITHIC PIER CAP AND OPEN RAIL					30,044			30,248			30,492			30,810				
SAME AS ABOVE EXCEPT ALL "h" BARS DELETED																		

BENT BAR DETAILS



ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 70' 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.	107.7	108.4	110.8	115.8	103.5	104.0	106.0	110.0
OPEN RAIL	REINFORCING STEEL LBS.	31,284	31,515	31,926	32,522	30,044	30,248	30,492	30,810
OPEN RAIL	LIN. FT.	162.0	162.2	162.9	164.5	162.0	162.2	162.9	164.5

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

07-09 LATEST REVISION DATE	<i>Thomas C. McQuinn</i> APPROVED BY BRIDGE ENGINEER	<p>Iowa Department of Transportation Highway Division</p>
		STANDARD DESIGN - 24' ROADWAY, 3 SPAN BRIDGES CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006
		SUPERSTRUCTURE DETAILS 70'-0 BRIDGE
		J24-03-06

REVISED 07-09 - OPEN RAIL REINF. QTY'S. CHANGED WHICH CHANGED TOTAL REINF. QTY'S.