

REFERENCE DRAWINGS:

MINISTRY OF FORESTS STANDARD DRAWING NUMBERS STD-EC-000-001 TO 002, STD-EC-010-02, STD-EC-050-06 TO 07 & STD-EC-030-01 TO 09.

DESIGN SPECIFICATIONS:

- DESIGN CODE: CAN/CSA-S6-06, MODIFIED IN ACCORDANCE WITH THE BC MINISTRY OF FORESTS BRIDGE DESIGN & CONSTRUCTION MANUAL
- DEAD LOAD INCLUDES ALLOWANCE FOR 50 ASPHALT WEARING SURFACE
- LIVE LOAD: L100
- FATIGUE: 500,000 CYCLES

ASSEMBLY & INSTALLATION:

- IN ACCORDANCE WITH CAN/CSA-S6-06.
- FIELD ASSEMBLY & INSTALLATION IS BY OTHERS, NO RESPONSIBILITY IS ACCEPTED FOR WORK BY OTHERS
- BACKFILL BEHIND BALLAST WALLS SHALL BE FREE-DRAINING GRANULAR MATERIAL

ERECTION LOADING (MINIMUM NON-COMPOSITE CAPACITY):

- SELF WEIGHT OF THE STRUCTURE, SUPPORTED AT THE BEARINGS, INCLUDING ALL DECK PANELS IN POSITION BUT UN-GROUTED.
- A VERTICAL LIVE LOAD OF 445 Kn (40 TON EQUIPMENT + 10 TON PANEL) DISTRIBUTED OVER A LENGTH OF 4m, POSITIONED ON THE BRIDGE TO PRODUCE THE MAXIMUM EFFECT. ECCENTRICITY = 100mm
- SELF WEIGHT OF THE STRUCTURE, SUPPORTED AT THE BEARINGS, INCLUDING ALL DECK PANELS IN POSITION BUT UN-GROUTED.
- MIN DLA = 10% (ASSUMED DESIGN SPEED = 10 km/hr)

STEEL SPECIFICATIONS:

- STEEL PLATE SHALL COMPLY TO CSA-G40.21-13 GRADE 350AT CAT 3
- ANGLES SHALL COMPLY TO ASTM A588B
- PIPE PILES SHALL CONFORM TO ASTM A252 GRADE 2
- BOLTS IN ACCORDANCE WITH ASTM A325, TYPE 3. THREADS SHALL BE EXCLUDED FROM THE SHEAR PLANES.
- SHEAR STUDS SHALL CONFORM TO ASTM A108 GR 1015, 1018 OR 1020 AND SHALL MEET THE REQUIREMENT OF CSA W59 APPENDIX H FOR TYPE B STUDS
- ALL WELDING IN ACCORDANCE WITH CSA W-59
- WELD METAL SHALL MEET THE CVN TOUGHNESS REQUIREMENTS OF TABLE 10.14 OF CAN/CSA-S6-06 FOR A MINIMUM SERVICE TEMPERATURE OF < -40°C
- TERMININATE FILLET WELDS 10mm FROM THE CORNERS OF STIFFENERS AND GUSSETS
- BEARING STIFFENERS SHALL BE FIT TO BEAR AGAINST THE BOTTOM FLANGE AND HAVE A TIGHT FIT AGAINST TOP FLANGE. ALL OTHER DIAPHRAGM STIFFENERS SHALL HAVE A TIGHT FIT AGAINST BOTH FLANGES. INTERMEDIATE TRANSVERSE STIFFENERS SHALL HAVE A TIGHT FIT AGAINST THE TOP FLANGE.

HARDWARE SPECIFICATIONS:

- FASTENERS SHALL CONFORM TO ASTM A307 GALVANIZED IN ACCORDANCE WITH ASTM A123/123M, UNO

ELASTOMERIC BEARING SPECIFICATIONS:

- BEARING PADS TO BE NATURAL RUBBER, 55± DUROMETER, AND SHALL CONFORM TO TABLE 11.5 OF CAN/CSA-S6-06

GROUT SPECIFICATIONS:

- GROUT SHALL BE NON-SHRINK, PORTAND CEMENT BASED INSTALLED IN ACCORDANCE WITH THE MANUFACTURES INSTRUCTIONS, MINIMUM COMPRESSIVE STRENGTH SHALL BE 35 Mpa. @ 28 DAYS.

GENERAL NOTES:

- UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm.
- UNLESS OTHERWISE SPECIFIED ALL HOLES TO BE 24mm DIA.

PRECAST CONCRETE SPECIFICATIONS:

CONCRETE:

- IN ACCORDANCE WITH CAN/CSA A23.1

NAME	MIX DESIGN	COMPRESSIVE STRENGTH AT 28 DAYS	STRIPPING STRENGTH	ENTRAINED AIR	SLUMP	EXPOSURE CLASS	CONCRETE TEMPERATURE AT POUR
BALLAST WALL	108.0	35 MPa	20 MPa	5% TO 8%	140 TO 220	C1	10°C TO 30 °C
CAP BEAM	108.0	35 MPa	20 MPa	5% TO 8%	140 TO 220	C1	10°C TO 30 °C
DECK PANEL	108.0	35 MPa	20 MPa	5% TO 8%	140 TO 220	C1	10°C TO 30 °C
FOOTING	108.0	50 MPa	20 MPa	5% TO 8%	140 TO 220	C1	10°C TO 30 °C

FINISH:

- TOP SURFACE OF DECK PANELS OVER DECK SURFACE: TRANSVERSE BROOM
- OTHER TOP SURFACES: SMOOTH FLOAT
- FORMED SURFACES: SMOOTH FORM

MANUFACTURE & TOLERANCE:

- IN ACCORDANCE WITH CAN/CSA A23.4, CLAUSE 12.

NOTICE:

- THESE DRAWINGS ARE FOR THE BRIDGE COMPONENTS DETAILED HEREIN ONLY. RAPID-SPAN IS NOT RESPONSIBLE FOR THE OVERALL BRIDGE DESIGN. THE ENGINEER OF RECORD SHALL VERIFY THE INFORMATION PRESENTED IN THESE DRAWINGS IS COMPATIBLE WITH THE OVERALL DESIGN CONCEPT AND THAT HYDROLOGICAL, ROADWAY ALIGNMENT, TRAFFIC CONTAINMENT, GEOTECHNICAL AND ALL OTHER DESIGN CONSIDERATIONS ARE SATISFIED AND ARE CONSISTANT WITH REQUIREMENTS OF THE REGULATORY AUTHORITY.
- RAPID-SPAN'S SCOPE OF WORK DOES NOT INCLUDE FIELD INSPECTION SERVICES. THE ENGINEER OF RECORD SHALL VERIFY THE SUPPLIED COMPONENTS ARE INSTALLED IN ACCORDANCE WITH THESE DRAWINGS.

0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK
REV	DATE	DESCRIPTION	DRAWN	CHK



www.rapidspan.com

1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

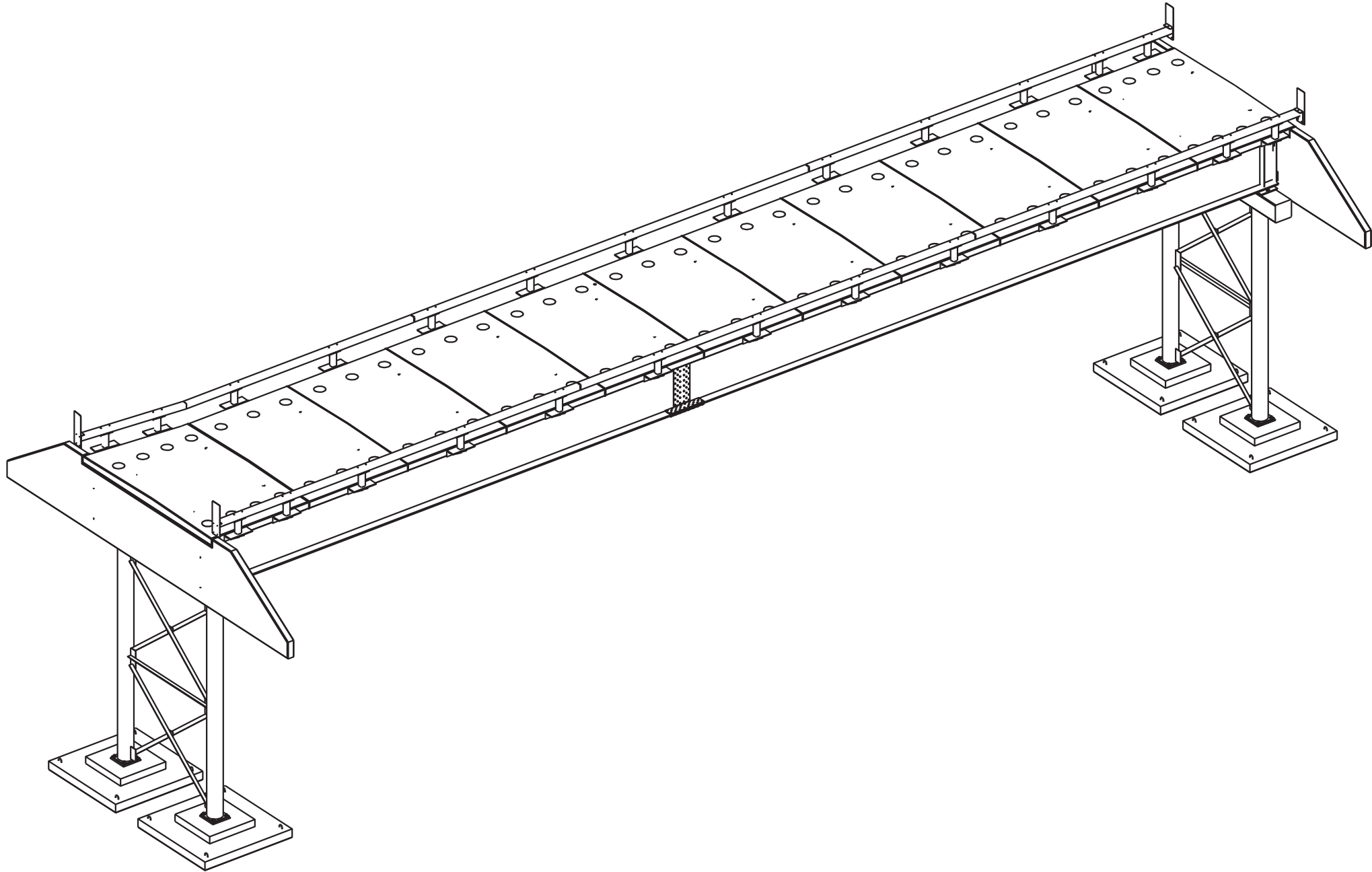
PROJECT:

MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE:

GENERAL NOTES

ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
P.J. KING	RON RIEMENS	7502	010-E-01	



GENERAL ARRANGEMENT - 3D
1:125

BILL OF MATERIALS - JOB # 7502				
ITEM	QTY	DESCRIPTION OR NAME	SIZE	WEIGHT
GA1	1	GIRDER	480 x 1664 x 15343	12120.2
GA2	1	GIRDER	480 x 1670 x 18303	13992.5
GB1	1	GIRDER	480 x 1664 x 15343	12115.1
GB2	1	GIRDER	480 x 1670 x 18303	13997.9
411P1	26	RAIL POST WELDMENT	269 x 583 x 680	3589.7
411R1	2	RAIL WELDMENT	152 x 152 x 11521	1355.6
411R2	2	RAIL WELDMENT	152 x 152 x 12462	1465.7
411R4	1	RAIL WELDMENT	152 x 859 x 10033	589.0
BA1	4	BEARING ASSEMBLY	51 x 500 x 750	733.7
SBCW1	4	STEEL BENT COLUMN WELDMENT	500 x 500 x 6025	4111.3
A	1	END DECK PANEL A	4876 x 250 x 3013	17564.4
B	7	INTERMEDIATE DECK PANEL B	4876 x 250 x 3028	123972.7
BW1	1	BALLAST WALL TYPE 1	2004 x 11333 x 200	19534.8
BW2	1	BALLAST WALL TYPE 2	2004 x 11028 x 200	18950.0
C	1	INTERMEDIATE DECK PANEL C	4876 x 250 x 3028	17631.0
CB	2	CAP BEAM	500 x 5486 x 600	15058.1
D	1	INTERMEDIATE DECK PANEL D	4876 x 250 x 3028	17698.8
E	1	END DECK PANEL E	5181 x 250 x 3013	18039.8
F	4	FOOTING	2700 x 2700 x 550	47943.4
P0000393	102	TARGET COARSE TRAFFIC PATCH	55 LB BAG	5610
P0000394	40	TARGET FINE TRAFFIC PATCH	55 LB BAG	2200
411M1	4	DELINEATOR MOUNT	9.5 x 250 x 431	72.4
411R3	1	RAIL	HSS152x152x6.4x10046	587.6
EV1	4	EVAZOTE	25.0 x 200 x 200	0.1
EV2	1	EVAZOTE	25.0 x 200 x 5231	0.9
EV3	1	EVAZOTE	25.0 x 200 x 4926	0.8
L1	10	LATERAL BRACE DIAGONAL	L102x102x9.5x4680	1498.4
L2	4	END DIAPHRAGM DIAGONAL	L102x102x9.5x3728	477.4
L3	11	STRUT	L102x102x9.5x3556	1252.4
L4	8	INTERMEDIATE DIAPHRAGM DIAGONAL	L102x102x9.5x3658	936.9
L5	4	STEEL BENT STRUT	L102x102x9.5x3164	405.2
L6	8	STEEL BENT DIAGONAL	L102x102x9.5x4001	1024.7
P0000029	2	LEFT HAND DELINEATOR	300 x 900	7.0
P0000030	2	RIGHT HAND DELINEATOR	300 x 900	7.0
P0000033	2	NARROW BRIDGE SIGN	762 x 762	14.0
P0000042	1	XYMAX MONOGUARD 5 GAL	5 GALLON PAIL	50.0
PL5	2	END DIAPHRAGM SPACER	15.9 x 150 x 150	12.4
PL14	2	INTERMEDIATE DIAPHRAGM SPACER	9.5 x 150 x 150	7.4
PL18	2	INTERMEDIATE DIAPHRAGM SPACER	12.7 x 150 x 150	9.9
PL22	8	STEEL BENT GUSSET	9.5 x 200 x 350	92.1
PL23	4	STEEL BENT GUSSET	9.5 x 200 x 500	65.8
PL24	4	STEEL BENT SPACER	9.5 x 200 x 200	26.3
TSPF1	2	CCA TREATED SIGN POST	4" x 4" x 10'-0"	58.8
78F212	26	ASTM A325-3 BOLT ASSEMBLY	7/8" DIA. x 2 1/2" LONG	24.6
78F214	108	ASTM A325-3 BOLT ASSEMBLY	7/8" DIA. x 2 1/4" LONG	97.6
78F234	120	ASTM A325-3 BOLT ASSEMBLY	7/8" DIA. x 2 3/4" LONG	119.0
78F312	48	ASTM A325-3 BOLT ASSEMBLY	7/8" DIA. x 3 1/2" LONG	52.9
78F412	88	ASTM A325-3 BOLT ASSEMBLY	7/8" DIA. x 4 1/2" LONG	112.5
34F9	56	ASTM A307A-BUTTONHEAD HDG BOLT	3/4" DIA. x 9" LONG	72.8
	56	ASTM A563A-HDG HEX NUT	3/4" DIA.	3.3
	56	ASTM F844-HDG STANDARD FW	3/4" DIA.	3.3
38F3	4	ASTM A307A-HDG LAG BOLT	3/8" DIA. x 3" LONG	0.2
	4	ASTM F844-HDG STANDARD FW	3/8" DIA.	0.0
1F214	78	ASTM A307A-HEX HEAD HDG BOLT	1" DIA. x 2 1/4" LONG	60.2
	78	ASTM F844-HDG STANDARD FW	1" DIA.	10.3
38F114	16	ASTM A307A-HEX HEAD HDG BOLT	3/8" DIA. x 1 1/4" LONG	1.1
	16	ASTM A563A-HDG HEX NUT	3/8" DIA.	0.0
	16	ASTM F844-HDG STANDARD FW	3/8" DIA.	0.0

0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK
REV	DATE	DESCRIPTION	DRAWN	CHK



www.rapidspan.com 1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

PROJECT:

MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE:

3D GA AND SHIPPING BOM

ENGINEERED BY:

RON RIEMENS

DRAWN BY:

RON RIEMENS

JOB No:

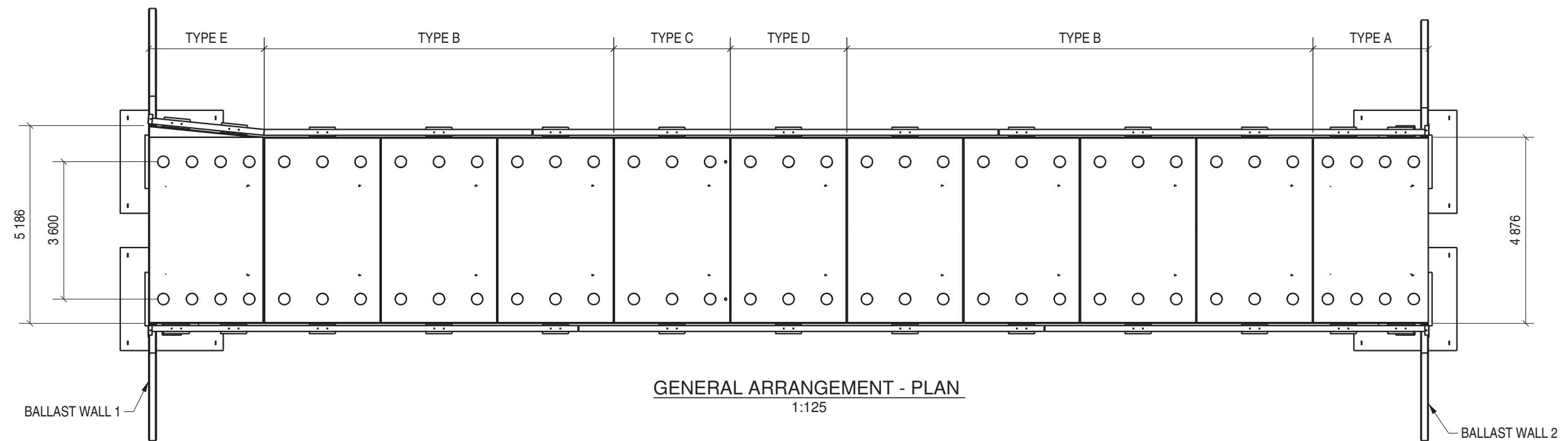
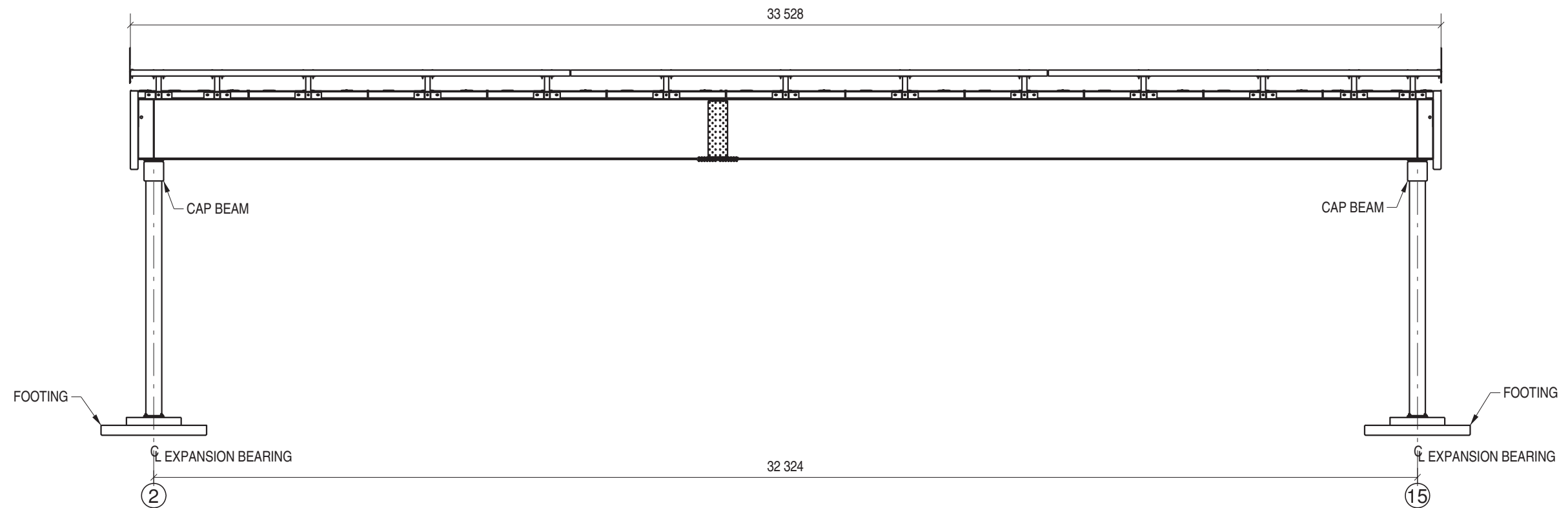
7502

