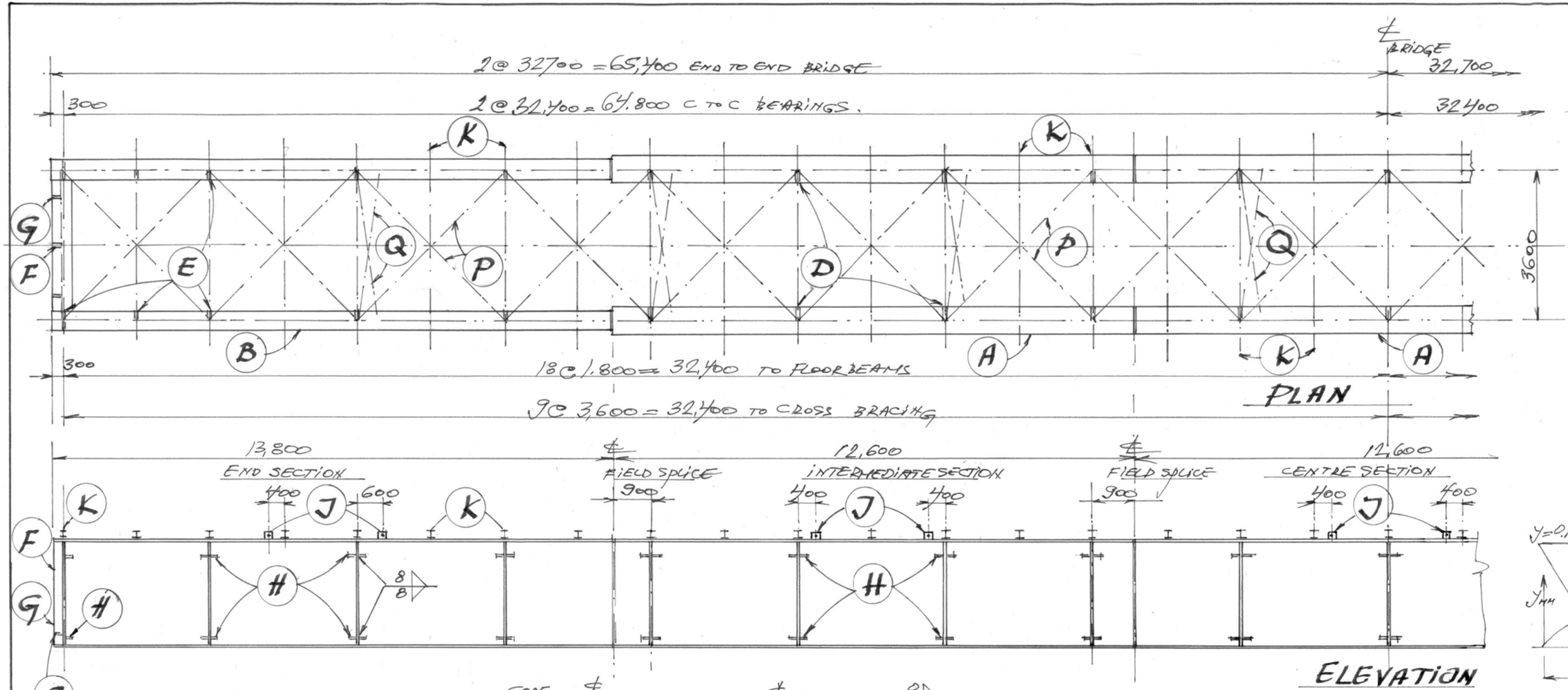

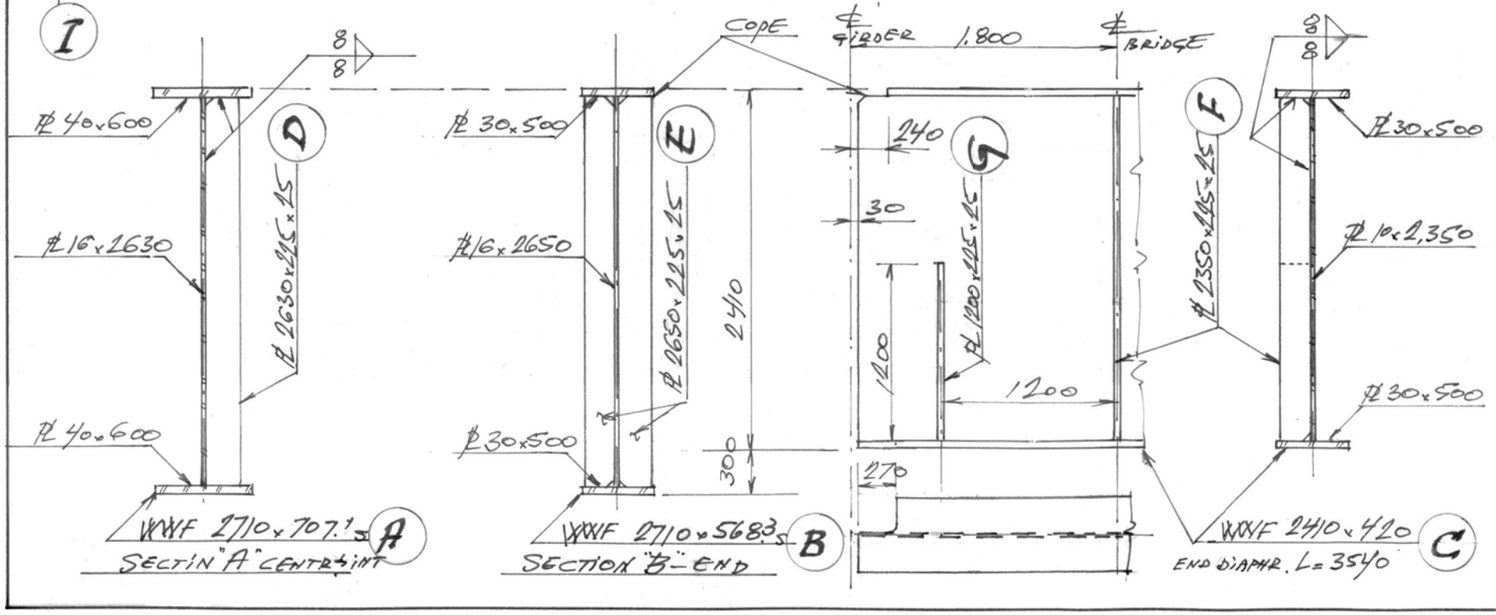

General notes:

- Design CAN/S6-00
- Live Load CL-625
- Dead Load 11.65 kN/m per girder

Material:

1. Material for bottom flanges and webs of girders and detail material welded to them to be G40.21M 350AT impact category 4 and are to be fabricated in accordance with S6-00, Clause 10.23 as FCM
2. All other steel not included above, (diaphragms, lateral and cross bracing, etc.) to conform to G40.21M 350A.
3. HSS for bridge rail to be G40.21M 350W hot dip galvanised. Bleeding holes are not allowed on base plates of the rail posts.
4. All bolted connections to be made with high strength bolts conforming to ASTM –A325. All bolts to be 7/8" diameter, except that bolts of 3/4" diameter are to be used for floor beams to top flange connections. Bolt holes to be drilled 2mm larger than specified bolts.
5. Girders are to meet the camber diagram shown on drawing 1

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29 MARCH 2011

AGNICO-EAGLE

Me 1of4

Rankin Inlet, NU
Meliadine River Bridge-
Span 64.8m
Girder Plan, Elevation, Sections
Camber & General Notes

3574 | ℄ bock | 7148/2

324 | 3250 | 6500/2

CAP

HSS 102×102×4.8 — L=65,400 — S

HSS 152×102×8 — L=900 — T

PL 320×200×20 — 4 BOLTS 3¼"ϕ — U

L M 132 (5 3/16") 252

W 250×58 — L=7,148 — K

350 50

P L 102×102×7.9 LATERAL BRACE

F B E

PL 2630×225×25 — D

A Q G C

W 200×46 — L=3,494 — O

100 250 200

H P

1800 | 3600/2

2710

STEEL GRATING FOSTER
MAIN BAR 5 3/16"
DESIGNED FOR CL625 LOADING
FASTENED TO W250×58 WITH 3/4"ϕ
HOLE PATTERN ON W150 BY FOSTER

