REINFORCING BAR LIST

ONE SUPERSTRUCTURE AND TWO ABUTMENTS

BRIDGE LENGTH

BAR	LOCATION	SHAPE	46'-8 LXA NO.	LENGTH	WEIGHT	55'-0 LXA NO.	LENGTH	WEIGHT	67'-6 LXB NO.	LENGTH	WEIGHT	80'-0 LXC NO.	LENGTH	WEIGHT	90'-0 LXD NO.	LENGTH	WEIGHT	100'-0 LXD NO.	LENGTH	WEIGHT	110'-0 LXD NO.	LENGTH	WEIGHT
6o1	SLAB TRANSVERSE, TOP & BOTTOM		87	32'-10	4291	109	32'-10	5376	143	32'-10	7053	175	32'-10	8631	203	32'-10	10,012	229	32'-10	11,294	255	32'-10	12,576
6o2	SLAB TRANSVERSE END, TOP		44	*	1105	44	*	1105	44	*	1105	44	*	1105	44	*	1105	44	*	1105	44	*	1105
6o3	SLAB TRANSVERSE END, BOTTOM		46	**	1155	46	**	1155	46	**	1155	46	**	1155	46	**	1155	46	**	1155	46	**	1155
5b1	SLAB LONGITUDINAL TOP & BOTTOM		168	25'-11	4542	168	30'-1	5272	168	36'-4	6367	252	29'-1	7645	252	32'-5	8521	252	35'-9	9397	252	39'-1	10,273
5d2	ABUTMENT DIAPHRAGM, LONGITUDINAL - F.F.		24	7'-2	180	24	6'-11	174	24	6'-11	174	24	6'-11	174	24	7'-1	178	24	7'-1	178	24	7'-1	178
5d3	ABUTMENT DIAPHRAGM, LONGITUDINAL - F.F.		8	6'-3	53	8	6'-0	51	8	6'-0	51	8	6'-0	51	8	5'-10	49	8	5'-10	49	8	5'-10	49
5d5	ABUTMENT DIAPHRAGM, LONGITUDINAL - END		12	5'-0	63	12	5'-0	63	12	5'-0	63	12	5'-0	63	12	5'-0	63	12	5'-0	63	12	5'-0	63
5d6	ABUTMENT DIAPHRAGM LONGITUDINAL - B.F.		8	37'-5	313	8	37'-5	313	8	37'-5	313	8	37'-5	313	8	37'-5	313	8	37'-5	313	8	37'-5	313
5d7	PAVING NOTCH, LONGITUDINAL		4	33'-2	139	4	33'-2	139	4	33'-2	139	4	37'-10	158	4	37'-10	158	4	37'-10	158	4	37'-10	158
5d8	ABUTMENT DIAPH. WING EXT. LONGIT.		-	-	-	-	-	-	-	-	-	48	10'-10	543	48	10'-10	543	48	10'-10	543	48	10'-10	543
8f1	ABUTMENT FOOTING LONGITUDINAL - B.F.		8	37'-5	800	8	37'-5	800	8	37'-5	800	8	37'-5	800	8	37'-5	800	8	37'-5	800	8	37'-5	800
8f2	ABUTMENT FOOTING LONGITUDINAL - F.F.		10	37'-5	1000	10	37'-5	1000	10	37'-5	1000	10	37'-5	1000	10	37'-5	1000	10	37'-5	1000	10	37'-5	1000
8f3	ABUTMENT EXTENSION LONGITUDINAL		-	-	-	-	-	-	-	-	-	16	10'-7	453	16	10'-7	453	16	10'-7	453	16	10'-7	453
8f4	ABUTMENT EXTENSION LONGITUDINAL		-	-	-	-	-	-	-	-	-	16	9'-6	406	16	9'-6	406	16	9'-6	406	16	9'-6	406
8g1	ABUTMENT VERTICAL - B.F.		62	6'-7	1090	62	6'-7	1090	62	7'-2	1187	58	7'-8	1188	58	8'-5	1304	58	8'-5	1304	58	8'-5	1304
