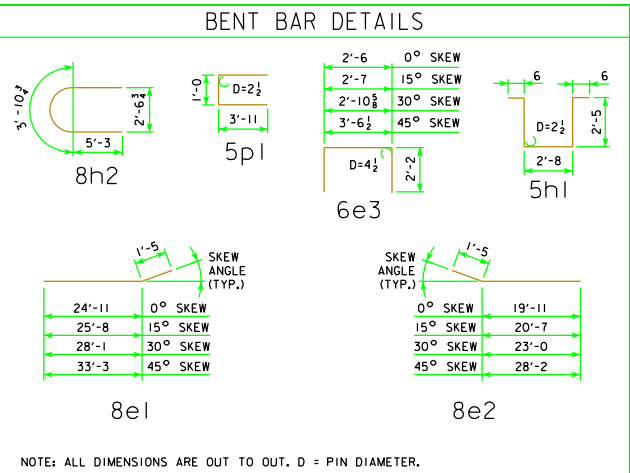


REVISED 12-07 - OPEN RAIL REINFORCING QUANTITY CHANGED

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			
SLAB LONGITUDINAL BOTTOM		=====	10o1	53	33'-10	7716	53	33'-10	7716	53	33'-10	7716	53	33'-10	7716	53	33'-10	7716
SLAB LONGITUDINAL BOTTOM		=====	10o2	53	51'-6	11,745	53	51'-6	11,745	53	51'-6	11,745	53	51'-6	11,745	53	51'-6	11,745
SLAB LONGITUDINAL BOTTOM		=====	10o3	53	48'-6	11,061	53	48'-6	11,061	53	48'-6	11,061	53	48'-6	11,061	53	48'-6	11,061
SLAB LONGITUDINAL BOTTOM		=====	9o4	52	37'-4	6601	52	37'-4	6601	52	37'-4	6601	52	37'-4	6601	52	37'-4	6601
SLAB LONGITUDINAL BOTTOM		=====	9o5	26	45'-0	3978	26	45'-0	3978	26	45'-0	3978	26	45'-0	3978	26	45'-0	3978
SLAB LONGITUDINAL BOTTOM, AT RAIL		=====	9o6	8	45'-8	1242	8	45'-8	1242	8	45'-8	1242	8	45'-8	1242	8	45'-8	1242
SLAB LONGITUDINAL BOTTOM, AT RAIL		=====	9o7	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		=====	9o8	4	56'-8	771	4	56'-8	771	4	56'-8	771	4	56'-8	771	4	56'-8	771
SLAB LONGITUDINAL BOTTOM, AT RAIL		=====	10o9	8	38'-7	1328	8	38'-7	1328	8	38'-7	1328	8	38'-7	1328	8	38'-7	1328
SLAB LONGITUDINAL BOTTOM, AT RAIL		=====	10o10	4	35'-0	602	4	35'-0	602	4	35'-0	602	4	35'-0	602	4	35'-0	602
SLAB LONGITUDINAL TOP		=====	6b1	53	6'-7	524	53	6'-7	524	53	6'-7	524	53	6'-7	524	53	6'-7	524
SLAB LONGITUDINAL TOP		=====	11b2	53	32'-9	9222	53	32'-9	9222	53	32'-9	9222	53	32'-9	9222	53	32'-9	9222
SLAB LONGITUDINAL TOP		=====	11b3	53	28'-6	8025	53	28'-6	8025	53	28'-6	8025	53	28'-6	8025	53	28'-6	8025
SLAB LONGITUDINAL TOP		=====	8b4	53	32'-0	4528	53	32'-0	4528	53	32'-0	4528	53	32'-0	4528	53	32'-0	4528
SLAB LONGITUDINAL TOP		=====	11b5	52	30'-0	8288	52	30'-0	8288	52	30'-0	8288	52	30'-0	8288	52	30'-0	8288
SLAB LONGITUDINAL TOP		=====	6b6	26	37'-4	1458	26	37'-4	1458	26	37'-4	1458	26	37'-4	1458	26	37'-4	1458
SLAB LONGITUDINAL TOP, AT RAIL		=====	6b8	8	33'-10	407	8	33'-10	407	8	33'-10	407	8	33'-10	407	8	33'-10	407
SLAB LONGITUDINAL TOP, AT RAIL		=====	11b9	8	35'-6	1509	8	35'-6	1509	8	35'-6	1509	8	35'-6	1509	8	35'-6	1509
SLAB LONGITUDINAL TOP, AT RAIL		=====	6b10	4	28'-0	168	4	28'-0	168	4	28'-0	168	4	28'-0	168	4	28'-0	168
SLAB LONGITUDINAL TOP, AT RAIL		=====	7b11	8	39'-7	647	8	39'-7	647	8	39'-7	647	8	39'-7	647	8	39'-7	647
SLAB LONGITUDINAL TOP, AT RAIL		=====	11b12	8	25'-6	1084	8	25'-6	1084	8	25'-6	1084	8	25'-6	1084	8	25'-6	1084
SLAB TRANSVERSE BOTTOM		=====	6c1	147	23'-5	5170	147	24'-3	5354	140	23'-5	4924	132	23'-5	4643			
SLAB TRANSVERSE BOTTOM		=====	6c2	147	21'-3	4692	147	22'-0	4857	141	21'-3	4500	134	21'-3	4277			
SLAB TRANSVERSE ENDS, BOTTOM		=====	6c3	-	-	-	-	-	-	11	VARIES	226	18	VARIES	386			
SLAB TRANSVERSE ENDS, BOTTOM		=====	6c4	-	-	-	-	-	-	10	VARIES	219	18	VARIES	363			
SLAB TRANSVERSE ENDS, BOTTOM		=====	6c5	-	-	-	-	-	-	10	VARIES	180	17	VARIES	288			
SLAB TRANSVERSE ENDS, BOTTOM		=====	6c6	-	-	-	-	-	-	10	VARIES	193	16	VARIES	319			
SLAB TRANSVERSE TOP		=====	5d1	147	23'-9	3641	147	24'-7	3769	140	23'-9	3468	132	23'-9	3270			
SLAB TRANSVERSE TOP		=====	5d2	147	21'-3	3258	147	22'-0	3373	141	21'-3	3125	134	21'-3	2970			
SLAB TRANSVERSE ENDS, TOP		=====	5d3	-	-	-	-	-	-	11	VARIES	157	18	VARIES	268			
SLAB TRANSVERSE ENDS, TOP		=====	5d4	-	-	-	-	-	-	10	VARIES	152	18	VARIES	252			
SLAB TRANSVERSE ENDS, TOP		=====	5d5	-	-	-	-	-	-	10	VARIES	125	17	VARIES	200			
SLAB TRANSVERSE ENDS, TOP		=====	5d6	-	-	-	-	-	-	10	VARIES	134	16	VARIES	222			
SLAB, TRANSVERSE AT ABUTMENT		=====	8e1	20	26'-4	1406	20	27'-1	1446	20	29'-6	1575	20	34'-8	1851			
SLAB, TRANSVERSE AT ABUTMENT		=====	8e2	20	21'-4	1139	20	22'-0	1175	20	24'-5	1304	20	29'-7	1580			
SLAB, HAIRPINS, AT ABUTMENT		=====	6e3	92	6'-10	944	92	6'-11	956	92	7'-3	1002	92	7'-11	1094			
PIER CAP HOOPS		=====	5h1	60	8'-6	532	60	8'-6	532	60	8'-6	532	90	8'-6	798			
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	25'-5	543	8	26'-7	568	8	29'-4	627	8	35'-0	748			
PIER CAP, BOTTOM LONGITUDINAL		=====	8h4	8	19'-11	425	8	20'-3	433	8	22'-2	473	8	26'-10	573			
PIER CAP, TOP LONGITUDINAL		=====	8h5	4	26'-2	279	4	27'-5	293	4	30'-4	324	4	36'-1	385			
PIER CAP, TOP LONGITUDINAL		=====	8h6	4	21'-5	229	4	21'-10	233	4	23'-11	255	4	28'-8	306			
TOP OF SLAB, TRANSVERSE, AT RAIL		=====	5j1	292	8'-6	2589	292	8'-6	2589	286	8'-6	2536	284	8'-6	2518			
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	40	8'-10	369	42	8'-10	387	46	8'-10	424	56	8'-10	516			
PAVING SUPPORT LONGITUDINAL		=====	5p3	6	22'-9	142	6	24'-0	150	6	26'-5	165	6	31'-9	199			
PAVING SUPPORT LONGITUDINAL		=====	5p4	6	20'-0	125	6	20'-9	130	6	23'-1	144	6	28'-3	177			