DRAWING No:

020-E-01

REV

0



0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK
REV	DATE	DESCRIPTION	DRAWN	CHK

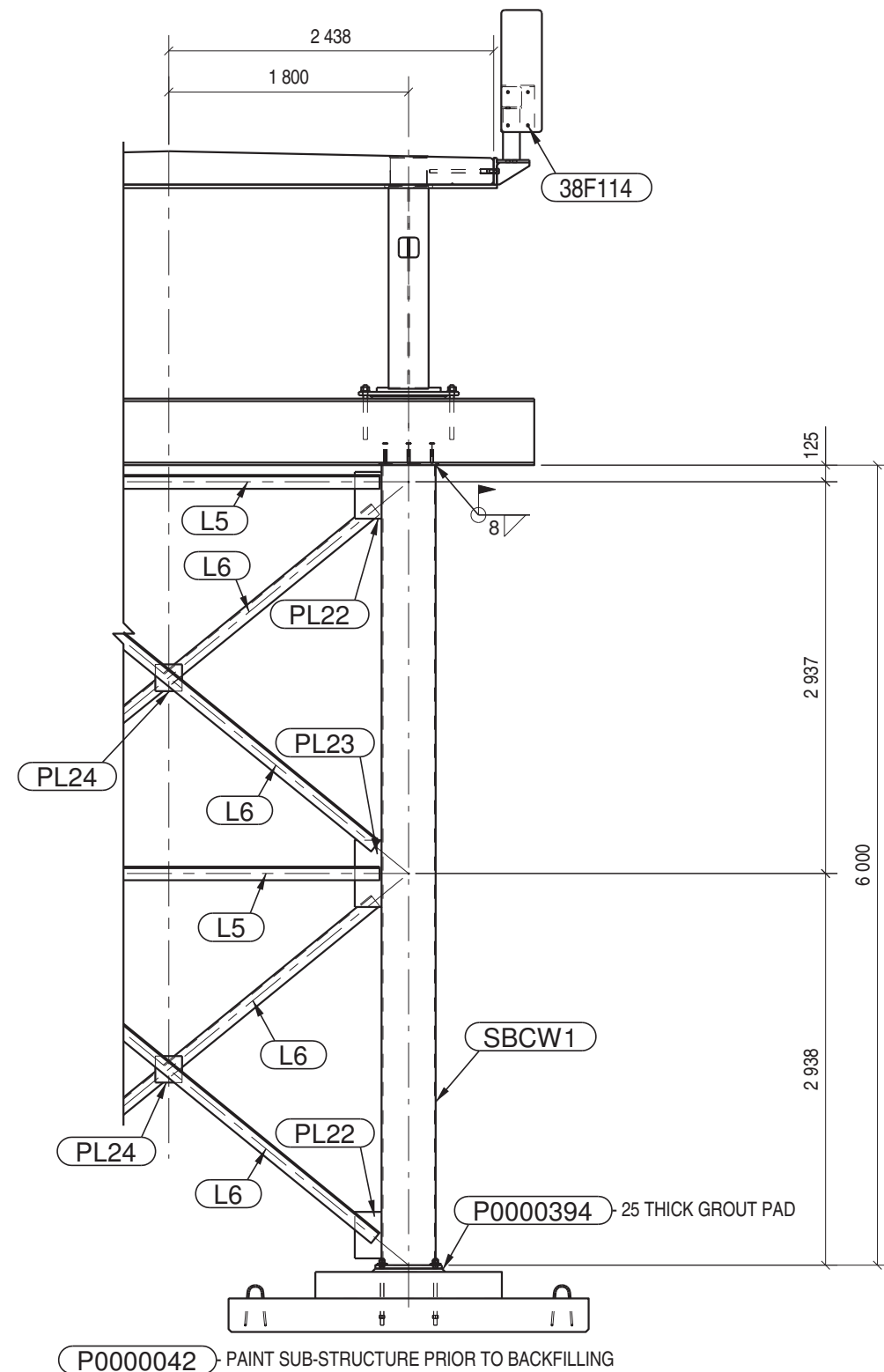


www.rapidspan.com

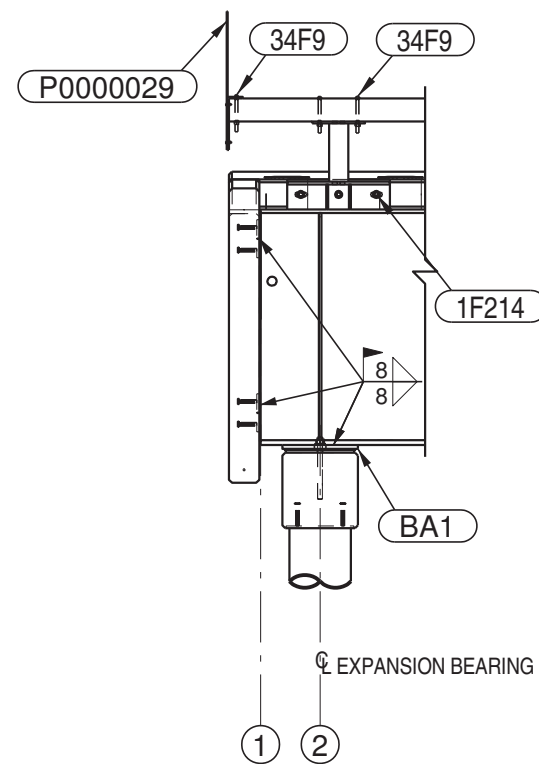
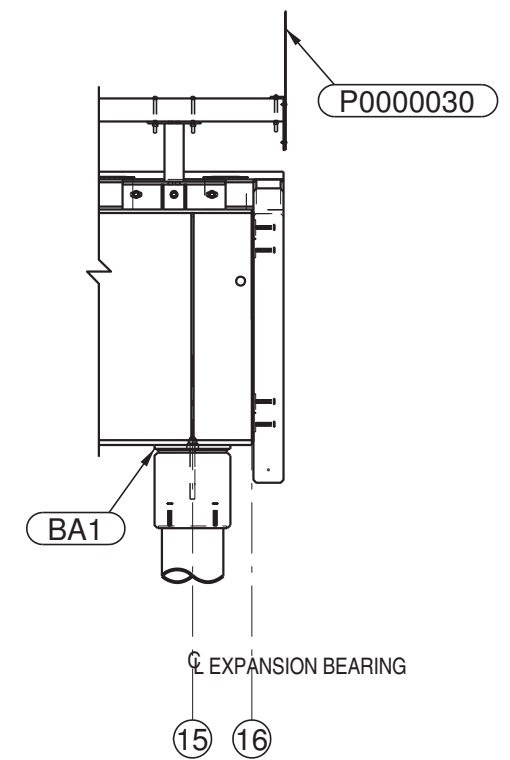
1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

PROJECT:					MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE:					GENERAL ARRANGEMENT				
ENGINEERED BY:		DRAWN BY:		JOB No:		DRAWING No:		REV	
		RON RIEMENS		7502		020-E-02		0	



TYPICAL ABUTMENT ELEVATION
1:50



0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK
REV	DATE	DESCRIPTION	DRAWN	CHK



www.rapidspan.com

1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

PROJECT:

MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE:

ABUTMENT AND CURB DETAILS

ENGINEERED BY:

DRAWN BY:

JOB No:

DRAWING No:

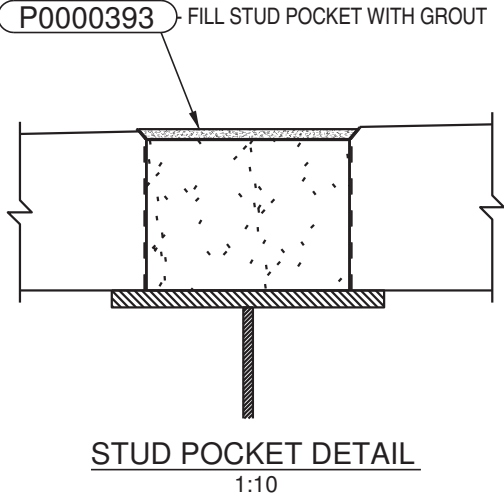
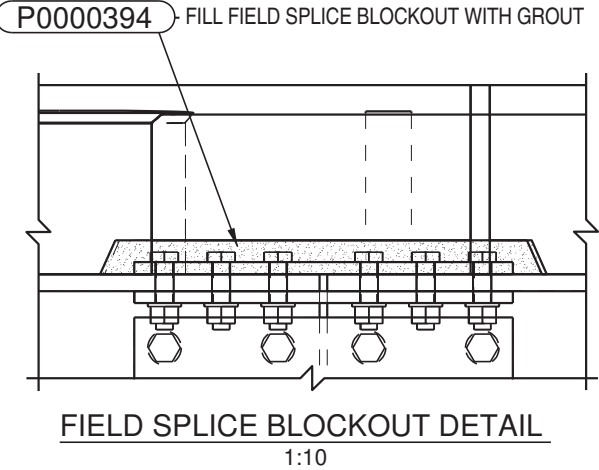
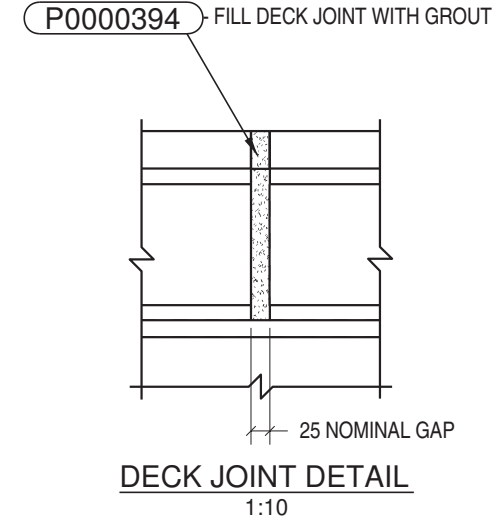
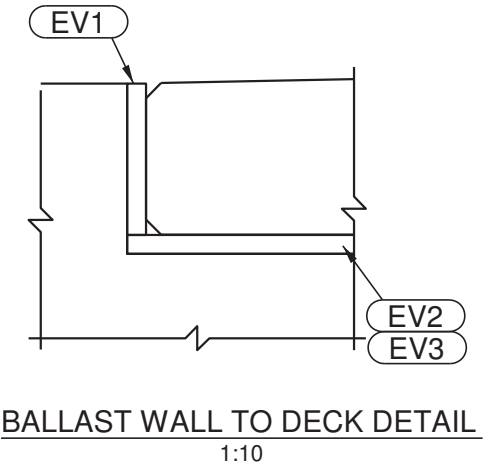
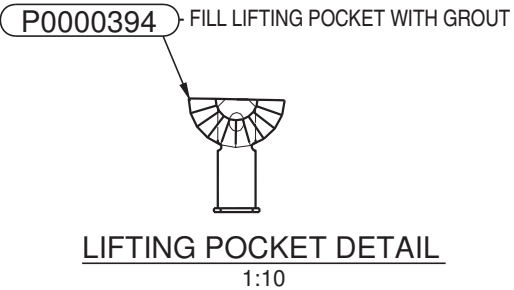
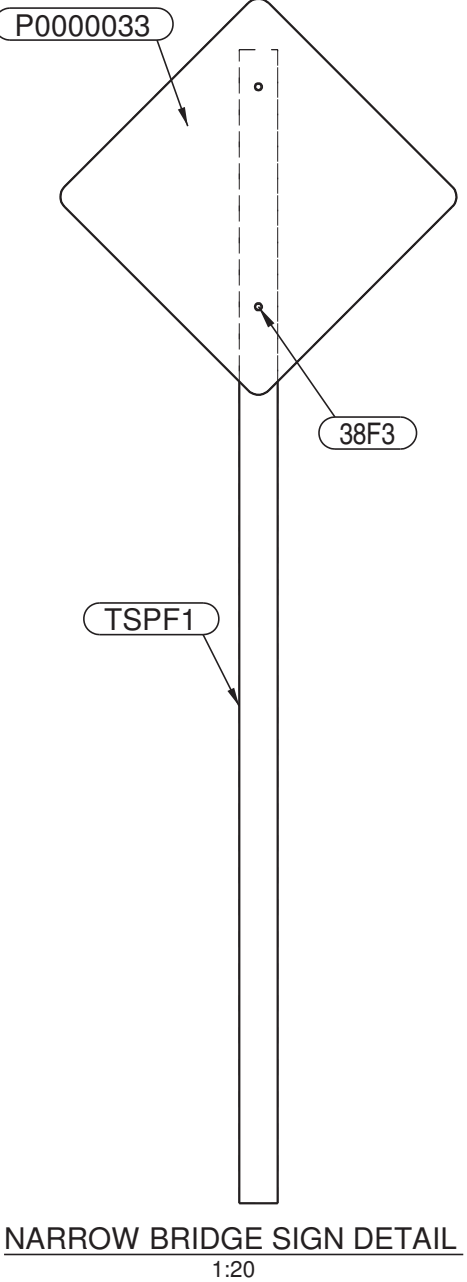
REV

RON RIEMENS

7502

020-E-03

0



REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK



www.rapidspan.com *1-800-661-2047*

PROJECT: **MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE**

TITLE: **DECK AND MISCELLANEOUS DETAILS**

ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
	RON RIEMENS	7502	020-E-04	

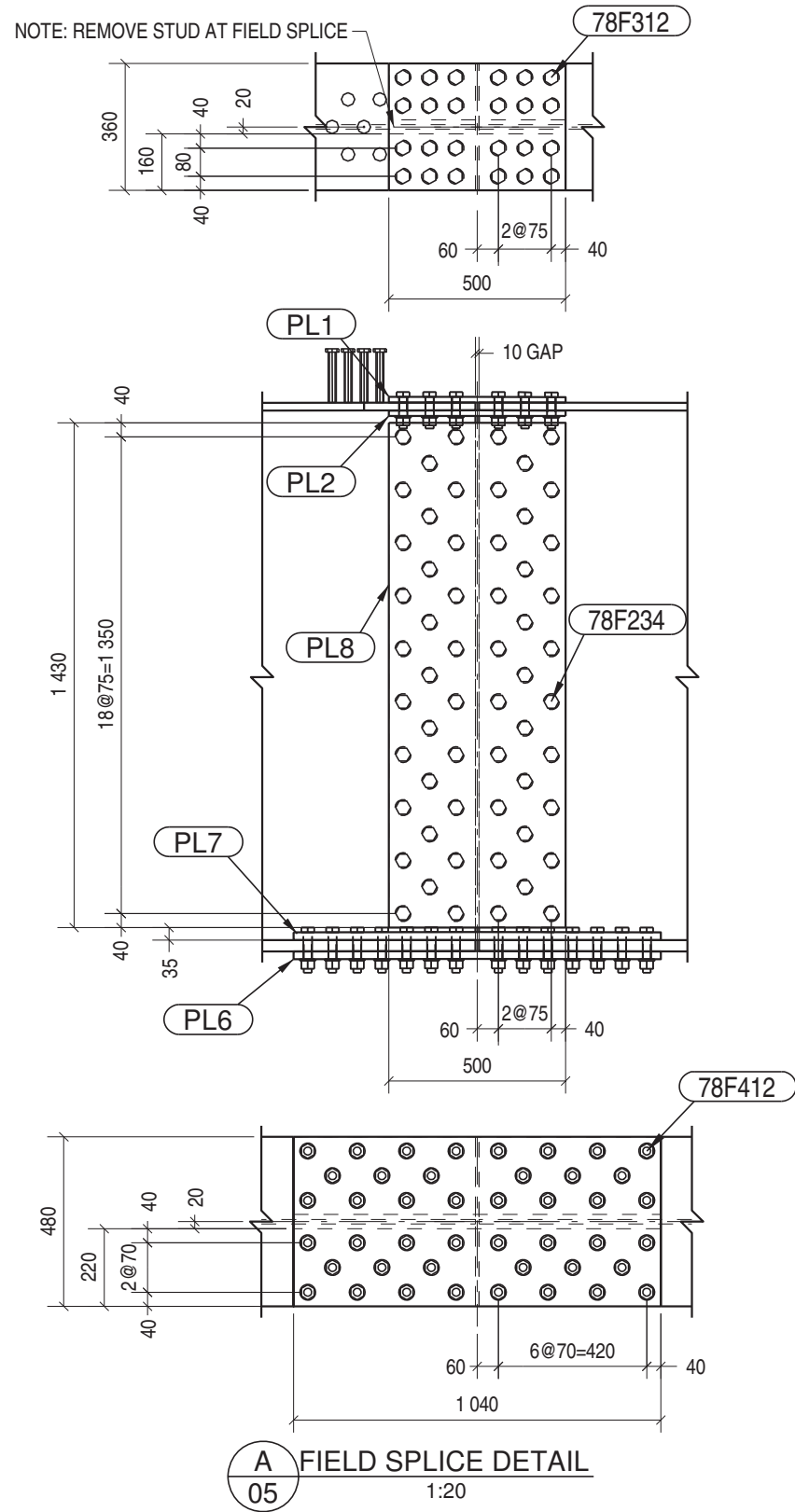


RAPID-SPAN

1-800-661-2047

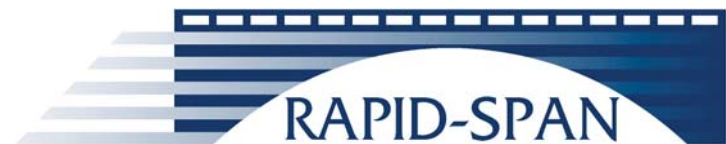
A circular professional engineer seal for the Province of British Columbia. The outer ring contains the text "PROFESSIONAL" at the top and "ENGINEER" at the bottom. Inside the ring, the words "PROVINCE OF" are at the top, "R. J. KING" is in the center, and "BRITISH COLUMBIA" is at the bottom. A stylized signature is written across the seal.