8g2	ABUTMENT VERTICAL - F.F.		52	5'-6	764	52	5'-6	764	52	6'-1	845	52	6'-7	915	52	7'-4	1019	52	7'-4	1019	52	7'-4	1019
8g3	ABUTMENT DIAPHRAGM VERTICAL - B.F.		50	15'-3	2036	50	15'-3	2036	50	15'-3	2036	50	15'-9	2103	50	15'-9	2103	50	15'-9	2103	50	15'-9	2103
6g4	ABUT. DIAPH. WING EXT. VERT.		-	-	-	-	-	-	-	-	-	40	5'-8	341	40	6'-5	386	40	6'-5	386	40	6'-5	386
5j1	SLAB TRANSV. TOP AT RAIL		126	6'-3	822	148	6'-3	965	182	6'-3	1187	214	6'-3	1396	242	6'-3	1578	268	6'-3	1748	294	6'-3	1917
5h1	ABUT. WING HORIZONTAL		56	6'-8	390	56	6'-8	390	56	6'-8	390	56	6'-8	390	56	6'-8	390	56	6'-8	390	56	6'-8	390
5h2	ABUTMENT TO WING ANCHOR		56	4'-0	234	56	4'-0	234	56	4'-0	234	8	4'-0	34	8	4'-0	34	8	4'-0	34	8	4'-0	34
5k1	PAVING NOTCH, TRANSVERSE		52	4'-11	267	52	4'-11	267	52	4'-11	267	52	4'-11	267	52	4'-11	267	52	4'-11	267	52	4'-11	267
5k2	PAVING NOTCH, TRANSVERSE		52	3'-5	186	52	3'-5	186	52	3'-5	186	52	3'-5	186	52	3'-5	186	52	3'-5	186	52	3'-5	186
5p1	ABUTMENT HOOPS		120	10'-6	1315	120	10'-6	1315	112	10'-6	1227	112	10'-6	1227	128	10'-6	1402	108	10'-6	1183	108	10'-6	1183
5p2	ABUTMENT EXT.HOOPS		-	-	-	-	-	-	-	-	-	24	10'-8	268	24	10'-8	268	24	10'-8	268	24	10'-8	268
6p3	ABUT. BOTT. AT PILES		-	-	-	-	-	-	-	-	-	32	6'-8	321	36	6'-8	361	40	6'-8	401	40	6'-8	401
5p4	ABUTMENT HOOPS AT ENDS		8	11'-6	96	8	11'-6	96	8	11'-6	96	8	11'-6	96	8	11'-6	96	8	11'-6	96	8	11'-6	96
5r1	PAVING BLOCK LIFTING HOOPS		8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24	8	2'-10	24
5s1	WING, VERTICAL		56	VARIES	263	56	VARIES	263	56	VARIES	263	56	VARIES	263	56	VARIES	263	56	VARIES	263	56	VARIES	263
4t1	UNDER BEAMS AT ABUTMENTS		10	4'-11	33	10	4'-11	33	10	4'-11	33	10	4'-11	33	10	5'-1	34	10	5'-1	34	10	5'-1	34
#2	PILE SPIRAL - NO. 2 BAR		12	38'-6	77	14	38'-6	90	16	38'-6	103	20	38'-6	128	22	38'-6	141	24	38'-6	154	24	38'-6	154
	SPIRAL SPACER $L\frac{7}{8}\times\frac{7}{8}\times\frac{1}{8}\times$ 0.70		24	1'-10	32	28	1'-10	37	32	1'-10	42	40	1'-10	52	44	1'-10	58	48	1'-10	63	48	1'-10	63
	REINFORCING STEEL (LBS.)				21,270			23,238			26,340			31,729			34,670			36,837			39,164
	SEE BARRIER RAIL DETAILS (LBS.)				3870			4226			4784			5809			6245			6682			7160
	SEE OPEN RAIL DETAILS (LBS.)				4215			4734			5444			7095			7691			8240			8752