ESTIMATED QUANTITIES FOR SUPERSTRUCTURE - 150' BRIDGE												
ITEM	SKEW	WITH MONOLITHIC PIER CAP				WITH NON-MONOLITHIC PIER CAP				C.Y.	LBS.	LIN. FT.
		0°	15°	30°	45°	0°	15°	30°	45°			
WITH *STRUCTURAL CONCRETE (BRIDGE)		519.6	520.9	525.2	534.6	513.6	514.7	518.3	526.2			
BARRIER RAIL REINFORCING STEEL EPOXY COATED		116,032	116,795	117,314	118,754	113,870	114,582	114,949	115,790			
CONCRETE BARRIER OR OPEN RAIL		322.0	322.2	322.9	324.5	322.0	322.2	322.9	324.5			
WITH *STRUCTURAL CONCRETE (BRIDGE)		519.3	520.6	524.9	534.3	513.3	514.4	518.0	526.0			
OPEN RAIL REINFORCING STEEL EPOXY COATED		116,361	117,124	117,643	119,083	114,199	114,911	115,278	116,119			
* INCLUDES 4 WINGS @ 0.71 C.Y. EACH; EXCLUDES RAIL CONCRETE.												



NOTES:
ALL REINFORCING STEEL SHALL BE EPOXY COATED.

THE TRANSVERSE REBARS ARE DETAILED WITH A SPLICE LAP.
AT THE CONTRACTOR'S OPTION, THIS LAP MAY BE ELIMINATED
BY FURNISHING FULL LENGTH BARS WITH NO REDUCTION IN
PAY WEIGHT FOR SAME.

LATEST REVISION DATE
12-07

APPROVED BY BRIDGE ENGINEER
Thomas E. McQuinn

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES
**CONTINUOUS CONCRETE
SLAB BRIDGES**
NOVEMBER, 2006

SUPERSTRUCTURE DETAILS
150'-0 BRIDGE

J40-19-06