M 2@100

178 146

5 6

900 768 400 132

30 232 30 — 292

BOLTS ON BRACING A325-7/8"ϕ
HOLES 24

CHAMFERS TYP 25

I PL 261×225×25

CROSS BRACING
tg = 0.5861
sin = 0.5057
cos = 0.8627

4112 | 2110 | 3600

53 80 50 50

HOLES 24
BOLTS 7/8"

50 103 50 203

r=30

W 200×46 — L=3494 — O

202

LOWER BRACE 1:10

SECTION - 1:25
TROUGH SPAN

END DIAGRAM - 1:25
VIEW FROM OUTSIDE

203 95

6 6

PL 214.1 | 99 | 95×20 — M

152 135.5 8 225

PL 400×100×16 — N

50 4 195

STIFFENERS ON FLOOR BEAM 1:10

PL 225×95×20 — L

6 6

233 193 40 50

99 65 75

1987 = 3974/2 — L=1862

PL 200×140×30 — J

200 HOLE 70

80 80 54 39

LIFTING LUG 1:10

1℄ web

118 80 53 12 251

PL 251×225×25 — H

122 50 53

8 225 233

P L 102×102×7.9 — L=4824

2287 | 4824/2 | 1414 = 4824/2 | 507.5 | 1734

5092 | 3600

LATERAL BRACING
PLAN 1:10

PL 100×100×25 FILLER — R

L 102×102×7.9 — L=3974 — Q

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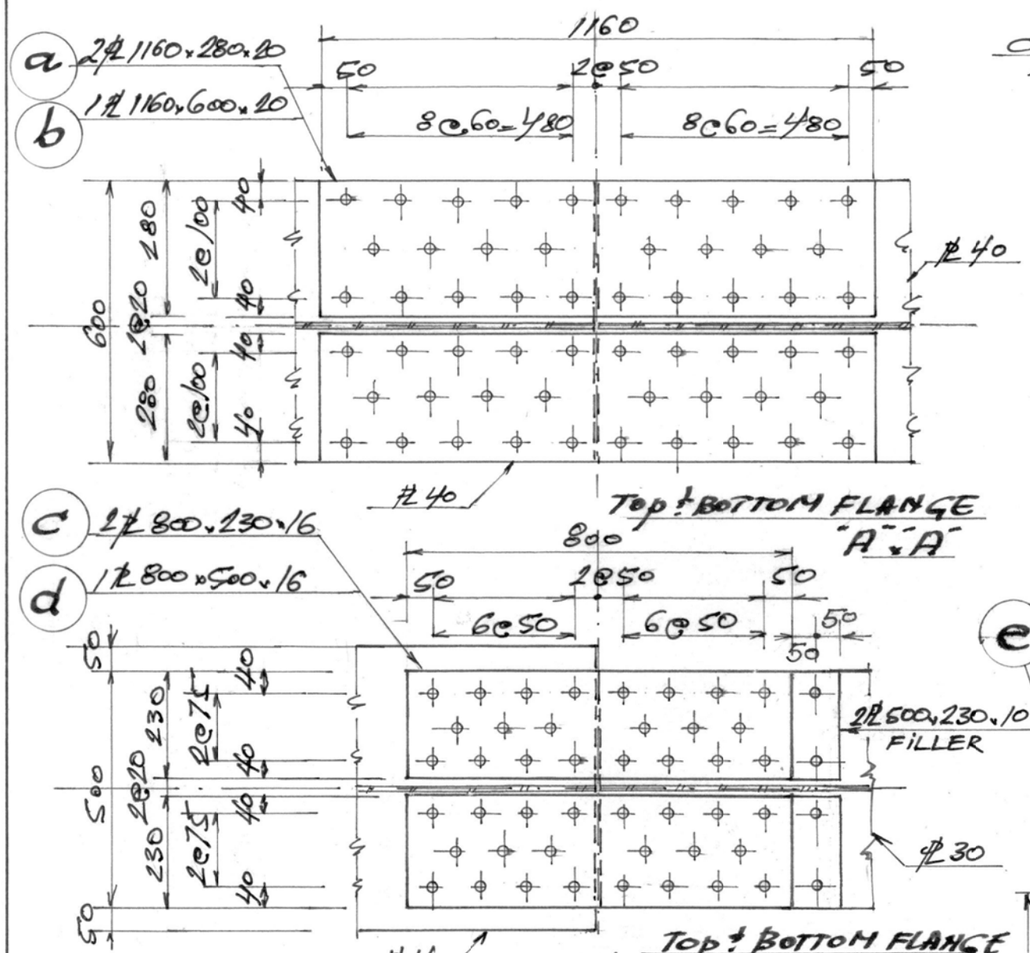
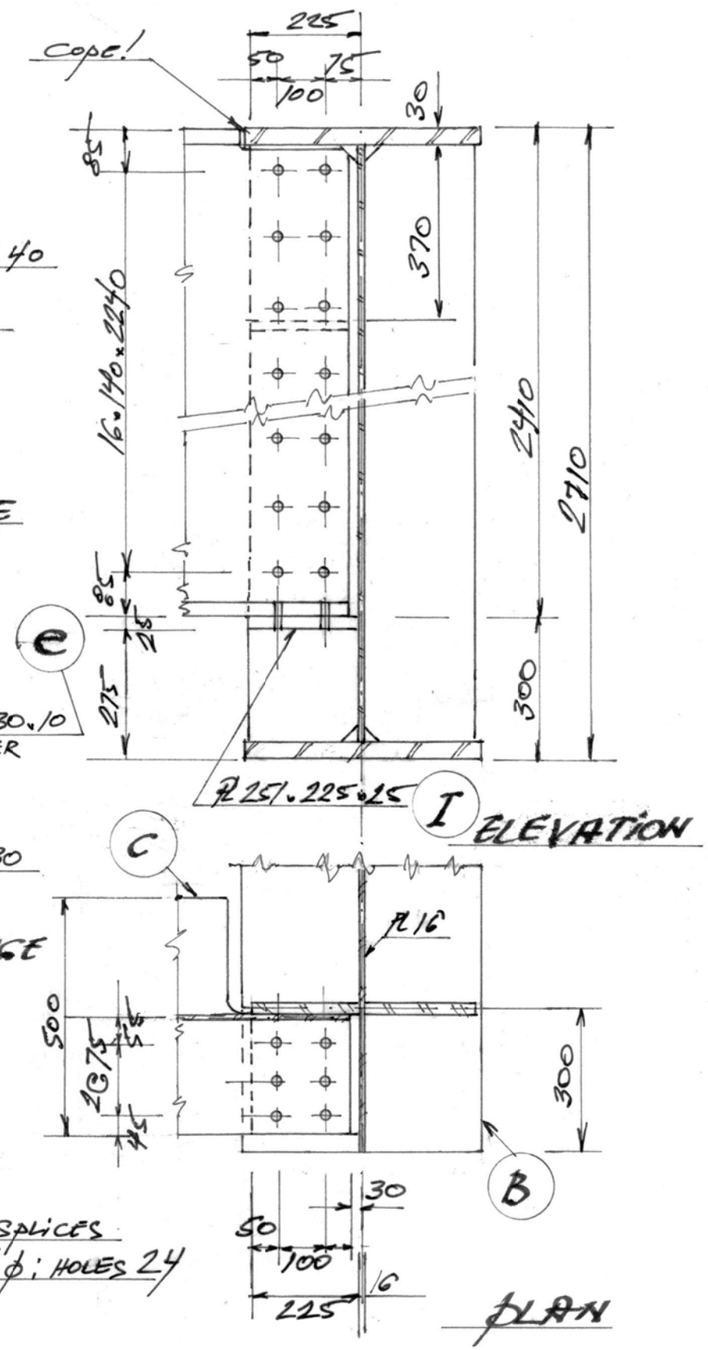
AGNICO-EAGLE

