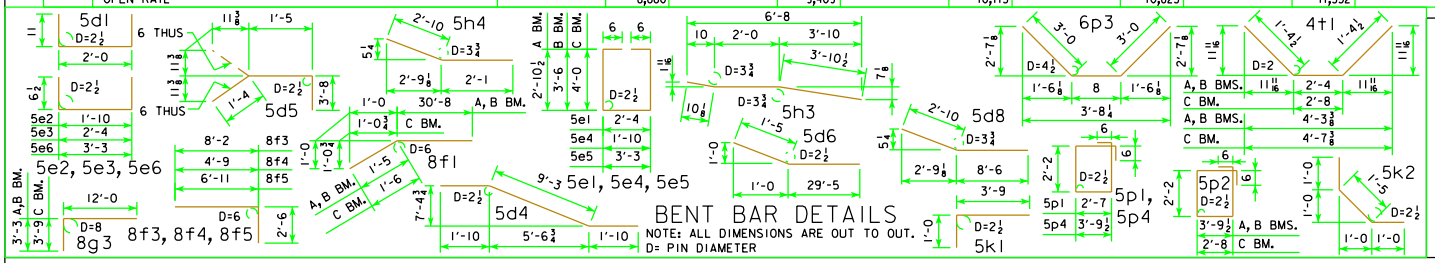
REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