 $\triangle 0$



BLAST CLEAN FAYING SURFACES
TO REMOVE MILL SCALE

0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK
REV	DATE	DESCRIPTION	DRAWN	CHK



www.rapidspan.com

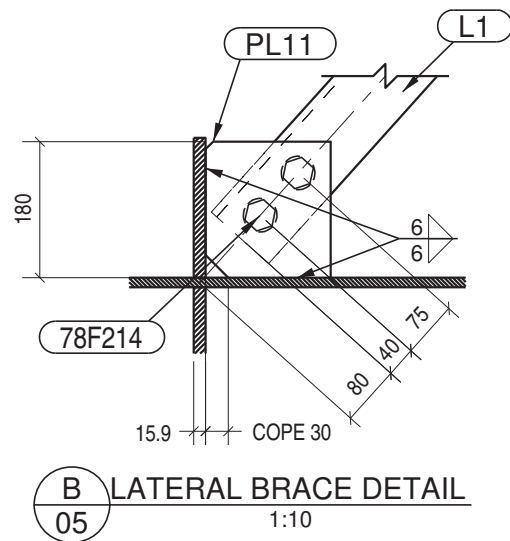
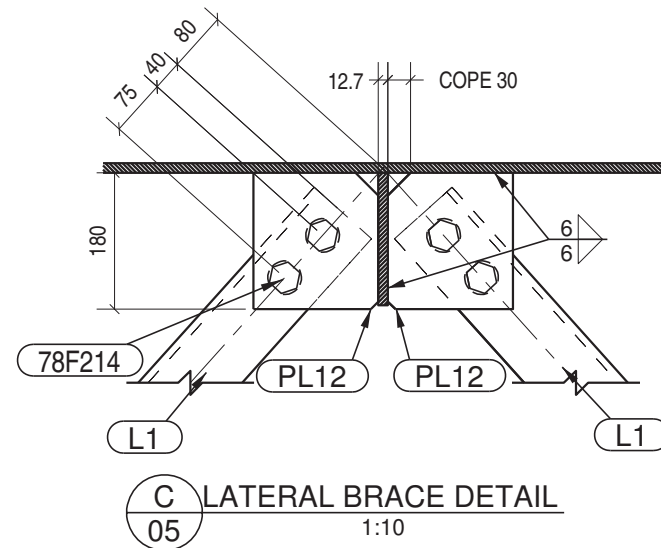
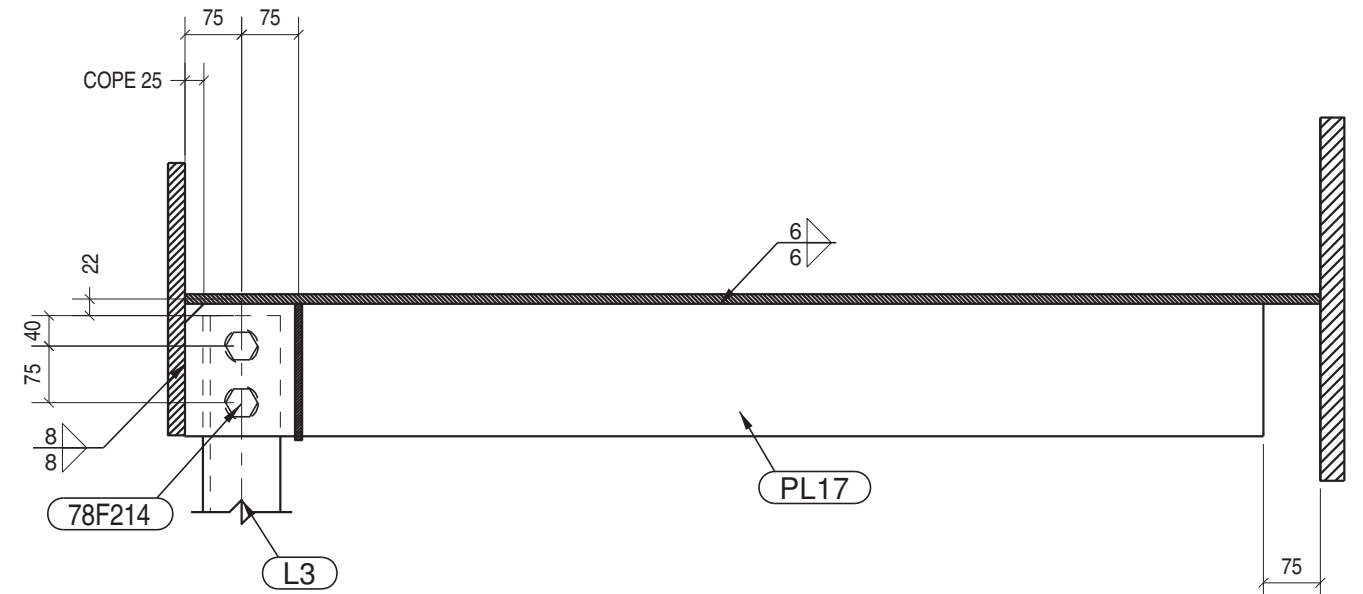
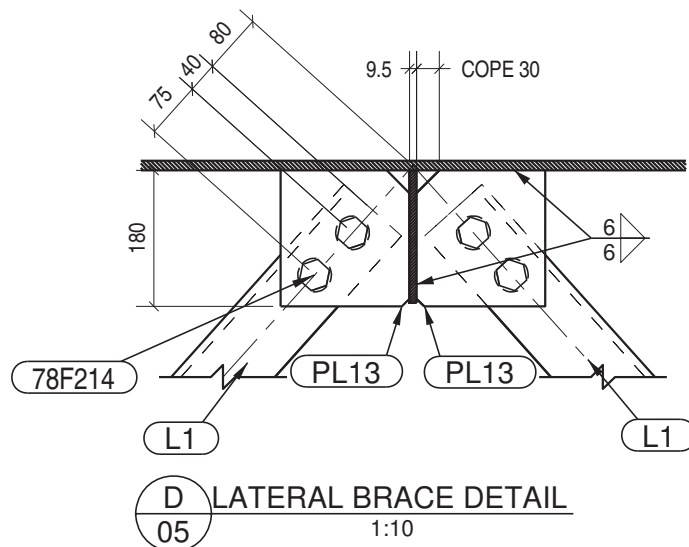
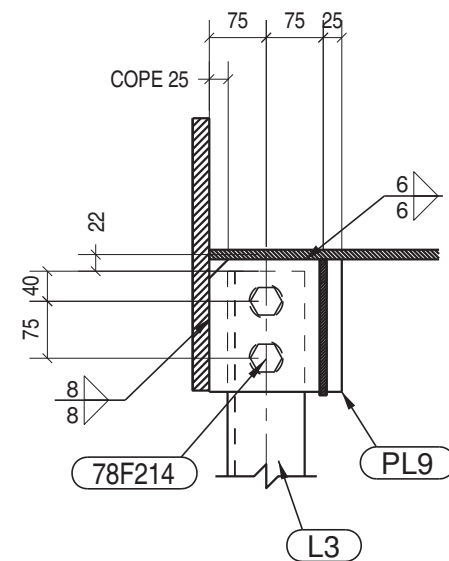
1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

PROJECT:				
MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE:				
FIELD SPLICE DETAIL				
ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
P.J. KING	RON RIEMENS	7502	020-E-06	0



REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK



www.rapidspan.com

1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

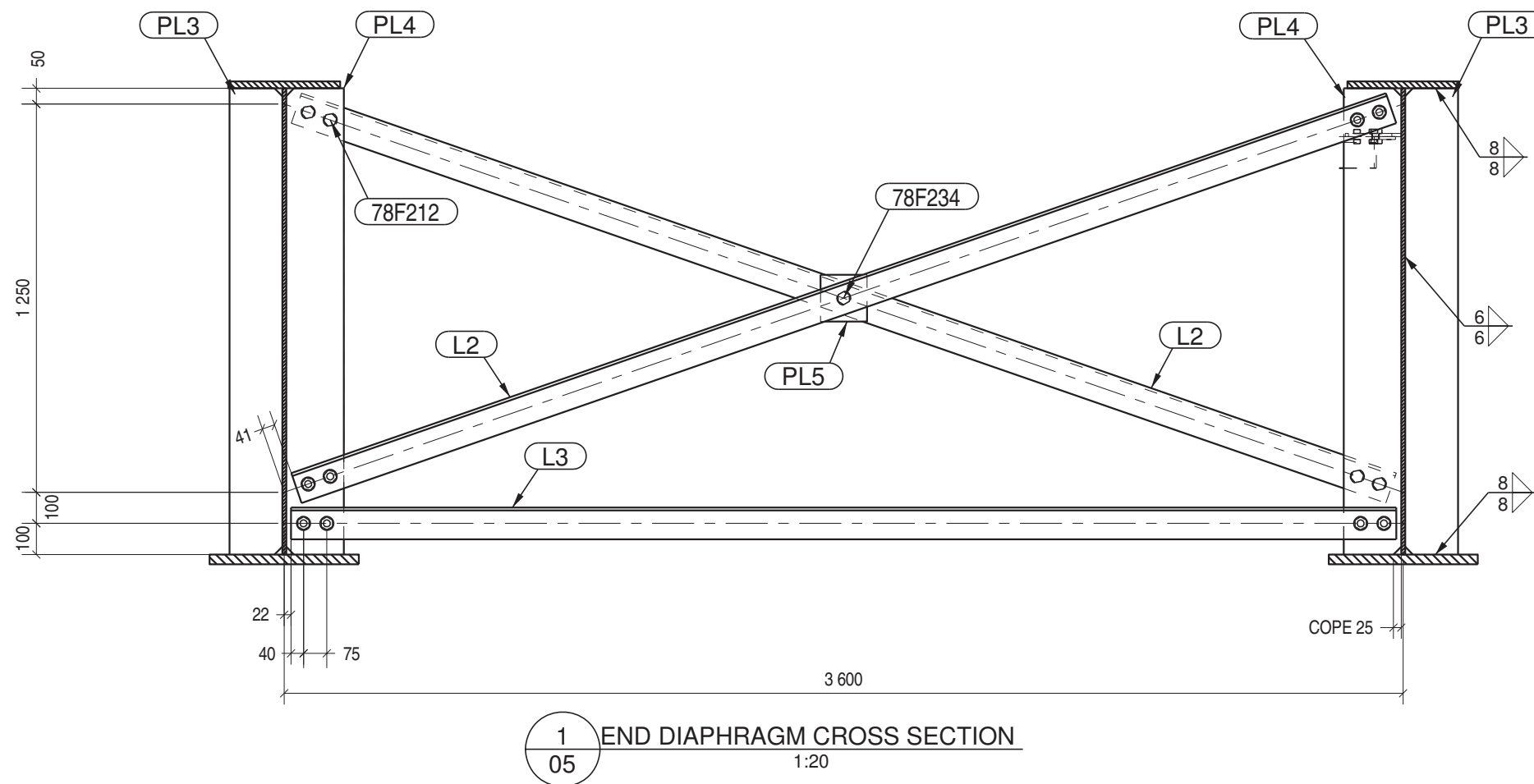


Jun. 13, 2017

PROJECT: MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE: LATERAL BRACE DETAILS

ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
P.J. KING	RON RIEMENS	7502	020-E-07	0



REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK



www.rapidspan.com

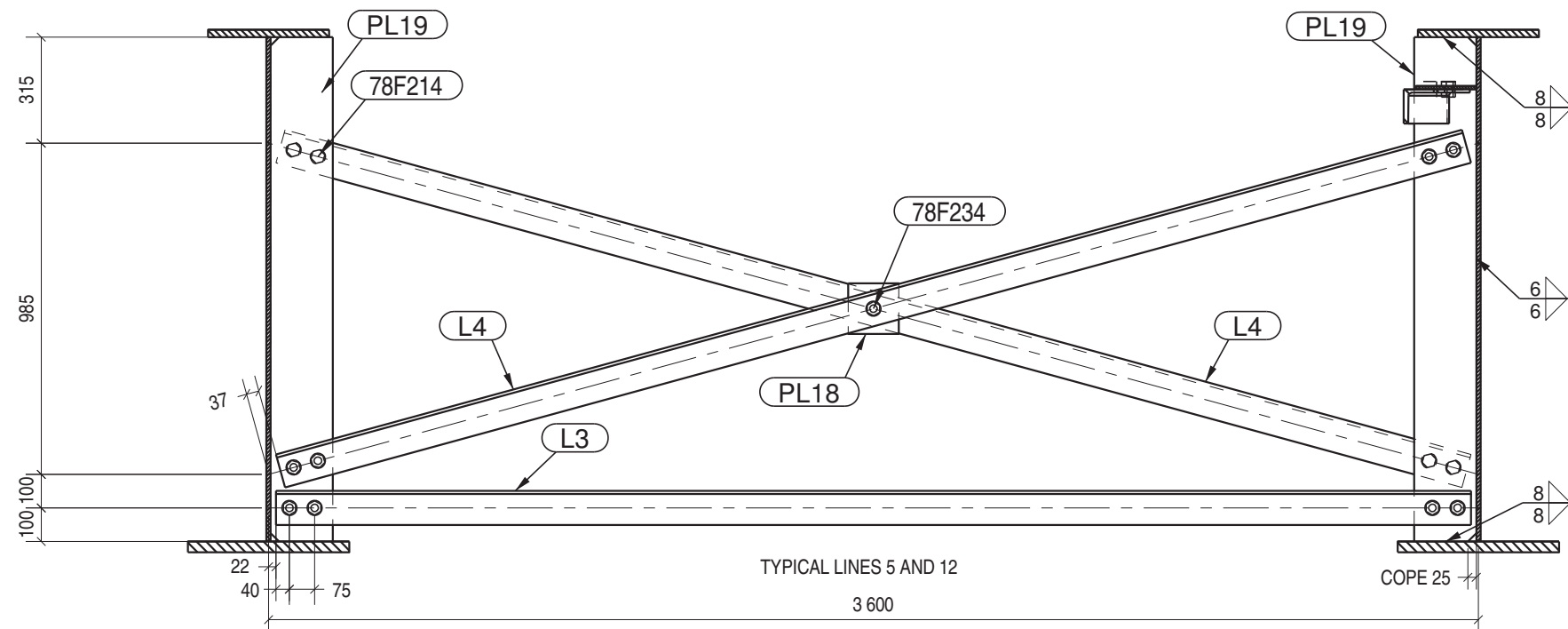
1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

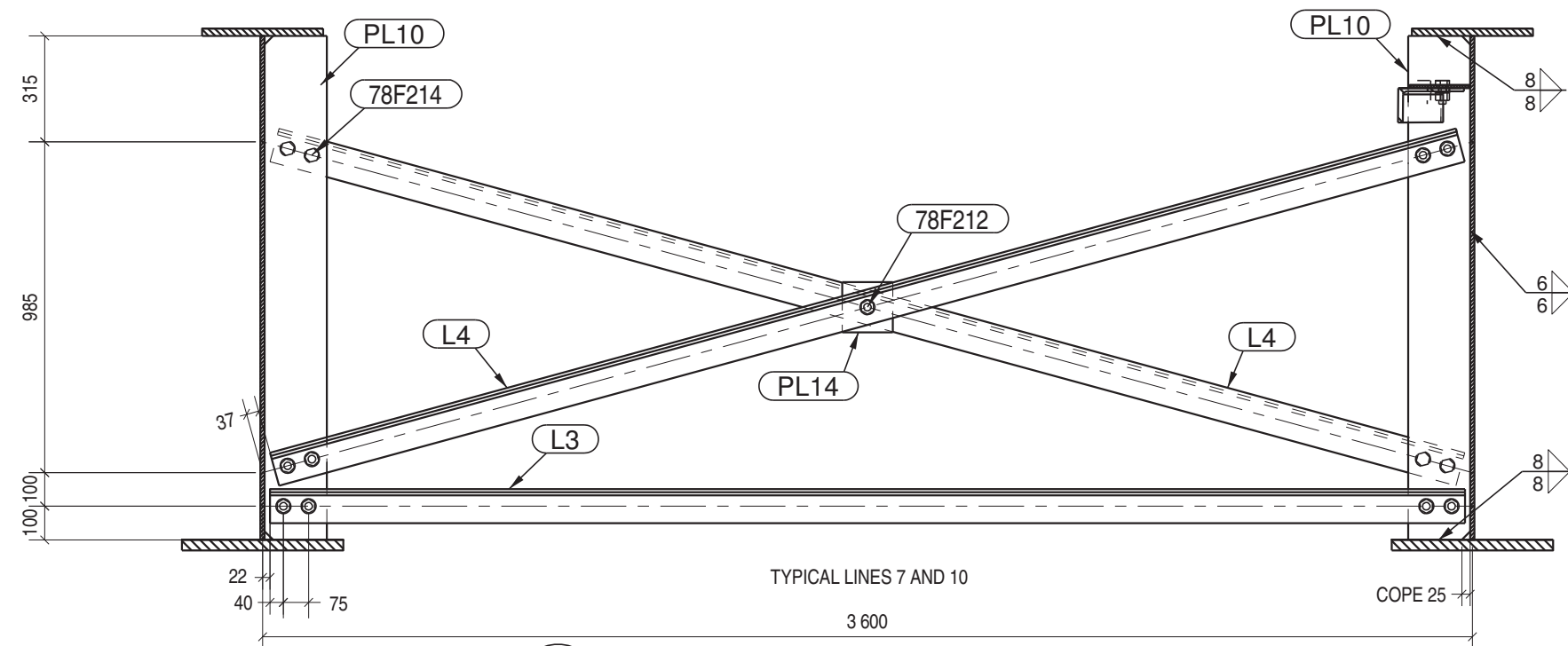


Jun. 13, 2017

PROJECT: MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE: END DIAPHRAGM DETAILS				
ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
P.J. KING	RON RIEMENS	7502	020-E-08	0



2
05 INTERMEDIATE DIAPHRAGM CROSS SECTION
1:20



3
05 INTERMEDIATE DIAPHRAGM CROSS SECTION
1:20

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK



www.rapidspan.com

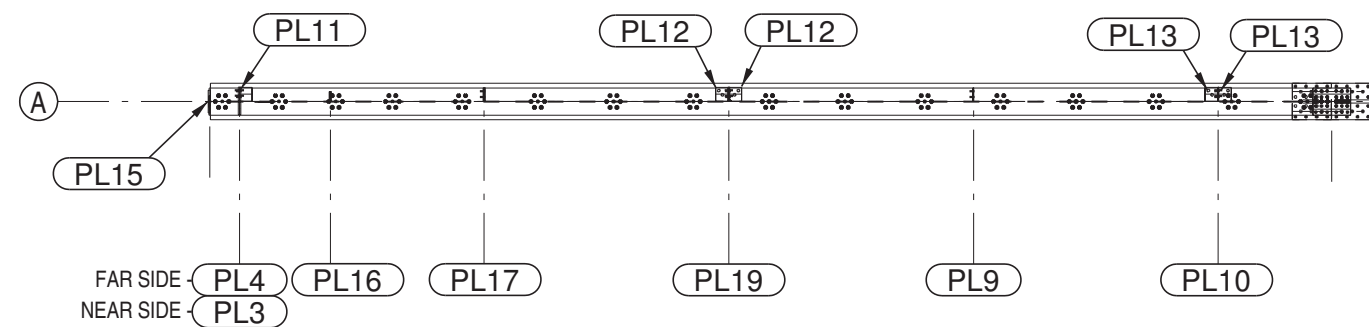
1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

PROJECT: MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE: INTERMEDIATE DIAPHRAGM DETAILS				
ENGINEERED BY: P.J. KING	DRAWN BY: RON RIEMENS	JOB No: 7502	DRAWING No: 020-E-09	REV 0



GIRDER A1 PLAN
1:100

RUNNING DIMENSIONS TO
STUD GROUP ALONG TOP
FLANGE. SEE DETAIL D ON
DRAWING NUMBER 031-G-01

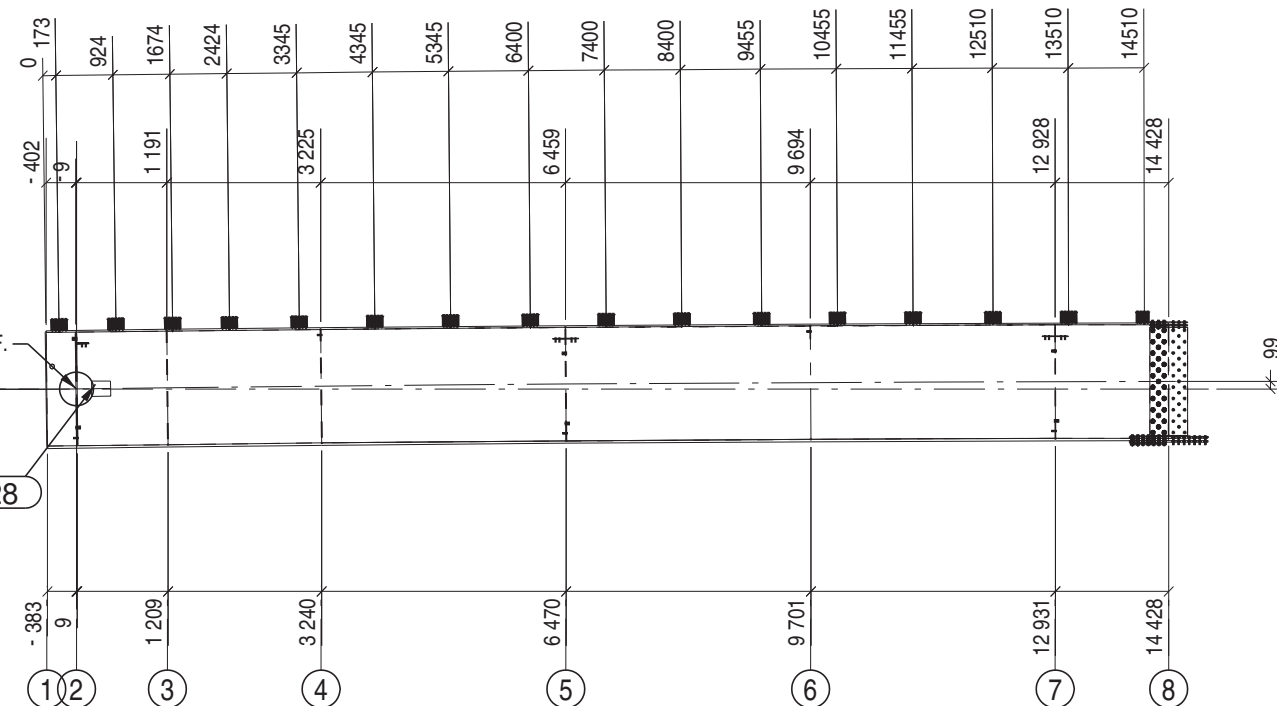
RUNNING DIMENSIONS TO
STIFFENERS AT TOP OF WEB

HORIZONTAL WORK LINE

M.O.F.
33.528M
7502
N2-108A

L100
MAY 2017

RUNNING DIMENSIONS TO
STIFFENERS AT BOTTOM OF WEB



GIRDER A1 ELEVATION
1:100

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION OR NAME	SIZE	WT.LBS. TOTAL
GA1	1	GIRDER	480 x 1664 x 15343	12120.2

BFA1-1	1	BOTTOM FLANGE PLATE	31.8 x 480 x 14808	3911.7
TFA1-1	1	TOP FLANGE PLATE	22.2 x 360 x 14825	2050.5
WA1-1	1	CAMBERED WEB PLATE	12.7 x 1500 x 14808	4884.2
P0000028	1	IDENTIFICATION PLAQUE	200 x 250	0.3
PL1	1	TOP O/S FLANGE SPLICE PLATE	15.9 x 360 x 500	49.5
PL2	2	TOP I/S FLANGE SPLICE PLATE	15.9 x 160 x 500	44.0
PL3	1	BEARING STIFFENER	15.9 x 170 x 1500	70.0
PL4	1	END DIAPHRAGM STIFFENER	15.9 x 185 x 1500	76.2
PL6	1	BOTTOM O/S FLANGE SPLICE PLATE	22.2 x 480 x 1040	191.8
PL7	2	BOTTOM I/S FLANGE SPLICE PLATE	22.2 x 220 x 1040	175.8
PL8	2	WEB SPLICE PLATE	9.5 x 500 x 1430	235.1
PL9	1	WEB STIFFENER	9.5 x 175 x 175	5.0
PL10	1	INTERMEDIATE DIAPHRAGM STIFFENER	9.5 x 185 x 1500	45.5
PL11	1	LATERAL BRACE GUSSET	9.5 x 165 x 180	4.8
PL12	2	LATERAL BRACE GUSSET	9.5 x 165 x 180	9.6
PL13	2	LATERAL BRACE GUSSET	9.5 x 170 x 180	9.9
PL15	1	END PLATE	9.5 x 300 x 1520	71.4
PL16	1	WEB STIFFENER	12.7 x 127 x 1425	39.7
PL17	1	WEB STIFFENER	12.7 x 175 x 1425	54.7
PL19	1	INTERMEDIATE DIAPHRAGM STIFFENER	12.7 x 185 x 1500	60.9
78S6	111	ASTM A108 STUD	7/8" DIA. x 6" LONG	129.7

NOTE: ALL DIMENSIONS AT ABUTMENT
IS TO I/S END PLATES. DIMENSIONS AT
SPLICE IS TO CENTER OF SPLICE.