Me 2of4

Rankin Inlet, NU
Meliadine River Bridge-
Span 64.8m
Cross-Section& Bracing Details





MATERIAL

mark	Qty	Designation	Unit	Mass	L/A	Weight	Description
					m /m2	kg	
A	6	WWF 2710 x 707.1	kg/m	707.10	12.600	53,457	Centre Girder
B	4	WWF 2710 x 568.3	kg/m	568.30	13.800	31,370	End Girder
C	2	WWF 2410 x 420	kg/m	420.00	3.540	2,974	End Diaphragm
						87,801	
D	22	PL 2630 x 225 x 25	kg/m^2	196.25	0.592	2,556	Stiffener Girder A
E	24	PL 2650 x 225 x 25	kg/m^2	196.25	0.596	2,807	Stiffener Girder B
F	2	PL 2350 x 225 x 25	kg/m^2	196.25	0.529	208	Long Stiffener onC
G	4	PL 1200 x 225 x 25	kg/m^2	196.25	0.270	212	Short Stiffener onC
						5,783	
H	70	PL 251 x 225 x 25	kg/m^2	196.25	0.056	769	Gusset-Lat& Cr. Br.
I	4	PL 251 x 225 x 25	kg/m^2	196.25	0.056	44	Gusset on Diaph.
J	20	PL 200 x 140 x 30	kg/m^2	235.50	0.028	132	Lifting Lug
						945	
K+K1	41	W 250 x 58	kg/m	58.20	7.176	17,123	Floor Beam
L	156	PL 225 x 95 x 20	kg/m^2	157.00	0.021	514	Small Stiffener Fl. B.
M	156	PL 224 x 195/95 x 20	kg/m^2	157.00	0.033	808	Big Stiffener Fl. B.
N	156	PL 400 x 100 x 16	kg/m^2	125.60	0.040	784	Ext. Bot. Flange Fl.B.
						19,230	
O	8	W 200 x 46	kg/m	46.00	3.494	1,286	Lower W Brace
P	72	L 102 x 102 x 7.9	kg/m	12.20	4.824	4,237	Lateral Brace
Q	16	L 102 x 102 x 7.9	kg/m	12.20	3.974	776	Cross Brace
R	44	PL 100 x 100 x 25	kg/m^2	196.25	0.010	86	Spacer Plate
						6,385	
S	4	HSS 102 x 102 x 48	kg/m	14.10	65.400	3,689	Bridge Rail
T	74	HSS 152 x 102 x 8	kg/m	28.40	0.900	1,891	Rail Post
U	74	PL 320 x 200 x 20	kg/m^2	157.00	0.064	744	Rail Base Plate
						6,324	
V	2	L 102 x 102 x 7.9	kg/m	12.20	6.5	159	Ramp support
W	36	PL 90 x 30 x 25	kg/m^2	196.25	0.003	19	Ramp keeper bar
X	48	W 100 x 19	kg/m	19.00	0.886	808	Ramp main beam
Y	36	PL 2170 x 150 x 10	kg/m^2	78.50	0.326	920	Ramp top plate
Z	12	PL 2170 x 114 x 16	kg/m^2	125.60	0.247	373	Ramp face plate
						2,278	
a	16	PI 116 0 x 280 x 20	kg/m^2	157.00	0.325	816	splice
b	8	PI 1160 x 600 x 20	kg/m^2	157.00	0.696	874	splice
c	16	PI 800 x 230 x 16	kg/m^2	125.60	0.184	370	splice
d	8	PI 800 x 500 x 16	kg/m^2	126.60	0.400	405	splice
e	16	PI 500 x 230 x 10	kg/m^2	78.50	0.115	144	splice
f	16	PI 2530 x 340 x 10	kg/m^2	78.50	0.860	1,080	splice
						3,690	
					total	132,435	