BAR	LOCATION	SHAPE	℄-℄ ABUT. BRG.	138'-10			151'-4			163'-10			176'-4			188'-10			201'-4			213'-10			226'-4			243'-0		
			℄-℄ BEAM BRG.	42'-6	50'-10	42'-6	46'-8	55'-0	46'-8	50'-10	59'-2	50'-10	55'-0	63'-4	55'-0	59'-2	67'-6	59'-2	63'-4	71'-8	63'-4	67'-6	75'-10	67'-6	71'-8	80'-0	71'-8	80'-0	80'-0	80'-0
			BEAM SERIES	A BEAM			A BEAM			B BEAM			B BEAM			B BEAM			C BEAM			C BEAM			C BEAM			C BEAM		
				NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT
6a1	SLAB TRANSV. TOP & BOTT.			247	42'-10	15,891	277	42'-10	17,821	307	42'-10	19,751	337	42'-10	21,681	367	42'-10	23,611	397	42'-10	25,541	427	42'-10	27,471	457	42'-10	29,401	497	42'-10	31,975
6a2	SLAB TRANSV. TOP ENDS			96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028	96	VARIES	3,028
6a3	SLAB TRANSV. BOTT. ENDS			96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088	96	VARIES	3,088
5b1	SLAB LONGITUDINAL, TOP & BOTT.			202	40'-0	8,427	303	40'-0	12,641	303	40'-0	12,641	303	40'-0	12,641	404	40'-0	16,855	404	40'-0	16,855	404	40'-0	16,855	505	40'-0	21,069	505	40'-0	21,069
5b2	SLAB LONGITUDINAL, TOP & BOTT., ENDS			202	34'-5	7,251	202	21'-8	4,565	202	27'-11	5,882	202	34'-2	7,198	202	21'-5	4,512	202	27'-8	5,829	202	33'-11	7,146	202	21'-2	4,460	202	29'-6	6,215
6b3	SLAB LONGITUDINAL, TOP @ PIERS			92	12'-10	1,773	92	13'-10	1,912	92	14'-10	2,050	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7b3	SLAB LONGITUDINAL, TOP @ PIERS			—	—	—	—	—	—	—	—	—	92	15'-10	2,977	92	17'-0	3,197	92	18'-0	3,385	—	—	—	—	—	—	—	—	—
8b3	SLAB LONGITUDINAL, TOP @ PIERS			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	92	19'-0	4,667	92	20'-0	4,913	92	20'-0	4,913
5d1	PIER DIAPH. ENDS			12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48	12	3'-10	48
5d2	PIER & ABUT. DIAPH. LONGIT.			90	9'-1	853	90	9'-1	853	90	9'-1	853	90	9'-1	853	90	9'-1	853	90	8'-10	829	90	8'-10	829	90	8'-10	829	90	8'-10	829
5d3	PIER & ABUT. DIAPH. LONGIT.			30	8'-2	256	30	8'-2	256	30	8'-2	256	30	8'-2	256	30	8'-2	256	30	7'-10	245	30	7'-10	245	30	7'-10	245	30	7'-10	245
5d4	PIER DIAPH. LONGIT.			10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135	10	12'-11	135
5d5	ABUT. DIAPH. ENDS			12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80	12	6'-5	80
5d6	ABUT. DIAPH. LONGIT. B.F.			16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515	16	30'-10	515
5d7	PAVING NOTCH LONGIT.			8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259	8	31'-0	259
5d8	ABUT. DIAPH. WING EXT. LONGIT.			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	11'-4	284	24	11'-4	284	24	11'-4	284	24	11'-4	284
5d9	ABUT. DIAPH. WING EXT. LONGIT.			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	11'-3	282	24	11'-3	282	24	11'-3	282	24	11'-3	282
5e1	PIER DIAPH. HOOPS			50	9'-1	474	50	9'-1	474	50	10'-4	539	50	10'-4	539	50	10'-4	539	50	11'-4	591	50	11'-4	591	50	11'-4	591	50	11'-4	591
5e2	PIER DIAPH. TIES ENDS			4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12	4	2'-11	12
5e3	PIER DIAPH. TIES			50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178	50	3'-5	178
5e4	PIER DIAPH. HOOPS ENDS			4	8'-7	36	4	8'-7	36	4	9'-10	41	4	9'-10	41	4	9'-10	41	4	10'-10	45	4	10'-10	45	4	10'-10	45	4	10'-10	45
5e5	PIER DIAPH. HOOPS			20	10'-0	209	20	10'-0	209	20	11'-3	235	20	11'-3	235	20	11'-3	235	20	12'-3	256	20	12'-3	256	20	12'-3	256	20	12'-3	256
5e6	PIER DIAPH. TIES			20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90	20	4'-4	90
8f1	ABUT. FOOTING LONGIT.			36	32'-1	3,084	36	32'-1	3,084	36	32'-1	3,084	36	32'-1	3,084	36	32'-1	3,084	36	32'-2	3,092	36	32'-2	3,092	36	32'-2	3,092	36	32'-2	3,092
8f3	ABUT. EXTENSION LONGIT.			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	10'-8	456	16	10'-8	456	16	10'-8	456	16	10'-8	456
