OPEN RAIL REINFORCING BAR LIST - TWO RAILS

NOTE: THESE REINFORCING BARS TO BE USED ON ALL SKEWS.

	℄-℄ ABUTMENT BEARING			46'-8			55'-0			67'-6			80'-0			90'-0			100'-0			110'-0		
	BAR	LOCATION	SHAPE	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT	NO.	LENGTH	WEIGHT
STANDARD SECTION	7j1	RAIL POST VERTICAL		84	4'-1	701	108	4'-1	901	144	4'-1	1202	144	4'-1	1202	168	4'-1	1402	192	4'-1	1602	192	4'-1	1602
	5j2	RAIL POST TIES		42	4'-0	175	54	4'-0	225	72	4'-0	300	72	4'-0	300	84	4'-0	350	96	4'-0	401	96	4'-0	401
	5j3	RAIL TIES		164	5'-8	969	184	5'-8	1088	216	5'-8	1277	276	5'-8	1631	304	5'-8	1797	324	5'-8	1915	380	5'-8	2246
	6h1	RAIL LONGITUDINAL		24	26'-8	961	24	30'-10	1111	24	34'-10	1256	24	41'-1	1481	24	46'-1	1661	24	51'-1	1841	24	56'-1	2022
ABUT. DIAPH. SECTION	5j7	VERTICAL		-	-	-	-	-	-	-	-	-	72	3'-10	288	72	3'-10	288	72	3'-10	288	72	3'-10	288
	5j8	VERTICAL		-	-	-	-	-	-	-	-	-	36	5'-0	188	36	5'-0	188	36	5'-0	188	36	5'-0	188
	6h4	LONGITUDINAL		-	-	-	-	-	-	-	-	-	40	7'-9	466	40	7'-9	466	40	7'-9	466	40	7'-9	466
	4t1	WING FOOTING TIE BAR		-	-	-	-	-	-	-	-	-	32	2'-2	46	32	2'-2	46	32	2'-2	46	32	2'-2	46
4 END SECTIONS	5d1	WING HORIZONTAL		16	6'-8	111	16	6'-8	111	16	6'-8	111	16	11'-8	195	16	11'-8	195	16	11'-8	195	16	11'-8	195
	5j4	ANCHOR TO SLAB		104	3'-10	416	104	3'-10	416	104	3'-10	416	104	3'-10	416	104	3'-10	416	104	3'-10	416	104	3'-10	416
	5j5	VERTICAL		48	5'-0	250	48	5'-0	250	48	5'-0	250	48	5'-0	250	48	5'-0	250	48	5'-0	250	48	5'-0	250
	5j6	VERTICAL		4	4'-11	21	4	4'-11	21	4	4'-11	21	4	4'-11	21	4	4'-11	21	4	4'-11	21	4	4'-11	21
	6h2	LONGITUDINAL		28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280
	6h3	LONGITUDINAL		28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280	28	6'-8	280
	4t1	WING FOOTING TIE BAR		40	VARIES	51	40	VARIES	51	40	VARIES	51	40	VARIES	51	40	VARIES	51	40	VARIES	51	40	VARIES	51
	TOTAL LBS.					4215			4734			5444			7095			7691			8240			8752

NOTE: ALL BARRIER RAIL REINFORCEMENT TO BE EPOXY COATED IF EPOXY COATING OPTION IS USED. SEE SHEET H30S1-09-05, H30S1-16-05 AND H30S1-23-05.

CONCRETE OPEN RAIL QUANTITIES

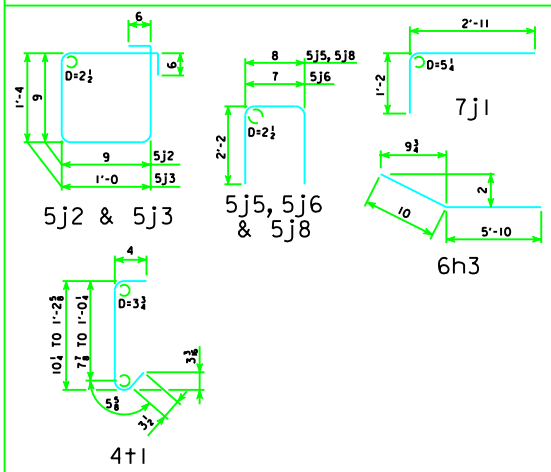
BRIDGE LENGTH		UNIT	46'-8	55'-0	67'-6	80'-0	90'-0	100'-0	110'-0
CONCRETE BARRIER RAILING	0° SKEW	L.F.	127.3	144.0	169.0	214.0	234.0	254.0	274.0
CONCRETE BARRIER RAILING	15° SKEW	L.F.	127.5	144.2	169.2	214.2	234.2	254.2	274.2
CONCRETE BARRIER RAILING	30° SKEW	L.F.	128.3	144.9	169.9	214.9	234.9	254.9	274.9

CONCRETE PLACEMENT QUANTITIES

NOTE: THESE VALUES TO BE USED FOR ALL SKEWS.

℄-℄ ABUTMENT BEARING	46'-8	55'-0	67'-6	80'-0	90'-0	100'-0	110'-0
STANDARD SECTION CU. YD.	7.8	9.1	11.1	13.0	14.5	16.1	17.6
ABUTMENT DIAPHRAGM EXTENSION 4 @ 0.47 CU. YDS.	-	-	-	1.9	1.9	1.9	1.9
END SECTION 4 @ 0.70 CU. YDS.	2.8	2.8	2.8	2.8	2.8	2.8	2.8
TOTAL CU.YDS.	10.6	11.9	13.9	17.7	19.2	20.8	22.3

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

OPEN RAIL DETAILS
SHEET 2 OF 2

H30S1-38-05