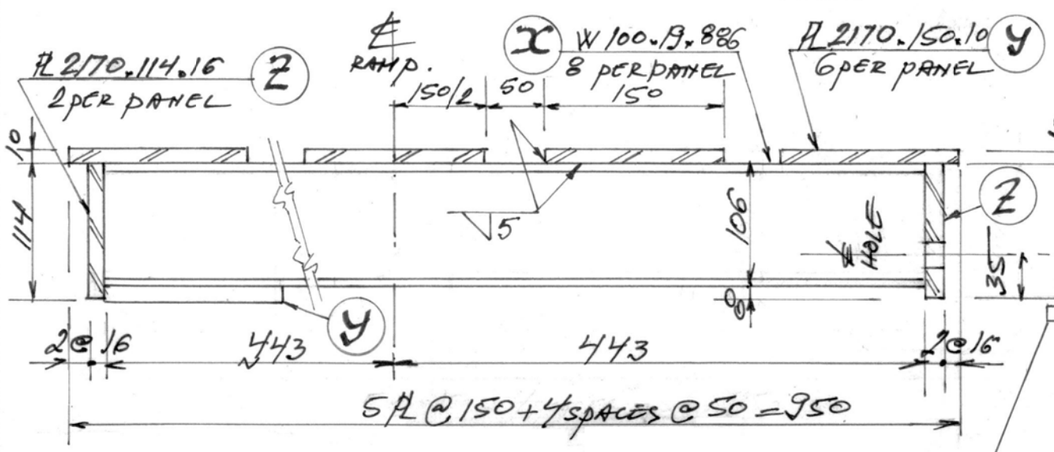
REGISTERED PROFESSIONAL ENGINEER
J. JIVKOV
NWT/NU