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK



www.rapidspan.com

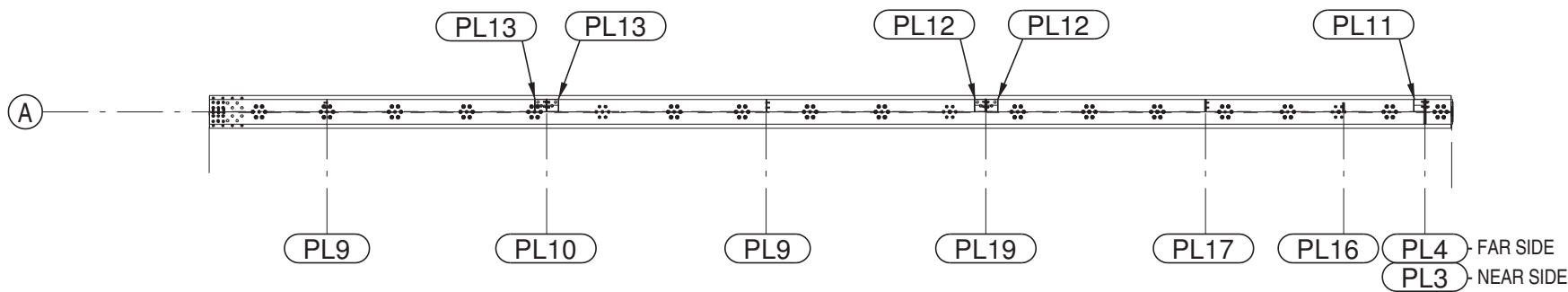
1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

PROJECT: MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE: GIRDER A1 LAYOUT				
ENGINEERED BY: P.J. KING	DRAWN BY: RON RIEMENS	JOB No: 7502	DRAWING No: 030-GA1-01	REV 0



GIRDER A2 PLAN
1:100

RUNNING DIMENSIONS TO
STUD GROUP ALONG TOP
FLANGE. SEE DETAIL D ON
DRAWING NUMBER 031-G-01

RUNNING DIMENSIONS TO
STIFFENERS AT TOP OF WEB

HORIZONTAL WORK LINE

0 REF.

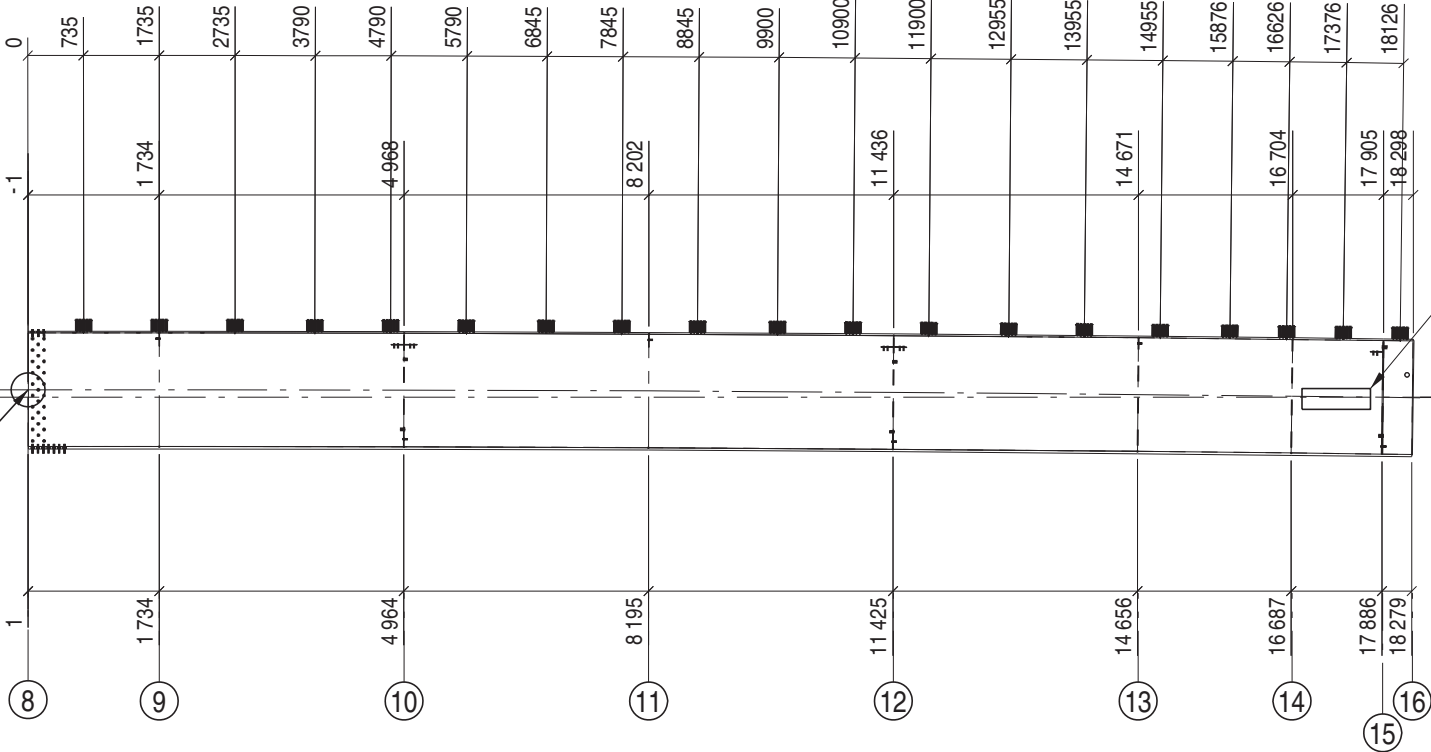
RUNNING DIMENSIONS TO
STIFFENERS AT BOTTOM OF WEB

99

0 REF.

PAINT RSS LOGO
152 x 775

-5



GIRDER A2 ELEVATION
1:100

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION OR NAME	SIZE	WT.LBS. TOTAL
GA2	1	GIRDER	480 x 1670 x 18303	13992.5

BFA2-1	1	BOTTOM FLANGE PLATE	31.8 x 480 x 18273	4827.0
TFA2-1	1	TOP FLANGE PLATE	22.2 x 360 x 18294	2530.3
WA2-1	1	CAMBERED WEB PLATE	12.7 x 1500 x 18273	6027.2
PL3	1	BEARING STIFFENER	15.9 x 170 x 1500	70.0
PL4	1	END DIAPHRAGM STIFFENER	15.9 x 185 x 1500	76.2
PL9	2	WEB STIFFENER	9.5 x 175 x 175	10.0
PL10	1	INTERMEDIATE DIAPHRAGM STIFFENER	9.5 x 185 x 1500	45.5
PL11	1	LATERAL BRACE GUSSET	9.5 x 165 x 180	4.8
PL12	2	LATERAL BRACE GUSSET	9.5 x 165 x 180	9.6
PL13	2	LATERAL BRACE GUSSET	9.5 x 170 x 180	9.9
PL15	1	END PLATE	9.5 x 300 x 1520	71.4
PL16	1	WEB STIFFENER	12.7 x 127 x 1425	39.7
PL17	1	WEB STIFFENER	12.7 x 175 x 1425	54.7
PL19	1	INTERMEDIATE DIAPHRAGM STIFFENER	12.7 x 185 x 1500	60.9
78S6	133	ASTM A108 STUD	7/8" DIA. x 6" LONG	155.4

NOTE: ALL DIMENSIONS AT ABUTMENT
IS TO I/S END PLATES. DIMENSIONS AT
SPLICE IS TO CENTER OF SPLICE.

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK



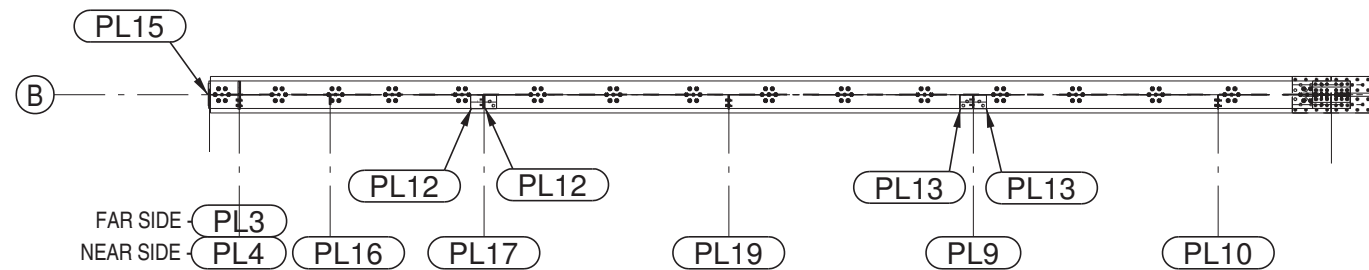
www.rapidspan.com 1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

PROJECT: MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE: GIRDER A2 LAYOUT				
ENGINEERED BY: P.J. KING	DRAWN BY: RON RIEMENS	JOB No: 7502	DRAWING No: 030-GA2-01	REV 0



GIRDER B1 PLAN
1:100

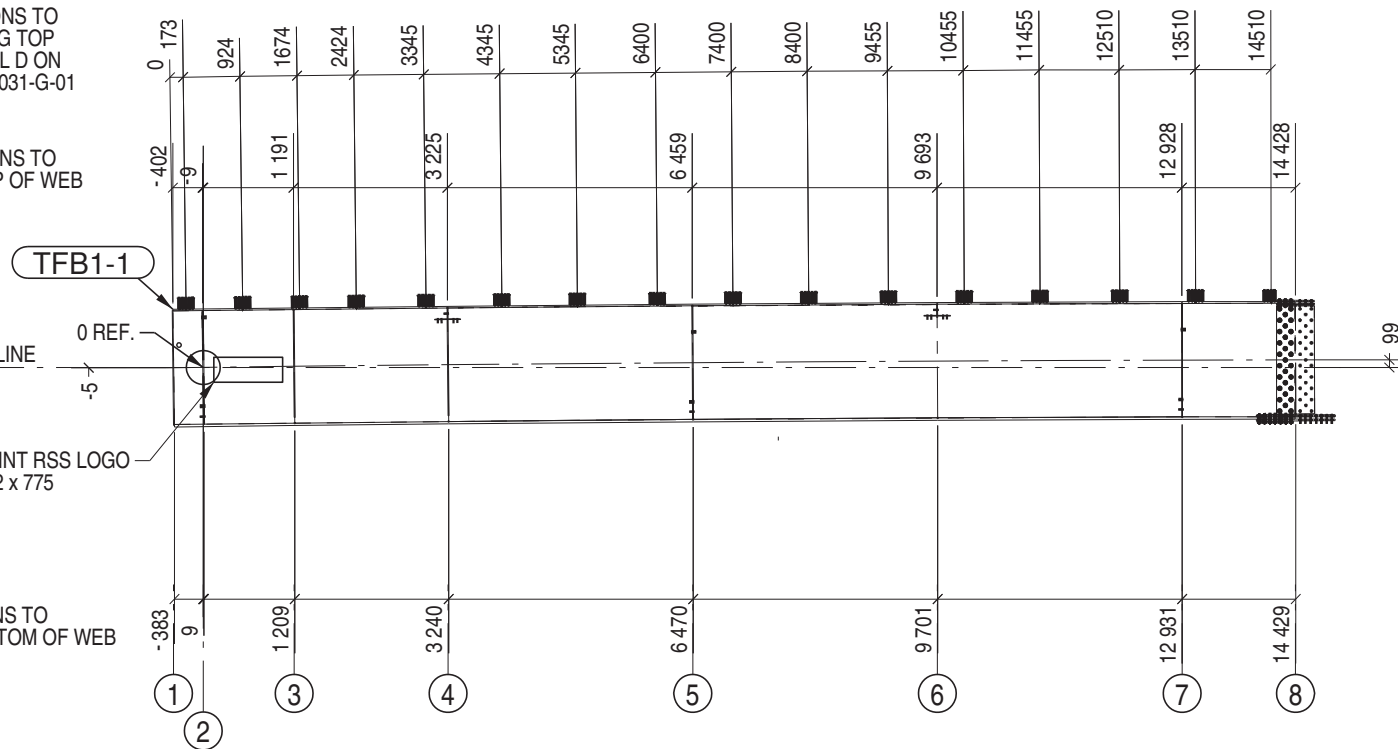
RUNNING DIMENSIONS TO
STUD GROUP ALONG TOP
FLANGE. SEE DETAIL D ON
DRAWING NUMBER 031-G-01

RUNNING DIMENSIONS TO
STIFFENERS AT TOP OF WEB

HORIZONTAL WORK LINE

PAINT RSS LOGO
152 x 775

RUNNING DIMENSIONS TO
STIFFENERS AT BOTTOM OF WEB



GIRDER B1 ELEVATION
1:100

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION OR NAME	SIZE	WT.LBS. TOTAL
GB1	1	GIRDER	480 x 1664 x 15343	12115.1

BFB1-1	1	BOTTOM FLANGE PLATE	31.8 x 480 x 14808	3911.7
TFB1-1	1	TOP FLANGE PLATE	22.2 x 360 x 14825	2050.5
WB1-1	1	CAMBERED WEB PLATE	12.7 x 1500 x 14808	4884.2
PL1	1	TOP O/S FLANGE SPLICE PLATE	15.9 x 360 x 500	49.5
PL2	2	TOP I/S FLANGE SPLICE PLATE	15.9 x 160 x 500	44.0
PL3	1	BEARING STIFFENER	15.9 x 170 x 1500	70.0
PL4	1	END DIAPHRAGM STIFFENER	15.9 x 185 x 1500	76.2
PL6	1	BOTTOM O/S FLANGE SPLICE PLATE	22.2 x 480 x 1040	191.8
PL7	2	BOTTOM I/S FLANGE SPLICE PLATE	22.2 x 220 x 1040	175.8
PL8	2	WEB SPLICE PLATE	9.5 x 500 x 1430	235.1
PL9	1	WEB STIFFENER	9.5 x 175 x 175	5.0
PL10	1	INTERMEDIATE DIAPHRAGM STIFFENER	9.5 x 185 x 1500	45.5
PL12	2	LATERAL BRACE GUSSET	9.5 x 165 x 180	9.6
PL13	2	LATERAL BRACE GUSSET	9.5 x 170 x 180	9.9
PL15	1	END PLATE	9.5 x 300 x 1520	71.4
PL16	1	WEB STIFFENER	12.7 x 127 x 1425	39.7
PL17	1	WEB STIFFENER	12.7 x 175 x 1425	54.7
PL19	1	INTERMEDIATE DIAPHRAGM STIFFENER	12.7 x 185 x 1500	60.9
78S6	111	ASTM A108 STUD	7/8" DIA. x 6" LONG	129.7

NOTE: ALL DIMENSIONS AT ABUTMENT
IS TO I/S END PLATES. DIMENSIONS AT
SPLICE IS TO CENTER OF SPLICE.

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK



www.rapidspan.com

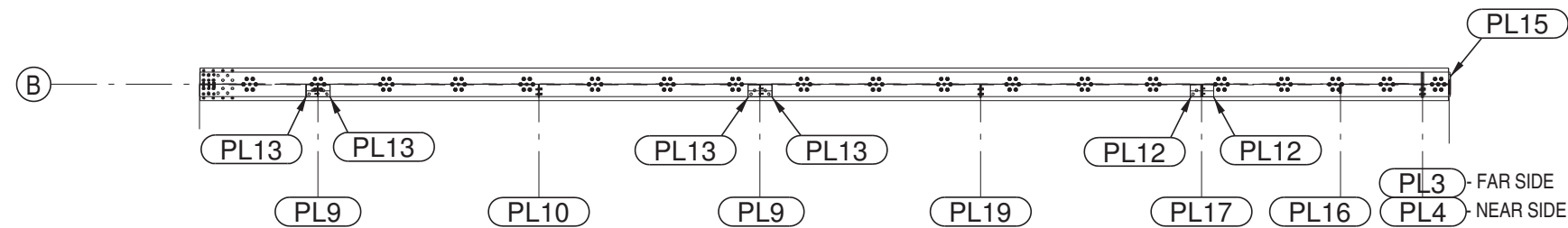
1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

PROJECT: MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE: GIRDER B1 LAYOUT				
ENGINEERED BY: P.J. KING	DRAWN BY: RON RIEMENS	JOB No: 7502	DRAWING No: 030-GB1-01	REV 0



GIRDER B2 PLAN
1:100

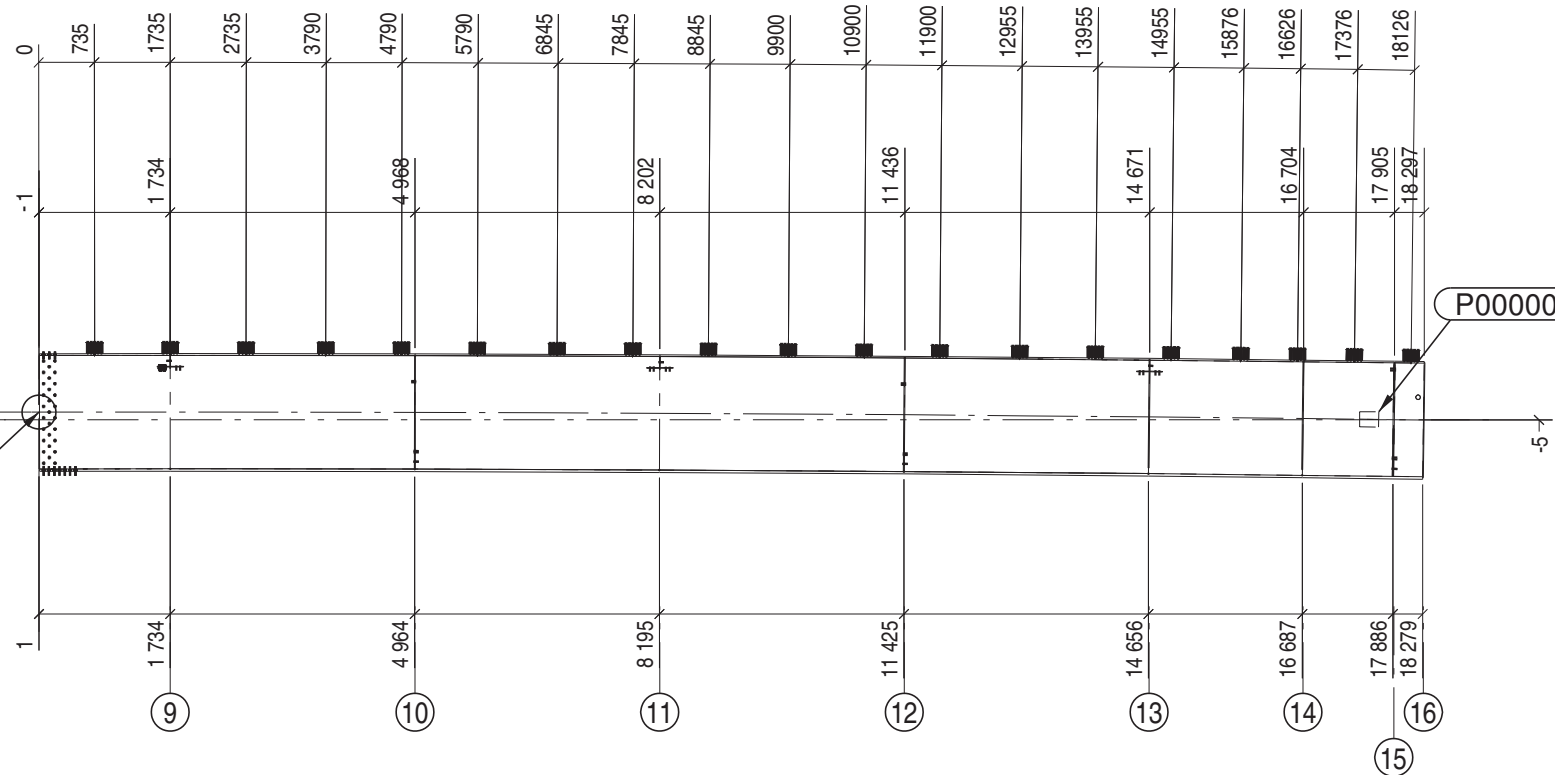
RUNNING DIMENSIONS TO
STUD GROUP ALONG TOP
FLANGE. SEE DETAIL D ON
DRAWING NUMBER 031-G-01

