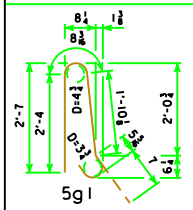
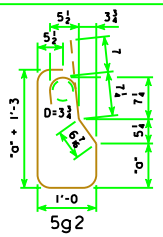
EPOXY REINFORCING STEEL-TWO BARRIER RAILS

BRIDGE LENGTH				70'-0			80'-0			90'-0			100'-0			110'-0			120'-0			130'-0			140'-0			150'-0		
SECTION	BAR	LOCATION	SHAPE	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
STANDARD SECTION	5g1	VERTICAL	A	136	5'-11	839	156	5'-11	963	176	5'-11	1086	196	5'-11	1210	216	5'-11	1333	236	5'-11	1456	256	5'-11	1580	276	5'-11	1703	296	5'-11	1827
	5g2	VERTICAL	B	136	6'-10	969	156	6'-11	1125	176	7'-1	1300	196	7'-4	1499	216	7'-6	1690	236	7'-9	1908	256	7'-11	2114	276	8'-2	2351	296	8'-5	2598
	5f1	LONGITUDINAL	—	36	35'-1	1317	54	27'-5	1544	54	30'-9	1732	54	34'-1	1920	54	37'-5	2107	72	31'-2	2340	72	33'-8	2528	72	36'-2	2716	72	38'-8	2904
		4 END SECTIONS @ 381 LBS.				1524			1524			1524			1524			1524			1524			1524			1524			1524
(INCLUDE WITH SUPERSTRUCTURE REINFORCING)				TOTAL (LBS.)		4649	TOTAL (LBS.)		5156	TOTAL (LBS.)		5642	TOTAL (LBS.)		6153	TOTAL (LBS.)		6654	TOTAL (LBS.)		7228	TOTAL (LBS.)		7746	TOTAL (LBS.)		8294	TOTAL (LBS.)		8853

REINFORCING QUANTITIES SHOWN ARE BASED ON 45° SKEW BID LENGTHS.

BENT BAR DETAILS





5g2 BARS		
BRIDGE	"a"	LENGTH
70'	1'-2	6'-10
80'	1'-2¾	6'-11
90'	1'-3¾	7'-1
100'	1'-5	7'-4
110'	1'-6	7'-6
120'	1'-7½	7'-9
130'	1'-8¾	7'-11
140'	1'-10	8'-2
150'	1'-11½	8'-5

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

CONCRETE PLACEMENT SUMMARY

BRIDGE LENGTH	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
STANDARD SECTION * 2 X B @ 0.1052 CU. YDS. PER FT.	14.4	16.5	18.6	20.7	22.8	24.9	27.0	29.1	31.2
END SECTION 4 @ 0.62 CU. YDS.	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
TOTAL (CU. YDS.)	16.9	19.0	21.1	23.2	25.3	27.4	29.5	31.6	33.7

* SEE J40-45-06 FOR DIMENSION "B".
CONCRETE QUANTITIES SHOWN ARE BASED ON 45° SKEW BID LENGTHS.

CONCRETE BARRIER RAIL QUANTITIES

BRIDGE LENGTH		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
CONCRETE BARRIER RAILING	0° SKEW	L.F.	162.0	182.0	202.0	222.0	242.0	262.0	282.0	302.0	322.0
CONCRETE BARRIER RAILING	15° SKEW	L.F.	162.2	182.2	202.2	222.2	242.2	262.2	282.2	302.2	322.2
CONCRETE BARRIER RAILING	30° SKEW	L.F.	162.9	182.9	202.9	222.9	242.9	262.9	282.9	302.9	322.9
CONCRETE BARRIER RAILING	45° SKEW	L.F.	164.5	184.5	204.5	224.5	244.5	264.5	284.5	304.5	324.5

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

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

BARRIER RAIL DETAILS

J40-46-06