29 MARCH 2011

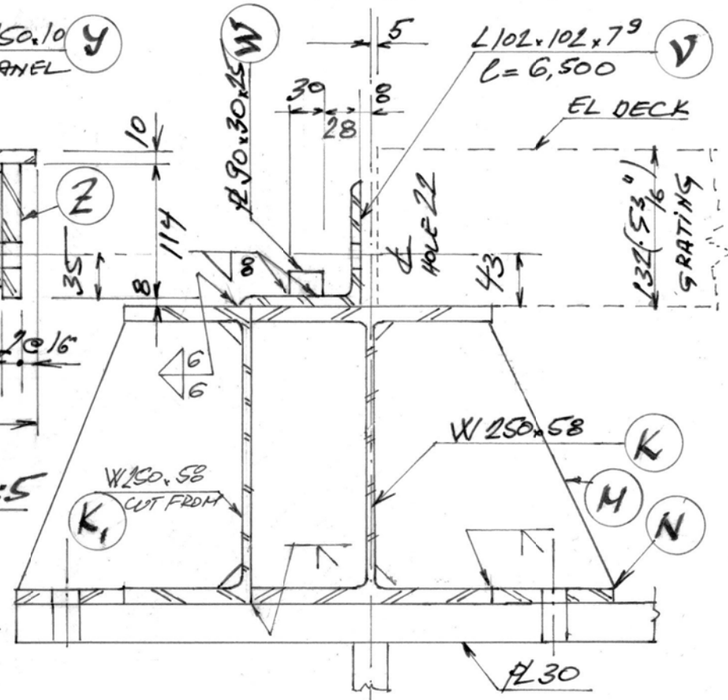
AGNICO-EAGLE

Me 3of4

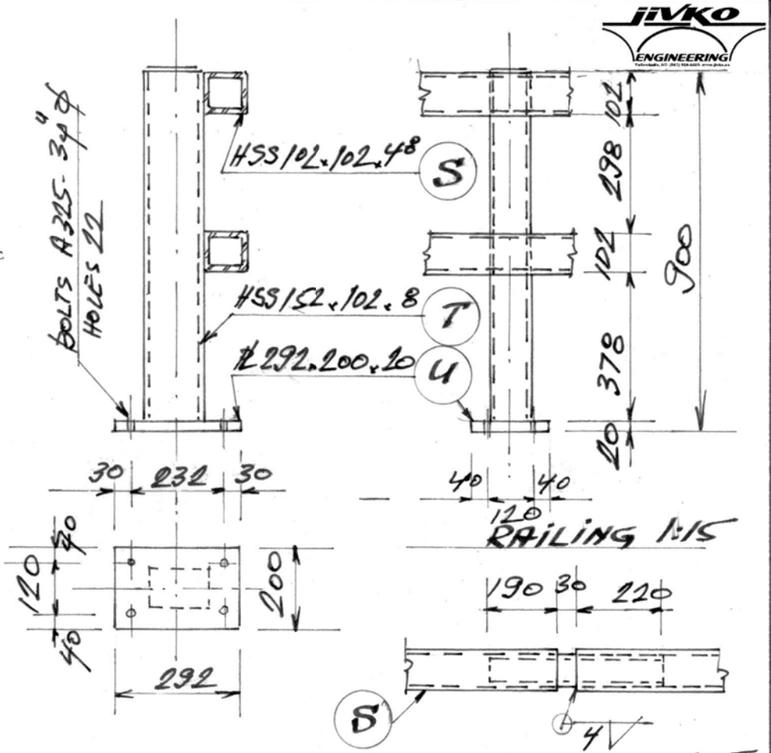
Rankin Inlet, NU
Meliadine River Bridge-Span
64.8m
Field Splices & Material Table



APPROACH RAMP SIDE VIEW 1:5
6 PER BRIDGE REQ'D.