RUNNING DIMENSIONS TO
STIFFENERS AT TOP OF WEB

HORIZONTAL WORK LINE

0 REF.

RUNNING DIMENSIONS TO
STIFFENERS AT BOTTOM OF WEB



GIRDER B2 ELEVATION
1:100

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION OR NAME	SIZE	WT.LBS. TOTAL
GB2	1	GIRDER	480 x 1670 x 18303	13997.9

BFB2-1	1	BOTTOM FLANGE PLATE	31.8 x 480 x 18273	4827.0
TFB2-1	1	TOP FLANGE PLATE	22.2 x 360 x 18294	2530.3
WB2-1	1	CAMBERED WEB PLATE	12.7 x 1500 x 18273	6027.2
P0000028	1	IDENTIFICATION PLAQUE	200 x 250	0.3
PL3	1	BEARING STIFFENER	15.9 x 170 x 1500	70.0
PL4	1	END DIAPHRAGM STIFFENER	15.9 x 185 x 1500	76.2
PL9	2	WEB STIFFENER	9.5 x 175 x 175	10.0
PL10	1	INTERMEDIATE DIAPHRAGM STIFFENER	9.5 x 185 x 1500	45.5
PL12	2	LATERAL BRACE GUSSET	9.5 x 165 x 180	9.6
PL13	4	LATERAL BRACE GUSSET	9.5 x 170 x 180	19.8
PL15	1	END PLATE	9.5 x 300 x 1520	71.4
PL16	1	WEB STIFFENER	12.7 x 127 x 1425	39.7
PL17	1	WEB STIFFENER	12.7 x 175 x 1425	54.7
PL19	1	INTERMEDIATE DIAPHRAGM STIFFENER	12.7 x 185 x 1500	60.9
78S6	133	ASTM A108 STUD	7/8" DIA. x 6" LONG	155.4

L100
MAY 2017

NOTE: ALL DIMENSIONS AT ABUTMENT
IS TO I/S END PLATES. DIMENSIONS AT
SPLICE IS TO CENTER OF SPLICE.

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK



www.rapidspan.com

1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

PROJECT:

MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE:

GIRDER B2 LAYOUT

ENGINEERED BY:

P.J. KING

DRAWN BY:

RON RIEMENS

JOB No:

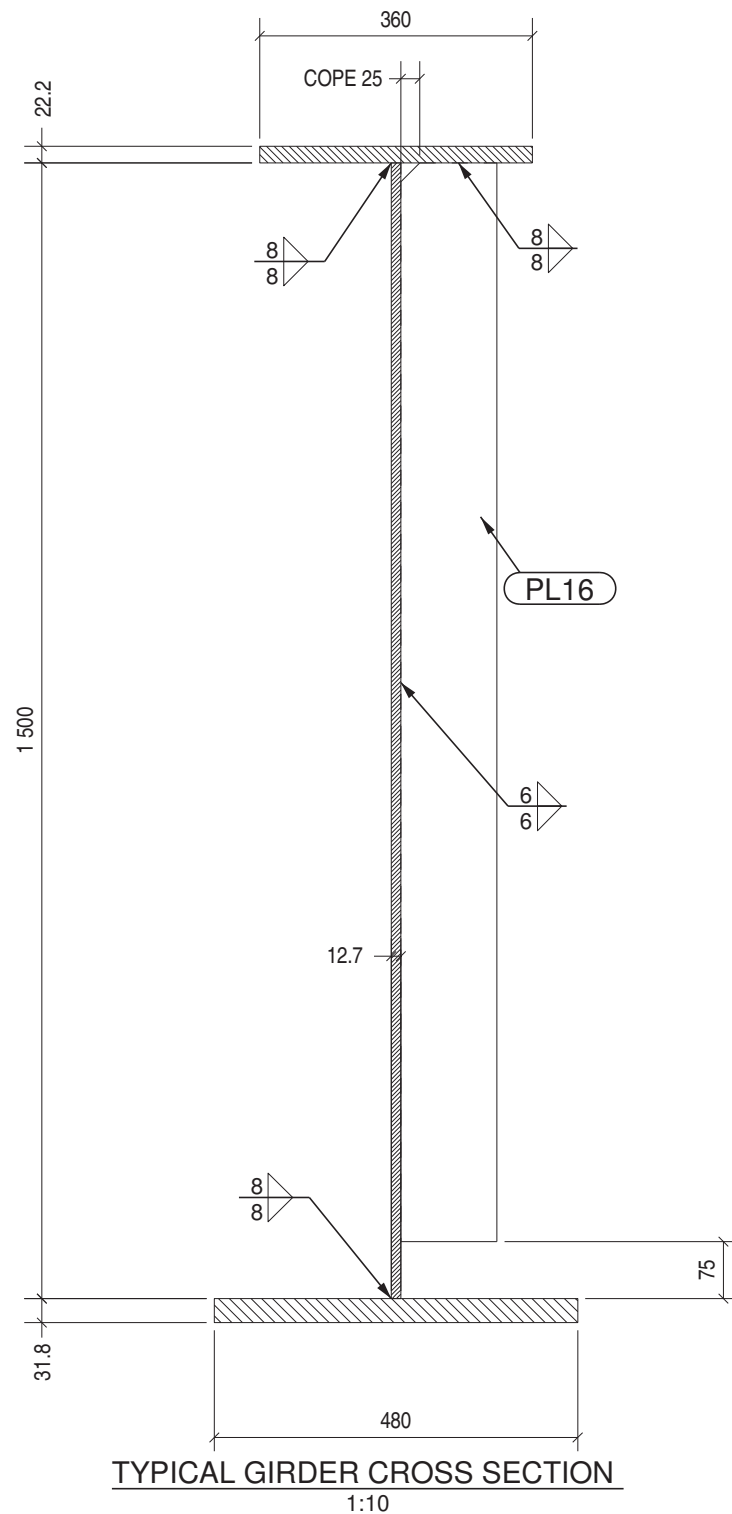
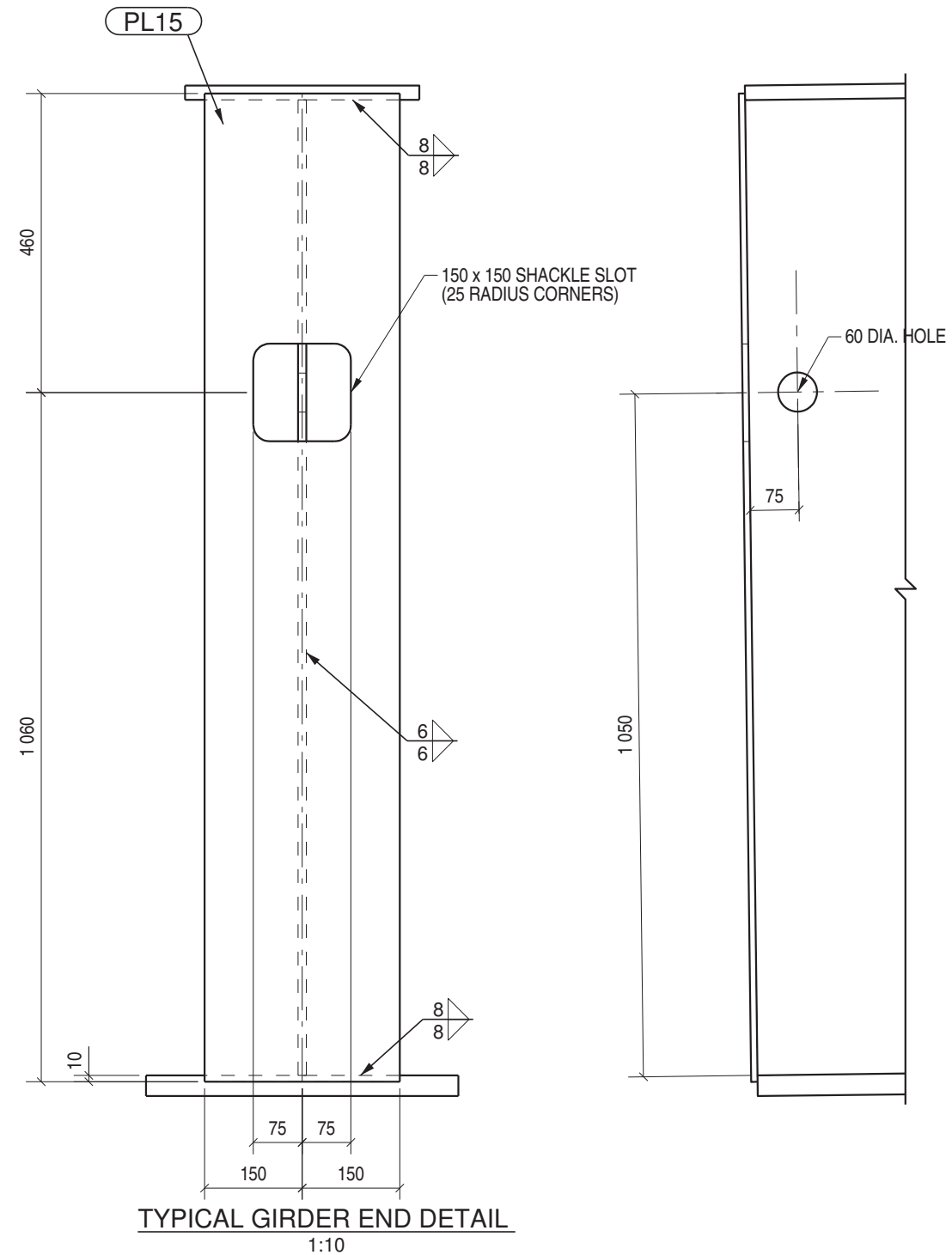
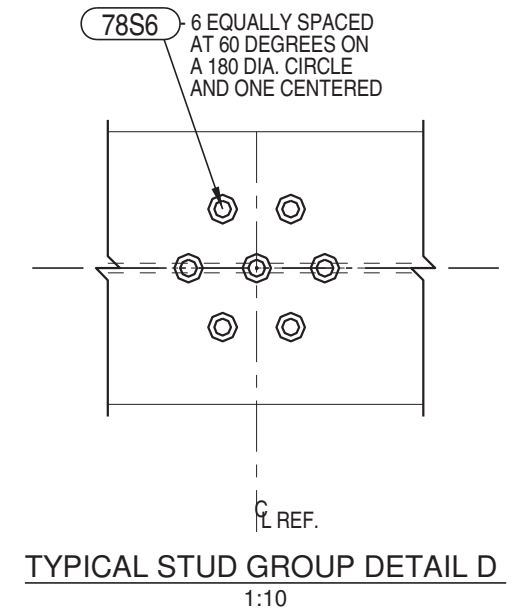
7502

DRAWING No:

030-GB2-01

REV

0



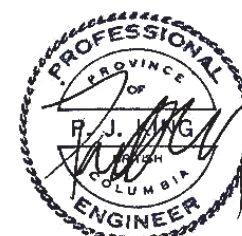
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK
REV	DATE	DESCRIPTION	DRAWN	CHK



www.rapidspan.com

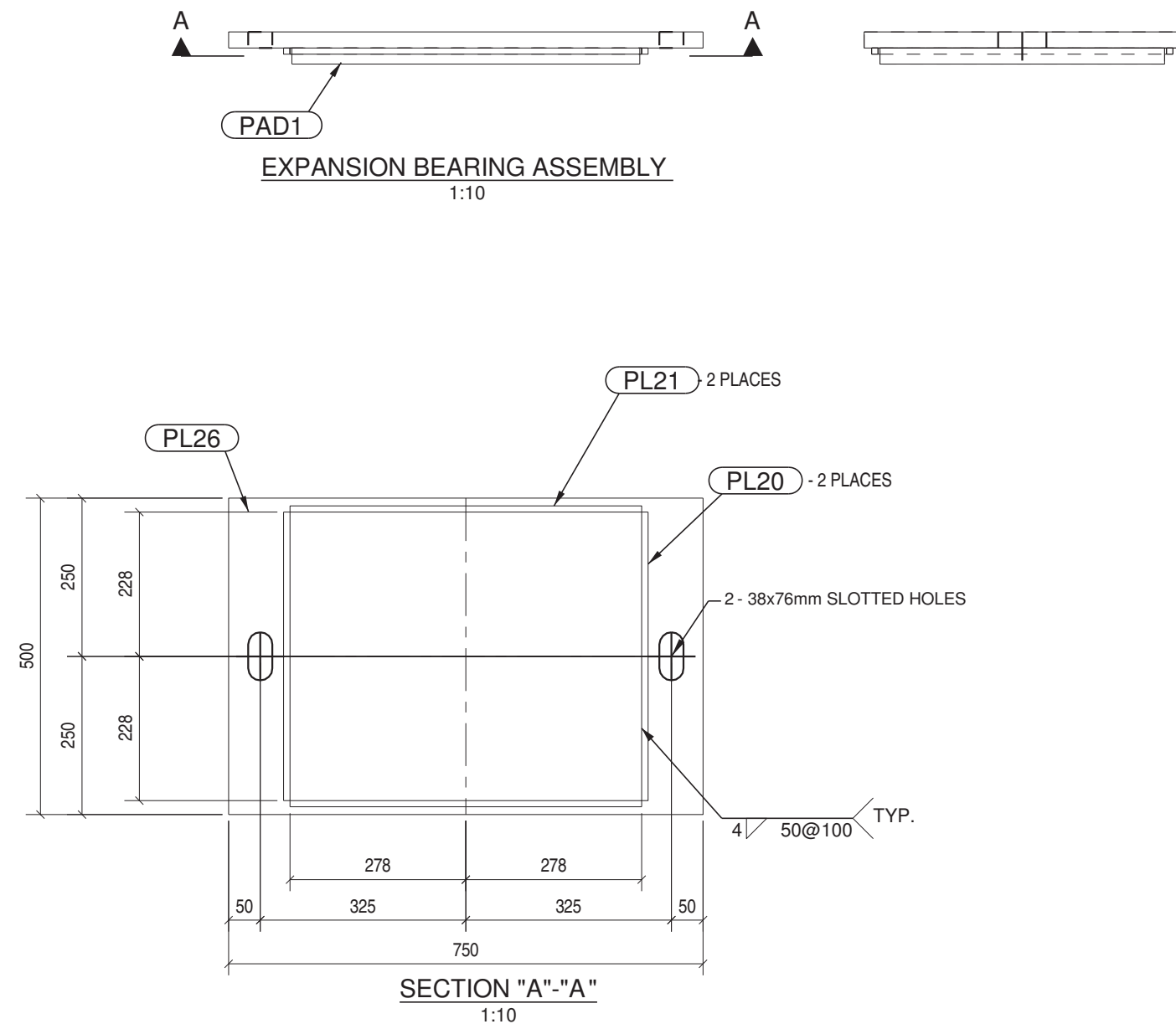
1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

PROJECT:				
MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE:				
GIRDER DETAILS				
ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
P.J. KING	RON RIEMENS	7502	031-G-01	0



BILL OF MATERIALS - JOB # 7502				
ITEM	QTY	DESCRIPTION OR NAME	SIZE	WT.LBS. TOTAL
BA1	4	BEARING ASSEMBLY	51 x 500 x 750	733.7
PAD1	4	RUBBER BEARING PAD	25.4 x 450 x 550	61.0
PL20	8	KEEPER BAR	9.5 x 10 x 456	6.0
PL21	8	KEEPER BAR	9.5 x 10 x 556	7.3
PL26	4	BASE PLATE	25.4 x 500 x 750	659.4

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR	
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA
A	MAY 24, 2017	PRELIMINARY	RR	PK

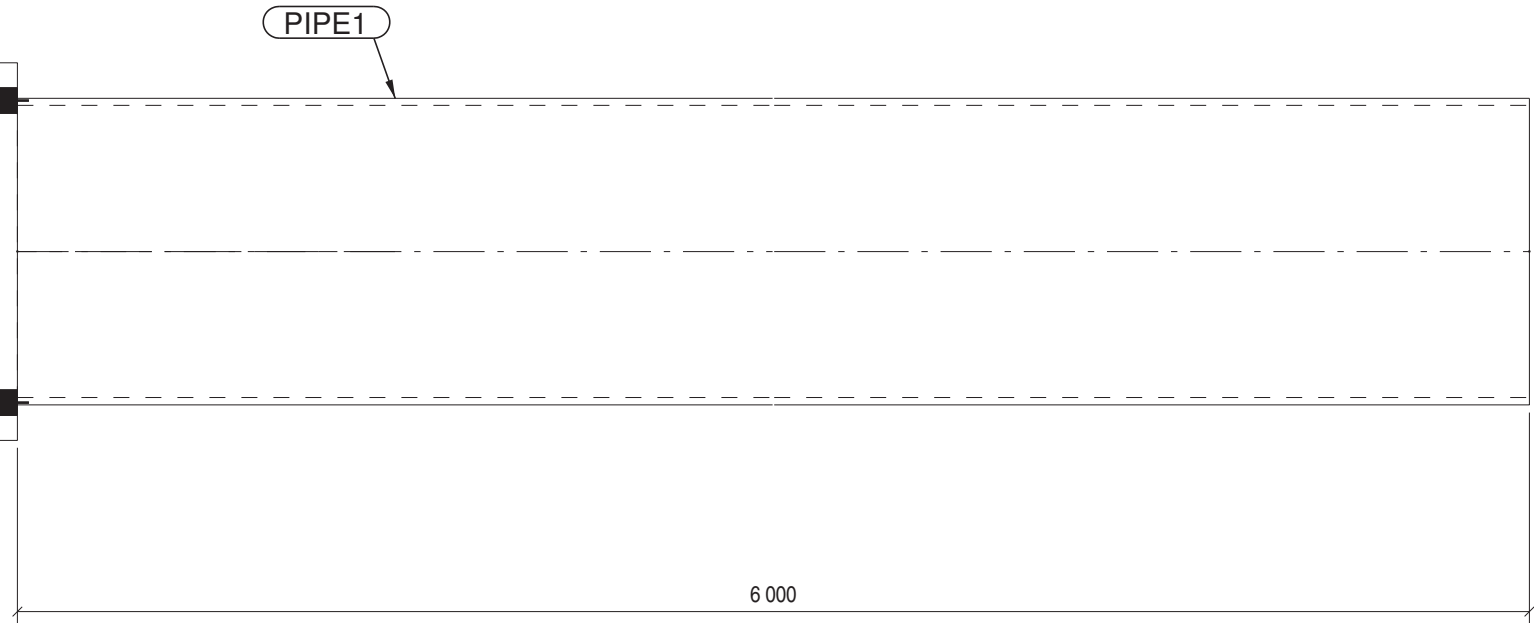


www.rapidspan.com 1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

PROJECT: MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE: EXPANSION BEARING ASSEMBLY				
ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
	RON RIEMENS	7502	040-BA2-01	0