8f4	ABUT. EXTENSION LONGIT.			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	7'-3	155	8	7'-3	155	8	7'-3	155	8	7'-3	155
8f5	ABUT. EXTENSION LONGIT.			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	9'-5	201	8	9'-5	201	8	9'-5	201	8	9'-5	201
8g1	ABUT. VERT.			166	6'-8	2,955	166	6'-8	2,955	166	7'-3	3,213	166	7'-3	3,213	166	7'-3	3,213	162	7'-9	3,352	162	7'-9	3,352	162	7'-9	3,352	162	7'-10	3,388
8g3	ABUT. DIAPH. VERT. B.F.			82	15'-3	3,339	82	15'-3	3,339	82	15'-3	3,339	82	15'-3	3,339	82	15'-3	3,339	82	15'-9	3,448	82	15'-9	3,448	82	15'-9	3,448	82	15'-9	3,448
6g4	ABUT. DIAPH. WING EXT. VERT.			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	6'-6	312	32	6'-6	312	32	6'-6	312	32	6'-7	316
5h1	ABUT. WING HORIZ. B.F.			28	6'-8	195	28	6'-8	195	28	6'-8	195	28	6'-8	195	28	6'-8	195	36	6'-8	250	36	6'-8	250	36	6'-8	250	36	6'-8	250
5h2	ABUT. TO WING ANCHOR			56	4'-11	287	56	4'-11	287	56	4'-11	287	56	4'-11	287	56	4'-11	287	12	4'-11	62	12	4'-11	62	12	4'-11	62	12	4'-11	62
5h3	ABUT. WING HORIZ. TRAFFIC FACE			28	6'-9	197	28	6'-9	197	28	6'-9	197	28	6'-9	197	28	6'-9	197	36	6'-9	253	36	6'-9	253	36	6'-9	253	36	6'-9	253
5h4	ABUT. TO WING ANCHOR			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	4'-11	62	12	4'-11	62	12	4'-11	62	12	4'-11	62
5j1	TOP OF SLAB TRANSV. (AT RAIL)			330	6'-3	2,151	360	6'-3	2,347	390	6'-3	2,542	420	6'-3	2,738	450	6'-3	2,933	480	6'-3	3,129	510	6'-3	3,325	540	6'-3	3,520	580	6'-3	3,781
5k1	PAVING NOTCH			84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416	84	4'-9	416
5k2	PAVING NOTCH			84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299	84	3'-5	299
5p1	ABUTMENT HOOPS (WOOD/STEEL)			168/168	10'-6	1840/1840	180/168	10'-6	1971/1840	192/168	10'-6	2103/1840	136/168	10'-6	1489/1840	136/168	10'-6	1489/1840	168	10'-6	1,840	168	10'-6	1,840	168	10'-6	1,840	168	10'-6	1,840
5p2	ABUTMENT HOOPS			8	12'-11	108	8	12'-11	108	8	12'-11	108	8	12'-11	108	8	12'-11	108	24	10'-8	267	24	10'-8	267	24	10'-8	267	24	10'-8	267
6p3	ABUT. BOTT. AT PILES			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	36	6'-8	360	36	6'-8	360	36	6'-8	360	36	6'-8	360
5p4	ABUT. HOOPS AT ENDS			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	12'-11	108	8	12'-11	108	8	12'-11	108	8	12'-11	108
5s1	WING VERT.			64	5'-10	389	64	5'-10	389	64	6'-2	412	64	6'-2	412	64	6'-2	412	64	6'-11	462	64	6'-11	462	64	6'-11	462	64	6'-11	462
4t1	UNDER BEAMS AT ABUTMENTS			12	5'-1	41	12	5'-1	41	12	5'-1	41	12	5'-1	41	12	5'-1	41	12	5'-5	43	12	5'-5	43	12	5'-5	43	12	5'-5	43
#2	PILE SPIRAL (WOOD/STEEL)*			30/16	38'-6	193/103	32/16	38'-6	206/103	34/16	38'-6	219/103	36/16	38'-6	231/103	36/16	38'-6	231/103	22	38'-6	141	22	38'-6	141	22	38'-6	141	22	38'-6	141
	SPIRAL SPACERS, L 7/8 x 7/8 x 1/8 x 0.70 (WOOD/STL.)*			90/48	1'-10	116/62	96/48	1'-10	123/62	102/48	1'-10	131/62	108/48	1'-10	139/62	108/48	1'-10	139/62	66	1'-10	85	66	1'-10	85	66	1'-10	85	66	1'-10	85
	*EPOXY COATING NOT REQUIRED																													
	SUB TOTAL W/ WOOD PILES**					58,213			62,157			66,267			70,042			73,915			—			—			—			—
	SUB TOTAL W/ STEEL H-PILES**					58,069			61,862			65,819			70,188			74,061			80,368			85,093			88,996			93,622
	**RAIL REINFORCING NOT INCLUDED																													
	BARRIER RAIL					8,215			8,788			9,347			9,879			10,478			11,445			12,003			12,576			13,312
	OPEN RAIL					8,880			9,409			10,115			10,823			11,352			13,289			13,756			14,526			15,308

EPOXY COATED REINFORCING



BENT BAR DETAILS

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

REVISED 07-10 - THE OPEN RAIL QUANTITIES WERE CHANGED.

07-10
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

AUGUST, 2009

DECK & ABUTMENT REINF.
45° SKEW

H40-30-06