EPOXY COATED REINFORCING STEEL-TWO BARRIER RAILS

(NOTE: THESE REINFORCING BARS TO BE USED ON ALL SKEWS)

BRIDGE LENGTH				138'-10			151'-4			163'-10			176'-4			188'-10			201'-4			213'-10			226'-4			243'-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	5c1	VERTICAL		288	5'-11	1,777	312	5'-11	1,925	338	5'-11	2,086	362	5'-11	2,234	388	5'-11	2,394	432	5'-11	2,666	458	5'-11	2,826	482	5'-11	2,974	516	5'-11	3,184
	5d1	LONGITUDINAL-STANDARD SECTION		36	40'-0	1,502	54	40'-0	2,253	54	40'-0	2,253	54	40'-0	2,253	72	40'-0	3,004	72	40'-0	3,004	72	40'-0	3,004	90	40'-0	3,755	90	40'-0	3,755
	5d2	LONGITUDINAL-STANDARD SECTION, ENDS		36	34'-8	1,302	36	22'-0	826	36	28'-3	1,061	36	34'-6	1,295	36	21'-10	820	36	32'-5	1,217	36	38'-8	1,452	36	26'-0	976	36	34'-4	1,289
EPOXY COATED REINFORCING STEEL TOTAL LBS.						4,581			5,004			5,400			5,782			6,218			6,887			7,282			7,705			8,228

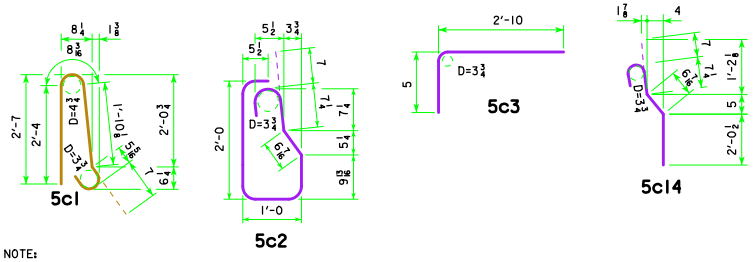
STAINLESS STEEL REINFORCING STEEL-TWO BARRIER RAILS

(NOTE: THESE REINFORCING BARS TO BE USED ON ALL SKEWS)

BRIDGE LENGTH				138'-10			151'-4			163'-10			176'-4			188'-10			201'-4			213'-10			226'-4			243'-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	5c2	VERTICAL		288	6'-0	1,802	312	6'-0	1,952	338	6'-0	2,115	362	6'-0	2,265	388	6'-0	2,428	412	6'-0	2,578	438	6'-0	2,741	462	6'-0	2,891	496	6'-0	3,104
	5c3	VERTICAL		-----	-----	0	-----	-----	0	-----	-----	0	-----	-----	0	-----	-----	0	20	3'-3	68	20	3'-3	68	20	3'-3	68	20	3'-3	68
	5c14	VERTICAL		-----	-----	0	-----	-----	0	-----	-----	0	-----	-----	0	-----	-----	0	20	3'-10	80	20	3'-10	80	20	3'-10	80	20	3'-10	80
STAINLESS STEEL REINFORCING STEEL TOTAL LBS.						1,802			1,952			2,115			2,265			2,428			2,726			2,889			3,039			3,252

NOTE: REINFORCING STEEL QUANTITIES ARE TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

BENT BAR DETAILS



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

CONCRETE PLACEMENT SUMMARY - C.Y.

BRIDGE LENGTH		138'-10	151'-4	163'-10	176'-4	188'-10	201'-4	213'-10	226'-4	243'-0
STANDARD SECTION *	2 × "B" @ 0.1052 C.Y. PER FT.	30.1	32.7	35.4	38.0	40.6	45.1	47.7	50.4	53.9
BARRIER RAIL END SECTION	4 @ 0.65 C.Y.	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
TOTAL C.Y.		32.7	35.3	38.0	40.6	43.2	47.7	50.3	53.0	56.5

* SEE SHEET H40-39-14 FOR DIMENSION "B". CONCRETE QUANTITIES SHOWN ARE BASED ON 45° SKEW BID LENGTHS.

CONCRETE BARRIER RAIL QUANTITIES - L.F.

BRIDGE LENGTH	138'-10	151'-4	163'-10	176'-4	188'-10	201'-4	213'-10	226'-4	243'-0
CONCRETE BARRIER RAILING 0° SKEW	311.7	336.7	361.7	386.7	411.7	456.7	481.7	506.7	540.0
CONCRETE BARRIER RAILING 15° SKEW	311.9	336.9	361.9	386.9	411.9	456.7	481.7	506.7	540.0
CONCRETE BARRIER RAILING 30° SKEW	312.6	337.6	362.6	387.6	412.6	456.7	481.7	506.7	540.0
CONCRETE BARRIER RAILING 45° SKEW	314.2	339.2	364.2	389.2	414.2	456.7	481.7	506.7	540.0

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWADOT Highway Division

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

SEPTEMBER, 2014

BARRIER RAIL DETAILS

SHEET 3 OF 3

H40-41-14