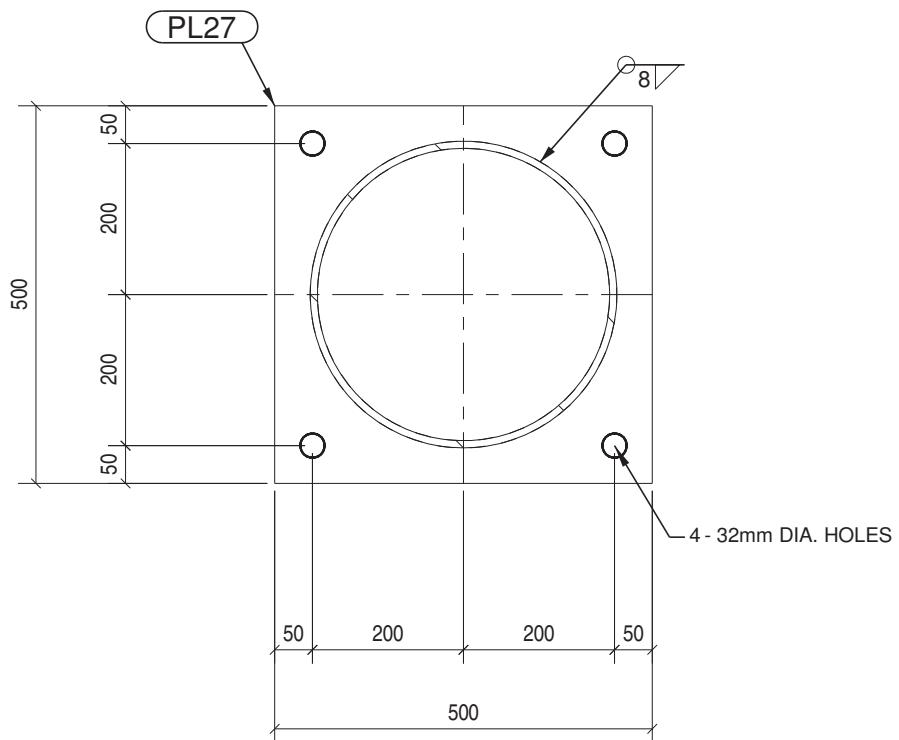
PIPE1



STEEL BENT COLUMN WELDMENT DETAIL

1:10

PL27



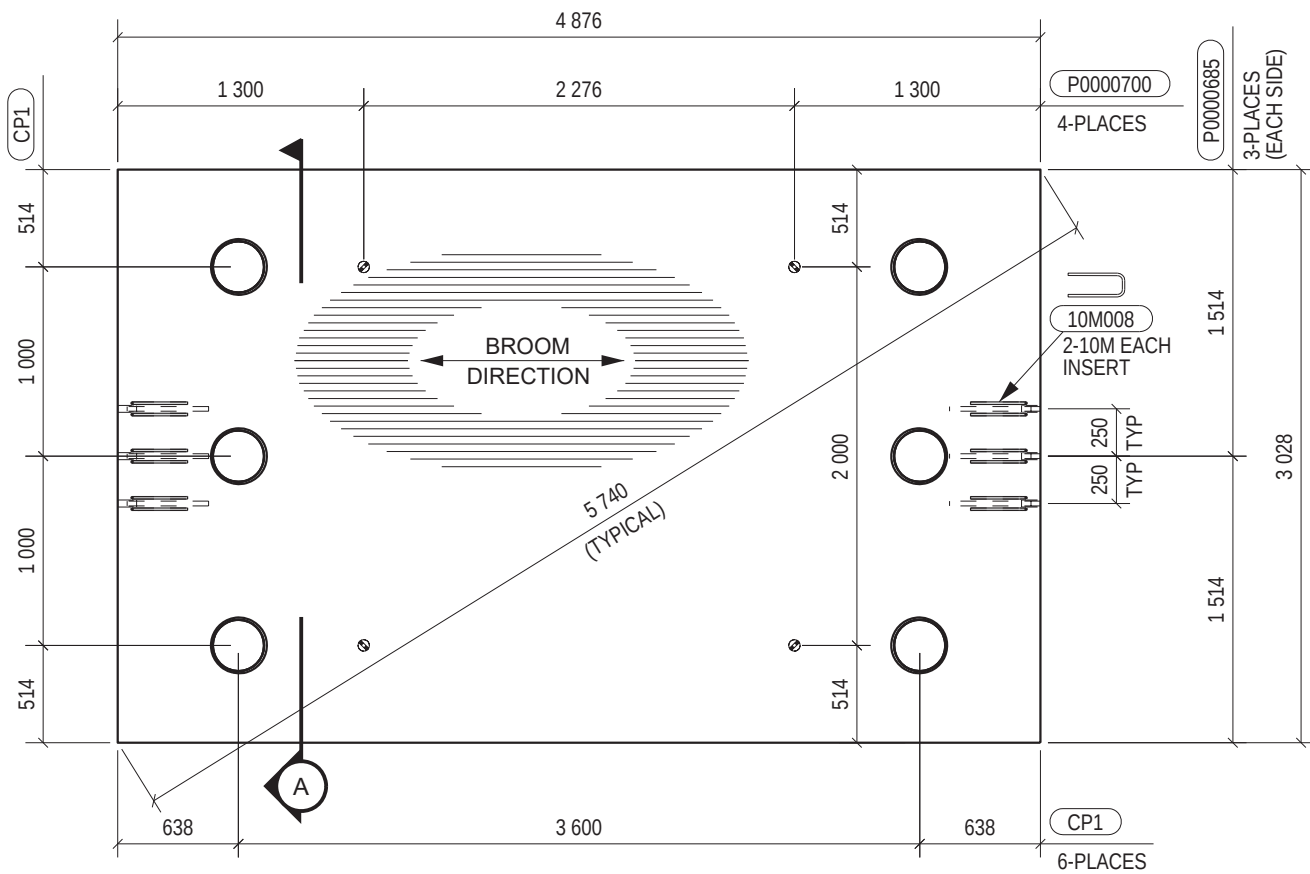
4 - 32mm DIA. HOLES

BILL OF MATERIALS - JOB # 7502

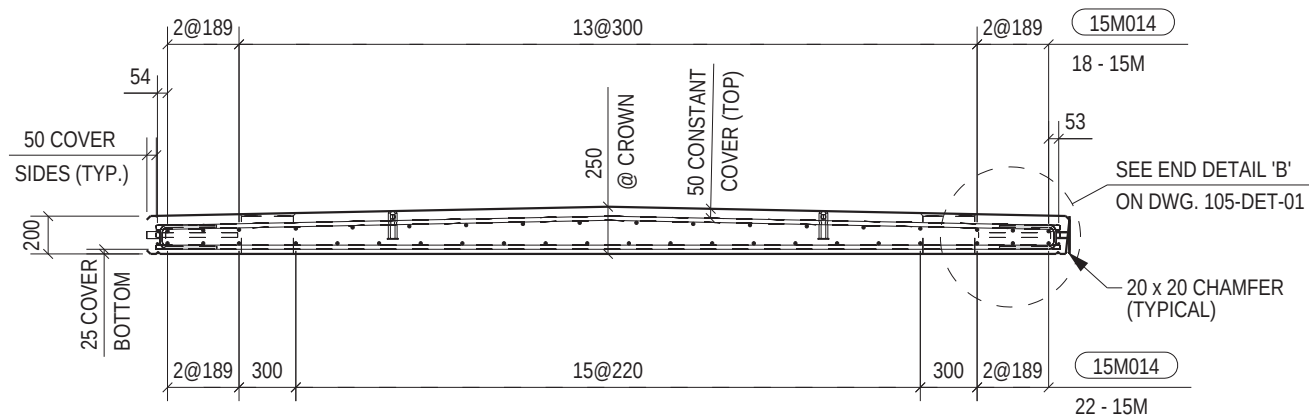
ITEM	QTY	DESCRIPTION OR NAME	SIZE	WT.LBS. TOTAL
SBCW1	4	STEEL BENT COLUMN WELDMENT	500 x 500 x 6025	4111.3

PIPE1	4	STEEL BENT COLUMN	PIPE406 O.D. x 9.5 x 6000	3671.7
PL27	4	STEEL BENT BASE PLATE	25.4 x 500 x 500	439.6

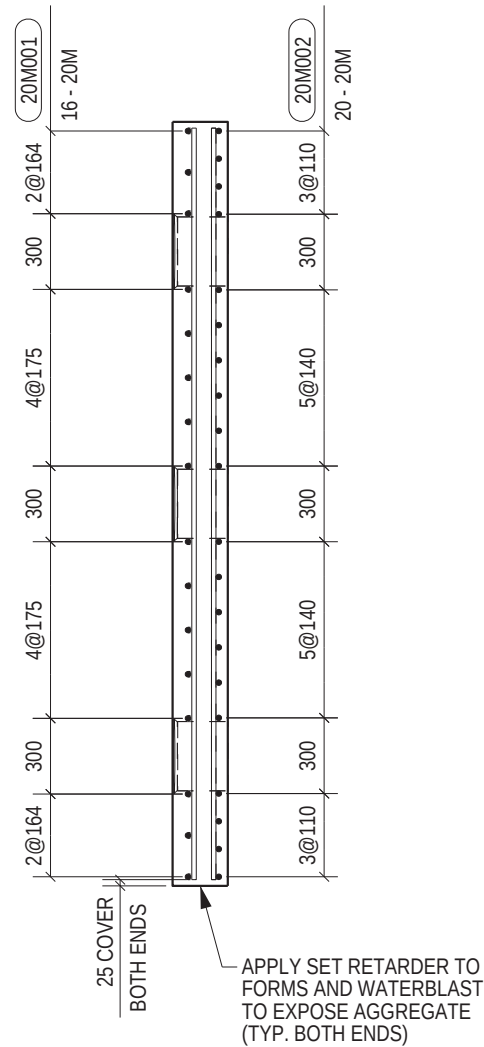
						<div><div><div><div>www.rapidspan.com</div><div>1-800-661-2047</div></div></div><div>NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.</div></div>	<div>PROJECT:</div> <div>MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE</div> <div>TITLE:</div> <div>STEEL BENT COLUMN WELDMENT</div> <div><div>ENGINEERED BY:</div><div>DRAWN BY:</div><div>JOB No:</div><div>DRAWING No:</div><div>REV</div></div> <div><div></div><div>RON RIEMENS</div><div>7502</div><div>042-SBCW1-01</div><div><div>0</div></div></div>				
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	RR								
B	JUN 01, 2017	ISSUED FOR APPROVAL	RR	DA							
A	MAY 24, 2017	PRELIMINARY	RR	PK							
REV	DATE	DESCRIPTION	DRAWN	CHK							



PLAN VIEW
1:40



ELEVATION
1:40



SECTION A
1:30

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION		SIZE	MIX	VOL. CU. M.	WT LBS EA
B	7	INTERMEDIATE DECK PANEL B		4876 x 250 x 3028	108.0	3.24 EA.	17521
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE	LENGTH	WT LBS ONE	
10M008	12	84	FORMED REBAR - SEE DETAIL	10M	671	13.9	
10M009	4	28	REBAR	10M	2978	20.6	
15M014	40	280	REBAR	15M	2978	412.3	
20M001	16	112	FORMED REBAR - SEE DETAIL	20M	4775	396.6	
20M002	20	140	REBAR	20M	4776	495.9	
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE		WT LBS ONE	
CP1	6	42	CORRUGATED PIPE 10" GALV	250 DIA. x 200 LONG		27.8	
P0000685	6	42	COUPLER 1" HDG C/W 25M x 430 LG REBAR	1"Ø x 19" LONG		26.7	
P0000700	4	28	DAYTON LIFTING ANCHOR FL509 HDG	SEE DETAIL		8.8	

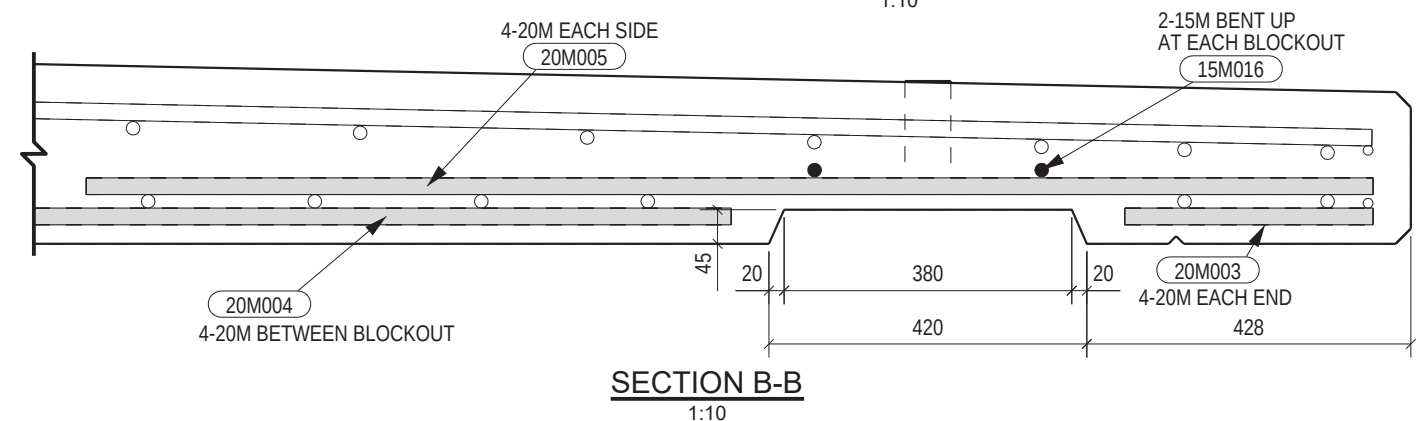
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF
REV	DATE	DESCRIPTION	DRAWN	CHK



NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY. NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

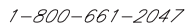


PROJECT:	MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE:	INTERMEDIATE DECK PANEL B				
ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV	
P.J. KING	J KASHUBA	7502	100-B-01	0	



BILL OF MATERIALS - JOB # 7502						
ITEM	QTY	DESCRIPTION	SIZE	MIX	VOL. CU. M.	WT LBS EA
C	1	INTERMEDIATE DECK PANEL C	4876 x 250 x 3028	108.0	3.23 EA.	17438
ITEM	QTY	DESCRIPTION	SIZE	LENGTH	WT LBS TOTAL	
10M008	12	FORMED REBAR - SEE DETAIL	10M	671	13.9	
10M009	4	REBAR	10M	2978	20.6	
15M014	36	REBAR	15M	2978	371.0	
15M016	4	FORMED REBAR - SEE DETAIL	15M	2994	41.4	
20M001	16	FORMED REBAR - SEE DETAIL	20M	4775	396.6	
20M002	16	REBAR	20M	4776	396.7	
20M003	4	REBAR	20M	328	6.8	
20M004	4	REBAR	20M	3080	64.0	
20M005	8	REBAR	20M	1700	70.6	
20M021	4	REBAR	20M	328	6.8	
ITEM	QTY	DESCRIPTION	SIZE		WT LBS TOTAL	
CP1	6	CORRUGATED PIPE 10" GALV	250 DIA. x 200 LONG		27.8	
P0000685	6	COUPLER 1" HDG C/W 25M x 430 LG REBAR	1"Ø x 19" LONG		26.7	
P0000700	4	DAYTON LIFTING ANCHOR FL509 HDG	SEE DETAIL		8.8	
PVC1	2	PVC PIPE	53 ID x 170		3.9	

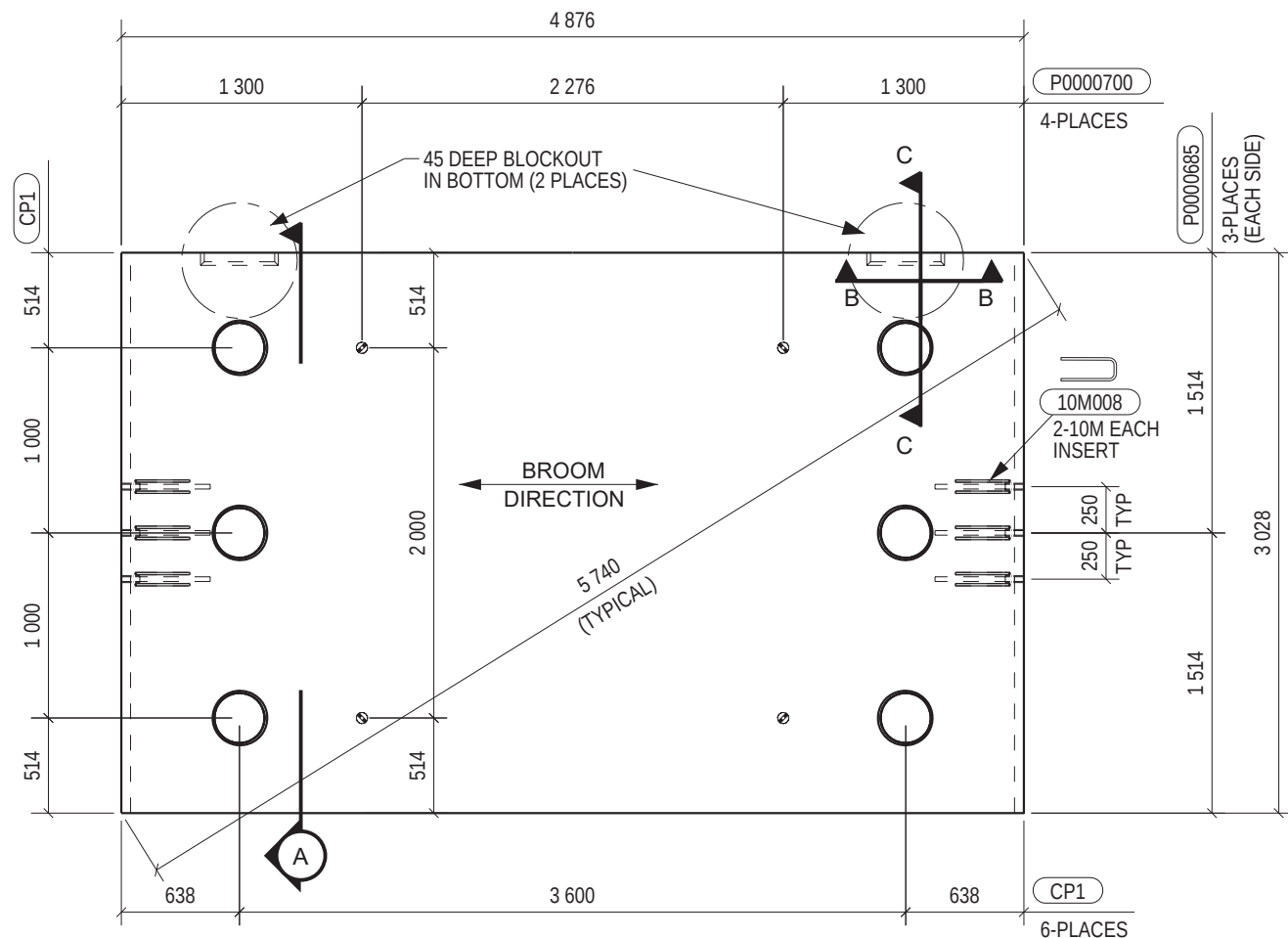
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF
REV	DATE	DESCRIPTION	DRAWN	CHK