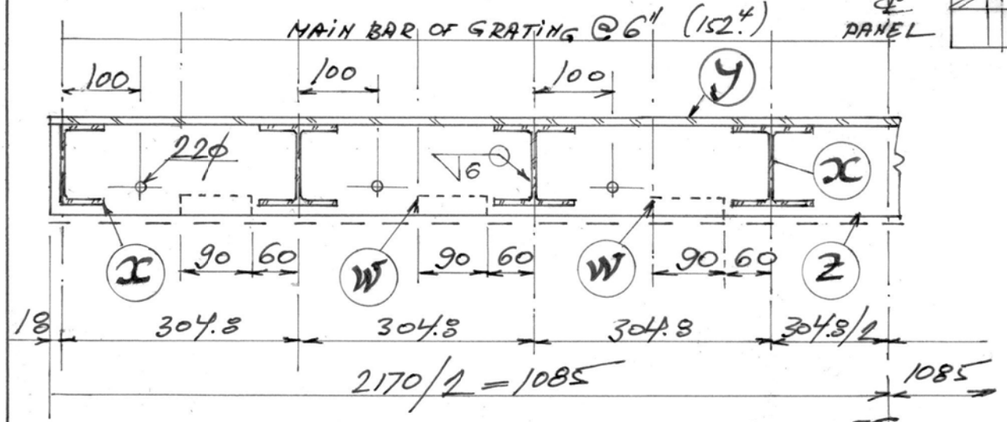


END FLOOR BEAM 1:5

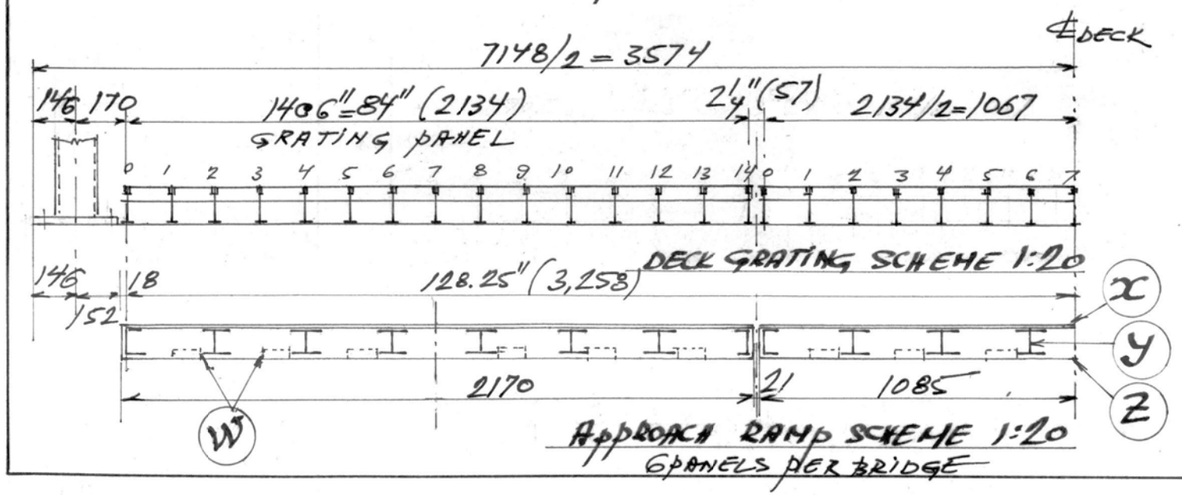


RAILING 1:15

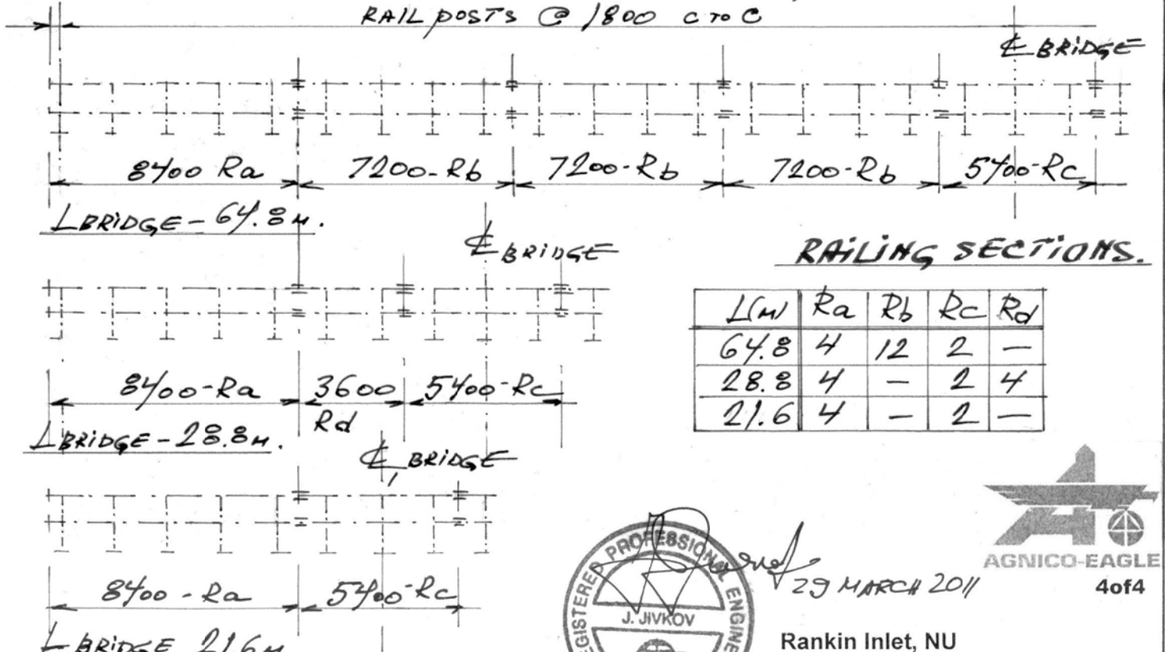
EXPANSION JOINT 1:15



APPROACH RAMP - SECTION 1:75



APPROACH RAMP SCHEME 1:20
6 PANELS PER BRIDGE



SCHEME OF RAIL SECTIONS

RAILING SECTIONS.

L(M)	Ra	Rb	Rc	Rd
64.8	4	12	2	—
28.8	4	—	2	4
21.6	4	—	2	—

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NWT/NU

29 MARCH 2011

AGNICO-EAGLE

4 of 4

Rankin Inlet, NU
3 bridges on Meliadine Project
Details for Railing and
Approach Ramps