* VARIES FROM 3'-1 TO 30'-4 ** VARIES FROM 2'-5 TO 31'-0

CONCRETE PLACEMENT QUANTITIES

(SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)

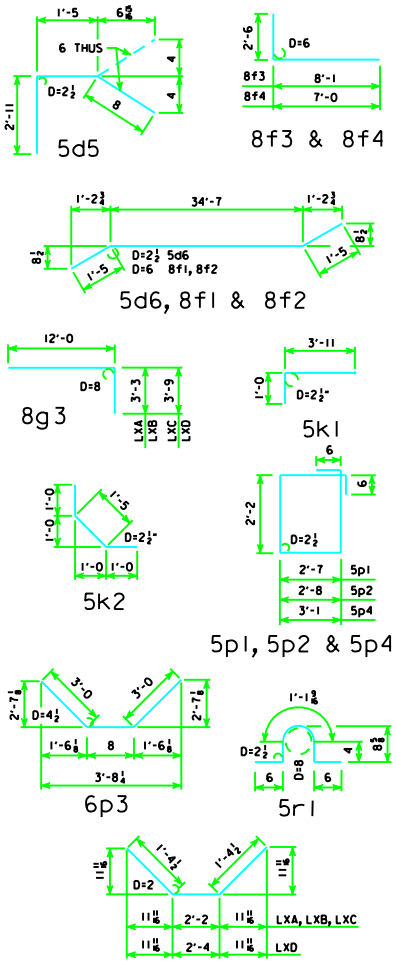
			46'-8	55'-0	67'-6	80'-0	90'-0	100'-0	110'-0
SLAB, AND ABUT. DIAPHRAGM	WITH BARRIER RAIL	CU.YD.	71.3	78.0	92.8	112.8	128.8	137.6	146.2
	WITH OPEN RAIL	CU.YD.	72.7	79.7	94.9	115.3	131.6	140.7	149.6
PAVING BLOCKS		CU.YD.	1.7	1.7	1.7	1.7	1.7	1.7	1.7
ABUTMENT WINGS		CU.YD.	6.9	6.9	6.9	6.9	6.9	6.9	6.9
ABUTMENT FOOTINGS		CU.YD.	30.7	30.7	30.7	38.5	38.5	38.5	38.5

ESTIMATED QUANTITIES

(SUPERSTRUCTURE PLUS INTEGRAL ABUTMENTS)

			46'-8	55'-0	67'-6	80'-0	90'-0	100'-0	110'-0
NO. OF STEEL H-PILES FOR TWO ABUTS. (HP10X42)		NO.	12	14	16	20	22	24	24
STRUCTURAL CONCRETE, (BRIDGE)	WITH BARRIER RAIL	CU.YD.	110.6	117.3	132.1	159.9	175.9	184.7	193.3
	WITH OPEN RAIL	CU.YD.	112.0	119.0	134.2	162.4	178.7	187.8	196.7
CONCRETE RAIL (BARRIER OR OPEN)		L.F.	128.3	144.9	169.9	214.9	234.9	254.9	274.9
REINFORCING STEEL	WITH BARRIER RAIL	LBS.	25,140	27,464	31,124	37,538	40,915	43,519	46,324
	WITH OPEN RAIL	LBS.	25,485	27,972	31,784	38,824	42,361	45,077	47,916
STRUCTURAL STEEL	WITH BARRIER RAIL	LBS.	1532	1526	1570	1610	1695	1695	1695
	WITH OPEN RAIL	LBS.	1242	1235	1235	1235	1265	1265	1265

BENT BAR DETAILS



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

LATEST REVISION DATE :

APPROVED BY

STANDARD DESIGN - 30' ROADWAY, SINGLE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

JANUARY, 2005 HS20-44 LOADING

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DECK & ABUTMENT REINF. 30 SKEW

H30S1-22-05