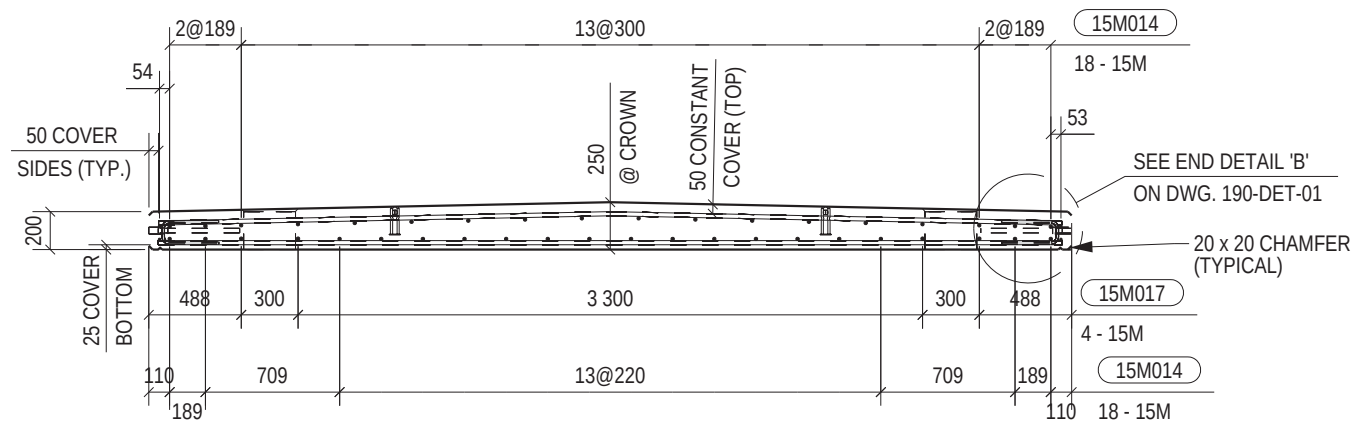
Jun. 13, 2017

PROJECT:	MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE
TITLE:	INTERMEDIATE DECK PANEL C

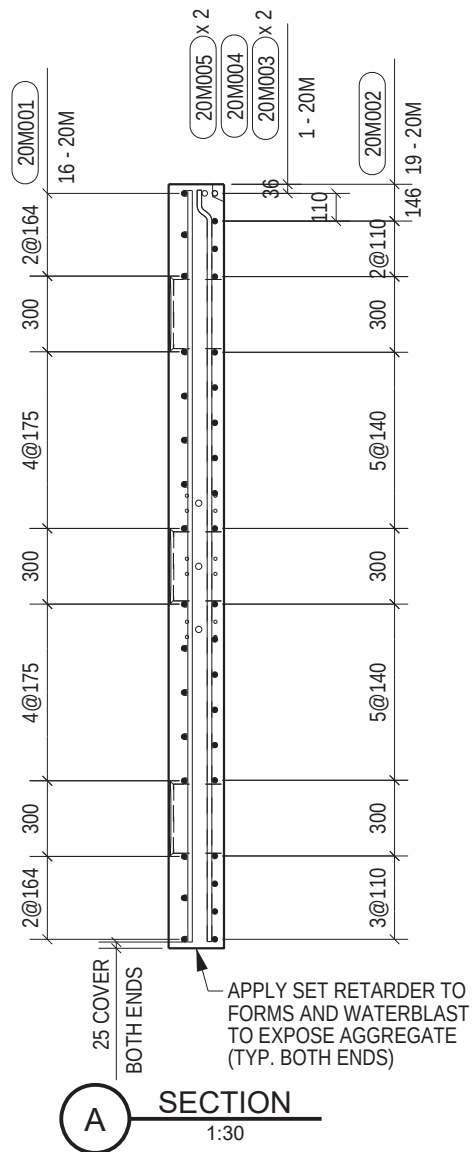
ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
P.J. KING	J KASHUBA	7502	100-C-01	



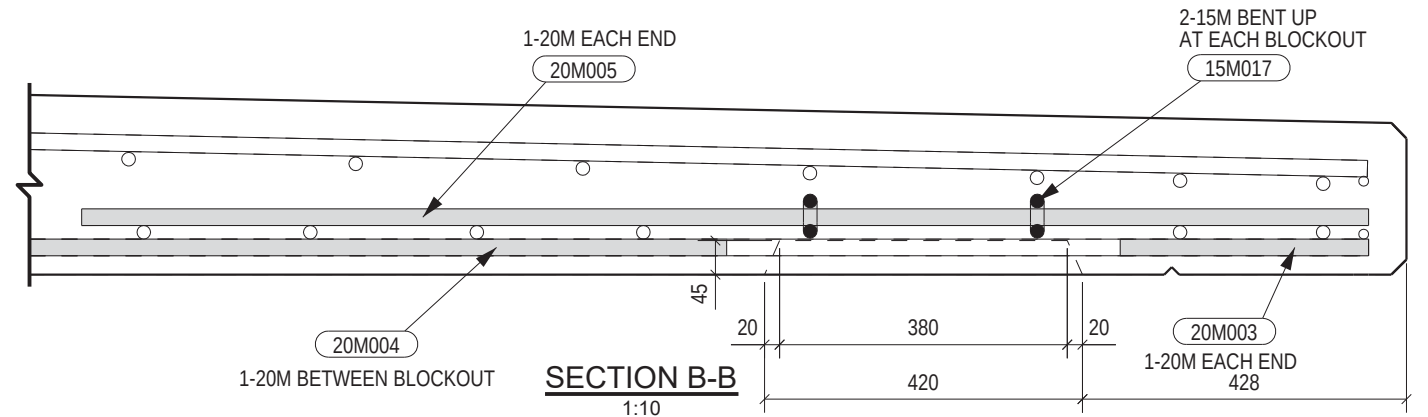
PLAN VIEW
1:40



ELEVATION
1:40



SECTION A
1:30



SECTION B-B
1:10

SECTION C-C
1:10

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION	SIZE	MIX	VOL. CU. M.	WT LBS EA
D	1	INTERMEDIATE DECK PANEL D	4876 x 250 x 3028	108.0	3.24 EA.	17510
ITEM	QTY	DESCRIPTION	SIZE	LENGTH	WT LBS TOTAL	
10M008	12	FORMED REBAR - SEE DETAIL	10M	671	13.9	
10M009	4	REBAR	10M	2978	20.6	
15M014	36	REBAR	15M	2978	371.0	
15M017	4	FORMED REBAR - SEE DETAIL	15M	2994	41.4	
20M001	16	FORMED REBAR - SEE DETAIL	20M	4775	396.6	
20M002	19	REBAR	20M	4776	471.1	
20M003	2	REBAR	20M	328	3.4	
20M004	1	REBAR	20M	3080	16.0	
20M005	2	REBAR	20M	1700	17.7	
ITEM	QTY	DESCRIPTION	SIZE		WT LBS TOTAL	
CP1	6	CORRUGATED PIPE 10" GALV	250 DIA. x 200 LONG		27.8	
P0000685	6	COUPLER 1" HDG C/W 25M x 430 LG REBAR	1"Ø x 19" LONG		26.7	
P0000700	4	DAYTON LIFTING ANCHOR FL509 HDG	SEE DETAIL		8.8	

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF



www.rapidspan.com

1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



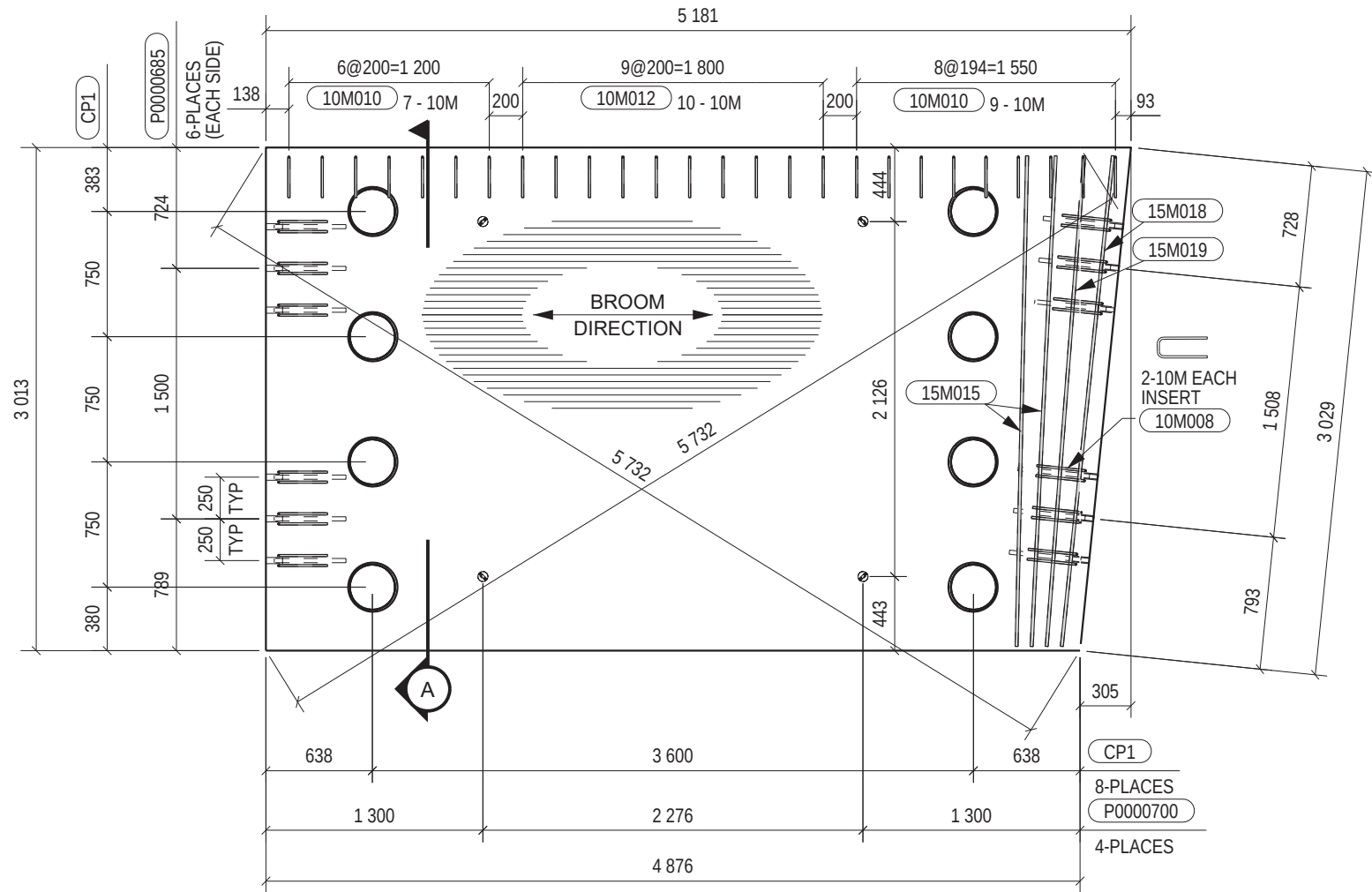
Jun. 13, 2017

PROJECT: MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE: INTERMEDIATE DECK PANEL D				
ENGINEERED BY: P.J. KING	DRAWN BY: J KASHUBA	JOB No: 7502	DRAWING No: 100-D-01	REV 0

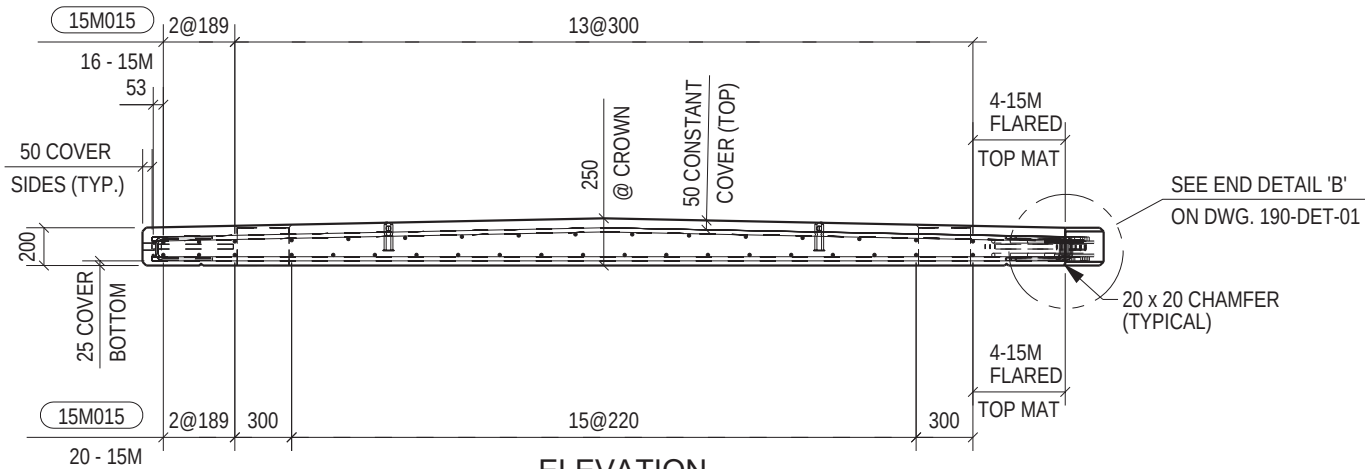
QTY ONE	QTY ALL	LENGTH
1	1	4780
1	1	4790
1	1	4800
1	1	4831
1	1	4840
1	1	4849
1	1	4858
1	1	4868
1	1	4877
1	1	4908
1	1	4917
1	1	4926
1	1	4935
1	1	4945
1	1	4954
1	1	4985
1	1	4993
1	1	5000
1	1	5008
1	1	5016
1	1	5023
1	1	5031
1	1	5062
1	1	5066
1	1	5071
1	1	5075
1	1	5080

QTY ONE	QTY ALL	LENGTH
1	1	4778
1	1	4788
1	1	4798
1	1	4829
1	1	4845
1	1	4860
1	1	4875
1	1	4906
1	1	4918
1	1	4929
1	1	4941
1	1	4953
1	1	4983
1	1	4990
1	1	4997
1	1	5003
1	1	5010
1	1	5017
1	1	5023

25M007		
QTY ONE	QTY ALL	LENGTH
1	1	5060
1	1	5066
1	1	5072
1	1	5078

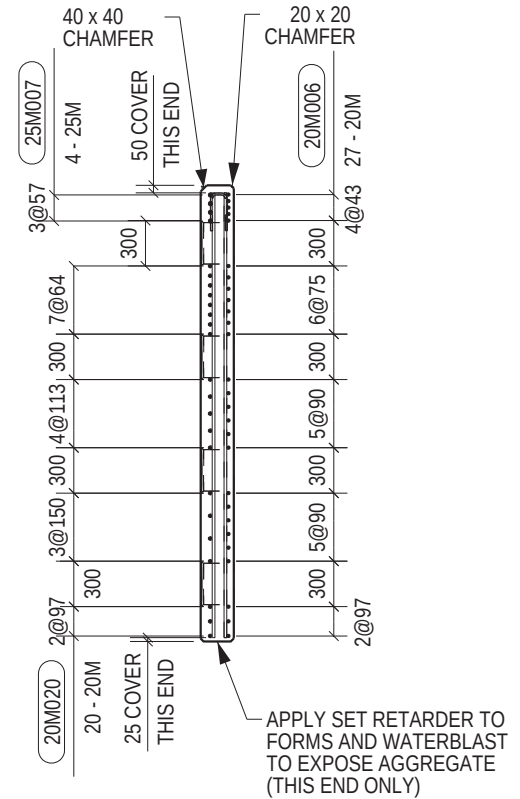


PLAN VIEW
1:40



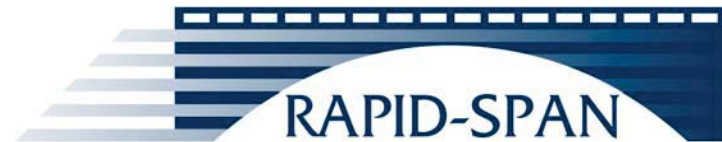
ELEVATION
1:40

ITEM	QTY	DESCRIPTION	SIZE	MIX	VOL. CU. M.	WT LBS EA
E	1	END DECK PANEL E	5181 x 250 x 3013	108.0	3.29 EA.	17773
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE	LENGTH	WT LBS ONE
10M008	24	24	FORMED REBAR - SEE DETAIL	10M	671	27.9
10M010	16	16	FORMED REBAR - SEE DETAIL	10M	556	15.4
10M011	2	2	REBAR	10M	2938	10.2
10M012	10	10	FORMED REBAR - SEE DETAIL	10M	576	10.0
10M013	2	2	REBAR	10M	2954	10.2
15M015	40	40	REBAR	15M	2938	406.8
15M018	2	2	REBAR	15M	2954	20.5
15M019	2	2	REBAR	15M	2947	20.4
20M006	27	27	REBAR - SEE TABLE	20M	VARIES	670.0
20M020	20	20	FORMED REBAR - SEE TABLE	20M	VARIES	496.2
25M007	4	4	FORMED REBAR - SEE TABLE	25M	VARIES	175.8
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE		WT LBS ONE
CP1	8	8	CORRUGATED PIPE 10" GALV	250 DIA. x 200 LONG		37.0
P0000685	12	12	COUPLER 1" HDG C/W 25M x 430 LG REBAR	1"Ø x 19" LONG		53.4
P0000700	4	4	DAYTON LIFTING ANCHOR FL509 HDG	SEE DETAIL		8.8



A SECTION
1:50

0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF
REV	DATE	DESCRIPTION	DRAWN	CHK



1-800-661-2047

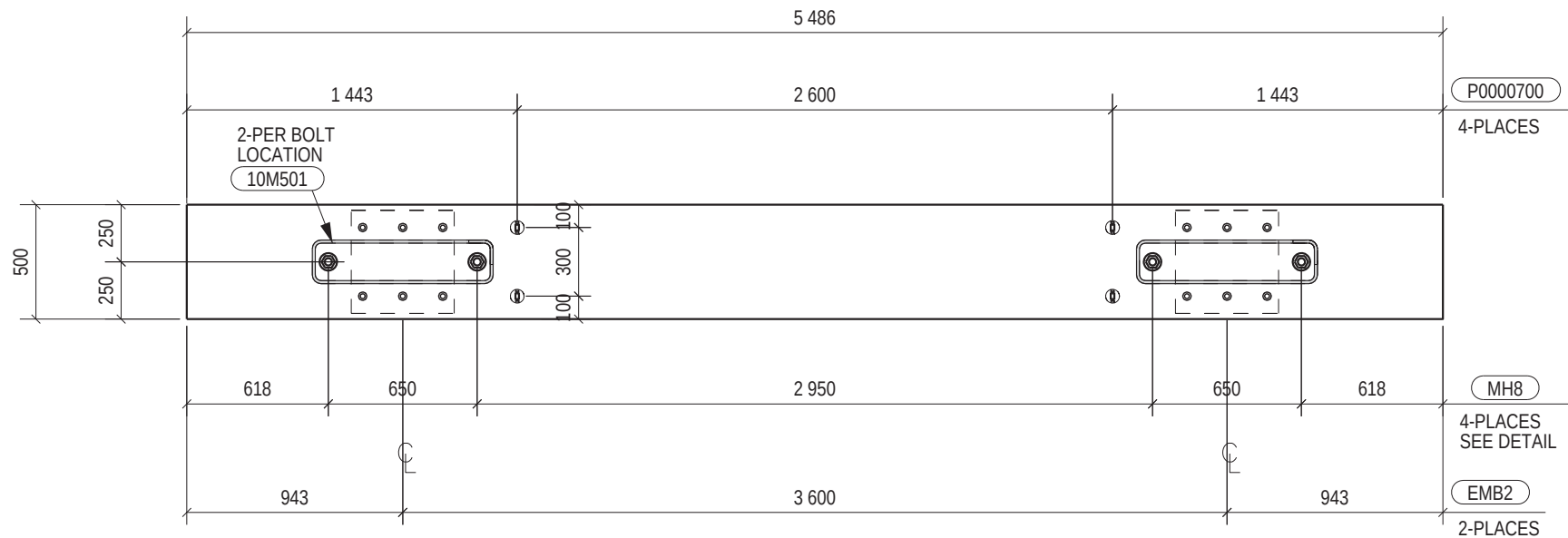
NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



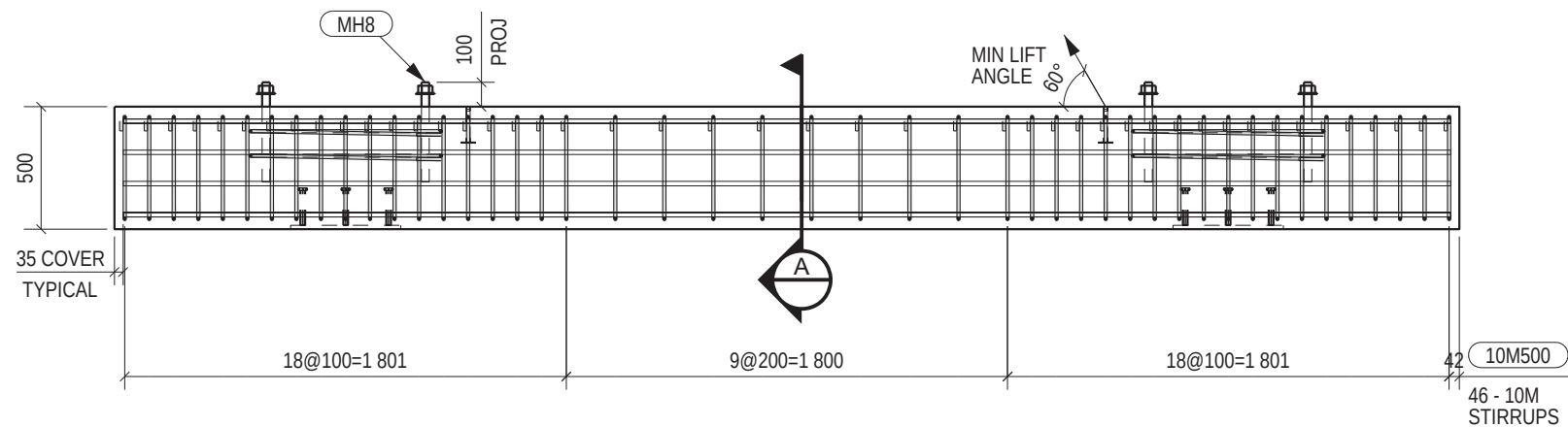
PROJECT: MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

END DECK PANEL E

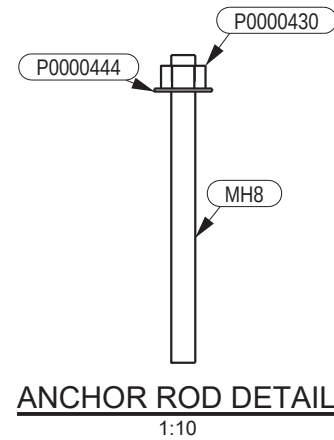
<u>ENGINEERED BY:</u>	<u>DRAWN BY:</u>	<u>JOB No:</u>	<u>DRAWING No:</u>	<u>REV</u>
P.J. KING	J KASHUBA	7502	100-E-01	



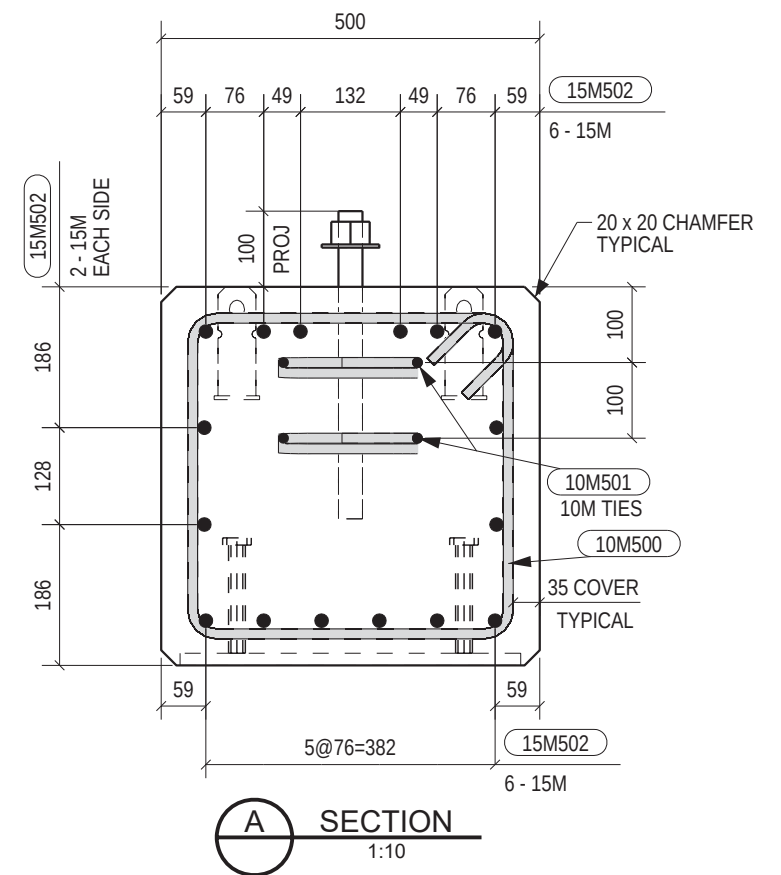
PLAN VIEW
1:30



ELEVATION
1:30



ANCHOR ROD DETAIL
1:10



SECTION A
1:10

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION	SIZE	MIX	VOL. CU. M.	WT LBS EA
CB	2	CAP BEAM	500 x 5486 x 500	108.0	1.37 EA.	7384
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE	LENGTH	WT LBS ONE
10M500	46	92	FORMED REBAR - SEE DETAIL	10M	1849	147.3
10M501	4	8	FORMED REBAR - SEE DETAIL	10M	2039	14.1
15M502	16	32	REBAR	15M	5416	299.9
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE		WT LBS ONE
EMB2	2	4	EMBEDDED PLATE	15.9 x 450 x 450		111.4
MH8	4	8	ASTM 193 GR B7 THREADED ROD HDG	1 1/4" x 16" LONG		21.3
P0000430	4	8	ASTM A194 HEAVY HEX NUT HDG	1 1/4" DIA		2.8
P0000444	4	8	ASTM F436 WASHER HDG	1 1/4" DIA		1.0
P0000700	4	8	DAYTON LIFTING ANCHOR FL509 HDG	SEE DETAIL		8.8

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF



NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



<div>PROJECT:</div> <div>MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE</div>				
<div>TITLE:</div> <div>CAP BEAM</div>				
<div>ENGINEERED BY:</div> <div>P.J. KING</div>	<div>DRAWN BY:</div> <div>J KASHUBA</div>	<div>JOB No:</div> <div>7502</div>	<div>DRAWING No:</div> <div>140-CB-01</div>	<div>REV</div> <div>0</div>

15M303

QTY ONE	QTY ALL	LENGTH
4	4	579
4	4	744
4	4	908
4	4	1073
4	4	1238
4	4	1402
4	4	1567
42	42	1709
4	4	1732
4	4	1896
2	2	1933
10	10	1934

15M304

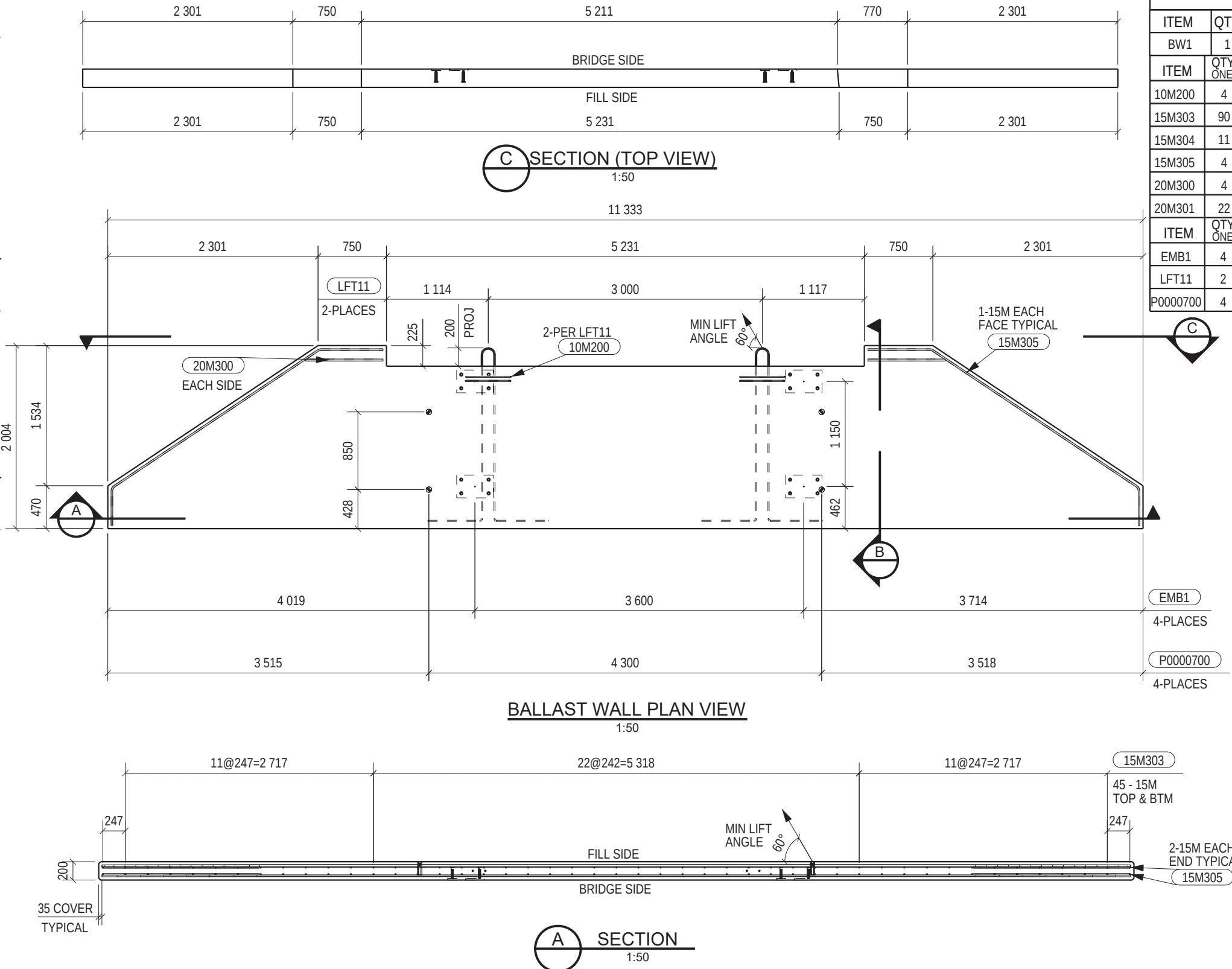
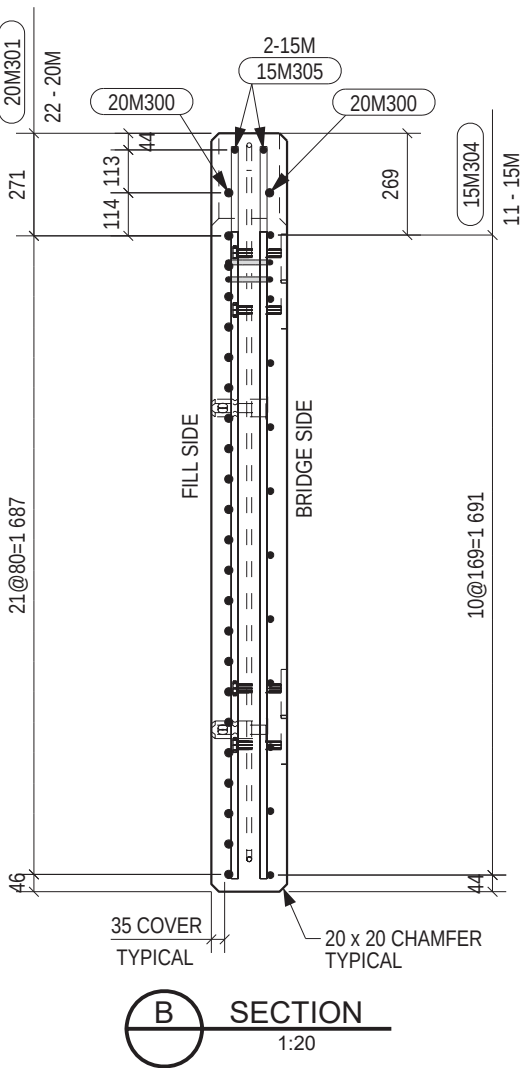
QTY ONE	QTY ALL	LENGTH
1	1	7354
1	1	7871
1	1	8388
1	1	8904
1	1	9411
1	1	9918
1	1	10424
1	1	10931
3	3	11263

20M301

QTY ONE	QTY ALL	LENGTH
1	1	7380
1	1	7618
1	1	7835
1	1	8070
1	1	8348
1	1	8589
1	1	8827
1	1	9069
1	1	9313
1	1	9551
1	1	9789
1	1	10030
1	1	10276
1	1	10521
1	1	10760
1	1	11002
1	1	11201
1	1	11259
4	4	11263

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION		SIZE	MIX	VOL. CU. M.	WT LBS EA
BW1	1	BALLAST WALL TYPE 1		2004 x 11333 x 200	108.0	3.59 EA.	19396
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE	LENGTH	WT LBS ONE	
10M200	4	4	FORMED REBAR - SEE DETAIL	10M	1066	7.4	
15M303	90	90	REBAR - SEE TABLE	15M	VARIES	180.4	
15M304	11	11	REBAR - SEE TABLE	15M	VARIES	428.8	
15M305	4	4	FORMED REBAR - SEE DETAIL	15M	3830	53.0	
20M300	4	4	REBAR	20M	846	17.6	
20M301	22	22	REBAR - SEE TABLE	20M	VARIES	1286.5	
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE			WT LBS ONE
EMB1	4	4	EMBEDDED PLATE	15.9 x 250 x 400			109.9
LFT11	2	2	LIFTING	SEE DETAIL			20.7
P0000700	4	4	DAYTON LIFTING ANCHOR FL509 HDG	SEE DETAIL			8.8



REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF



www.rapidspan.com 1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.



Jun. 13, 2017

PROJECT: MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE: BALLAST WALL TYPE 1

ENGINEERED BY: P.J. KING	DRAWN BY: J KASHUBA	JOB No: 7502	DRAWING No: 150-BW1-01	REV 0
-----------------------------	------------------------	-----------------	---------------------------	----------

15M306

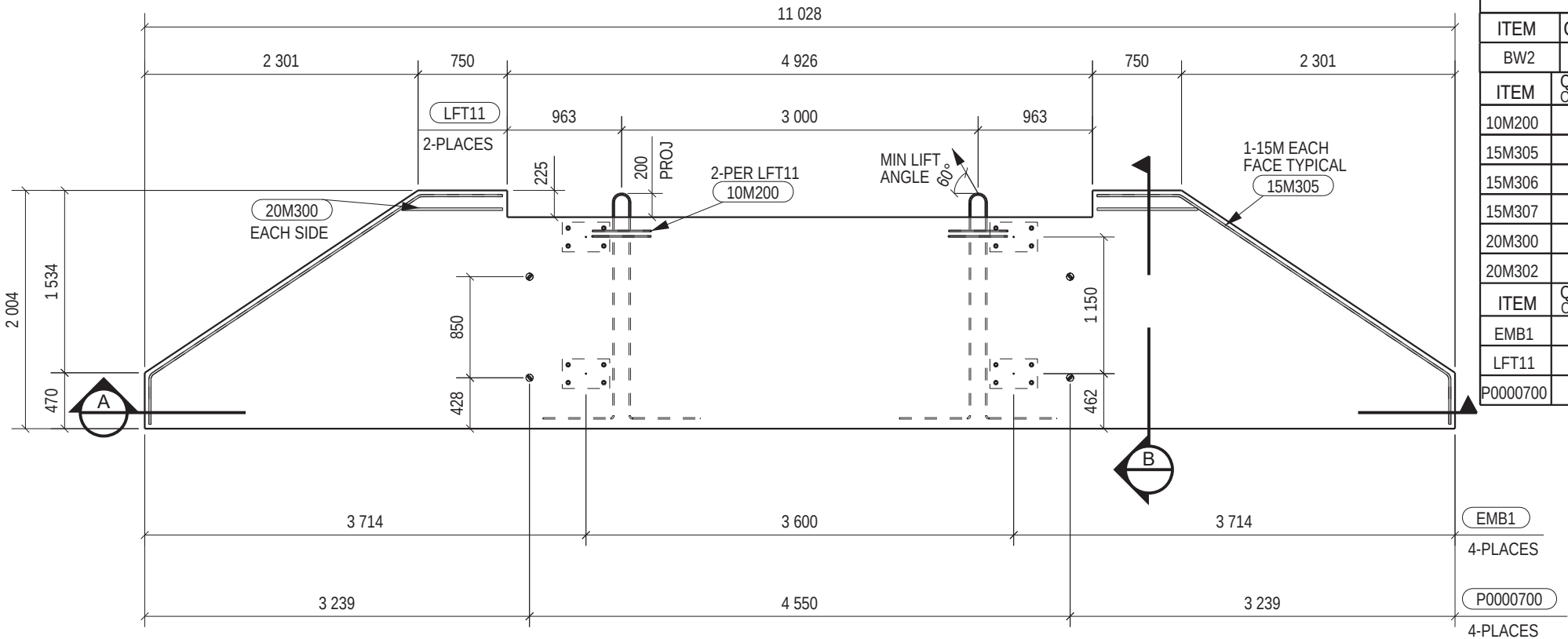
QTY ONE	QTY ALL	LENGTH
4	4	579
4	4	744
4	4	908
4	4	1073
4	4	1238
4	4	1402
4	4	1567
40	40	1709
4	4	1732
4	4	1896
2	2	1933
10	10	1934

15M307

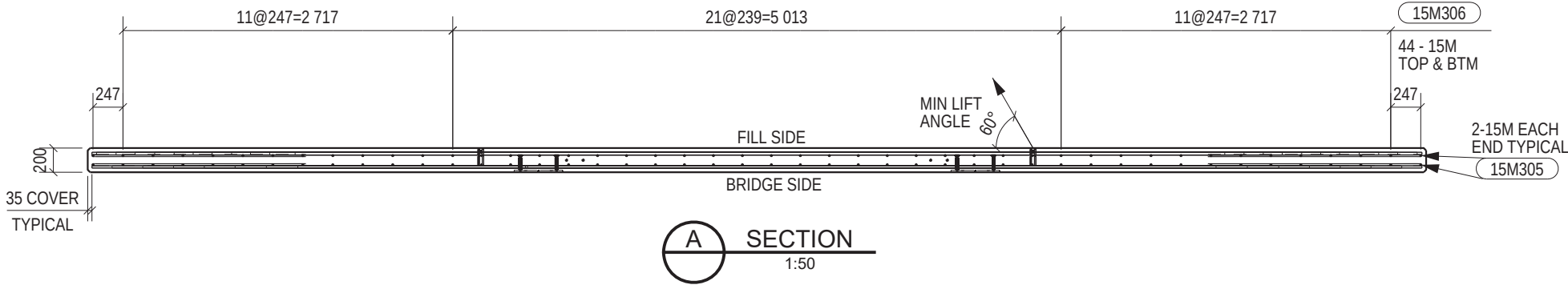
QTY ONE	QTY ALL	LENGTH
1	1	7049
1	1	7566
1	1	8083
1	1	8599
1	1	9106
1	1	9613
1	1	10119
1	1	10626
3	3	10958

20M302

QTY ONE	QTY ALL	LENGTH
1	1	7075
1	1	7388
1	1	7660
1	1	8028
1	1	8344
1	1	8656
1	1	8978
1	1	9291
1	1	9603
1	1	9925
1	1	10247
1	1	10559
1	1	10881
4	4	10958



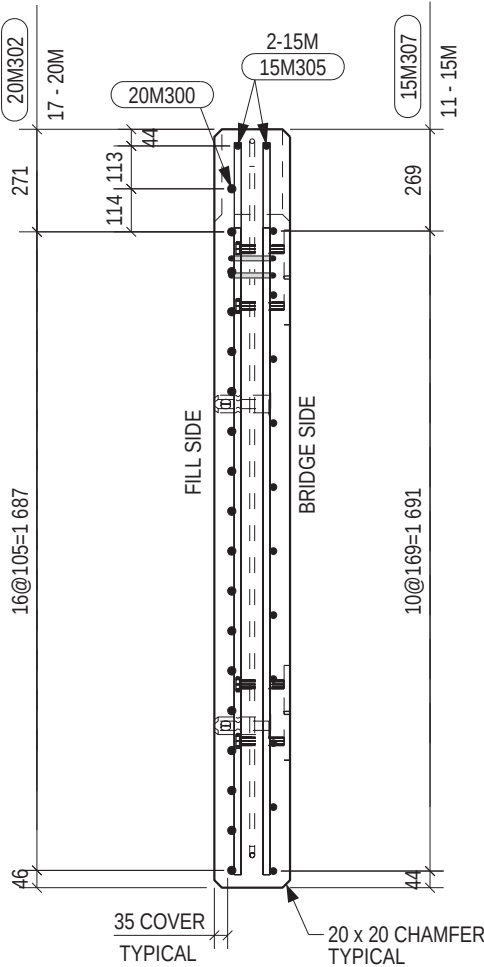
BALLAST WALL PLAN VIEW
1:50



SECTION A
1:50

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION		SIZE	MIX	VOL. CU. M.	WT LBS EA
BW2	1	BALLAST WALL TYPE 2		2004 x 11028 x 200	108.0	3.48 EA.	18811
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE	LENGTH	WT LBS ONE	
10M200	4	4	FORMED REBAR - SEE DETAIL	10M	1066	7.4	
15M305	4	4	FORMED REBAR - SEE DETAIL	15M	3830	53.0	
15M306	88	88	REBAR - SEE TABLE	15M	VARIES	176.4	
15M307	11	11	REBAR - SEE TABLE	15M	VARIES	417.2	
20M300	2	2	REBAR	20M	846	8.8	
20M302	17	17	REBAR - SEE TABLE	20M	VARIES	967.2	
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE		WT LBS ONE	
EMB1	4	4	EMBEDDED PLATE	15.9 x 250 x 400		109.9	
LFT11	2	2	LIFTING	SEE DETAIL		20.7	
P0000700	4	4	DAYTON LIFTING ANCHOR FL509 HDG	SEE DETAIL		8.8	



SECTION B
1:20

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF



www.rapidspan.com 1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

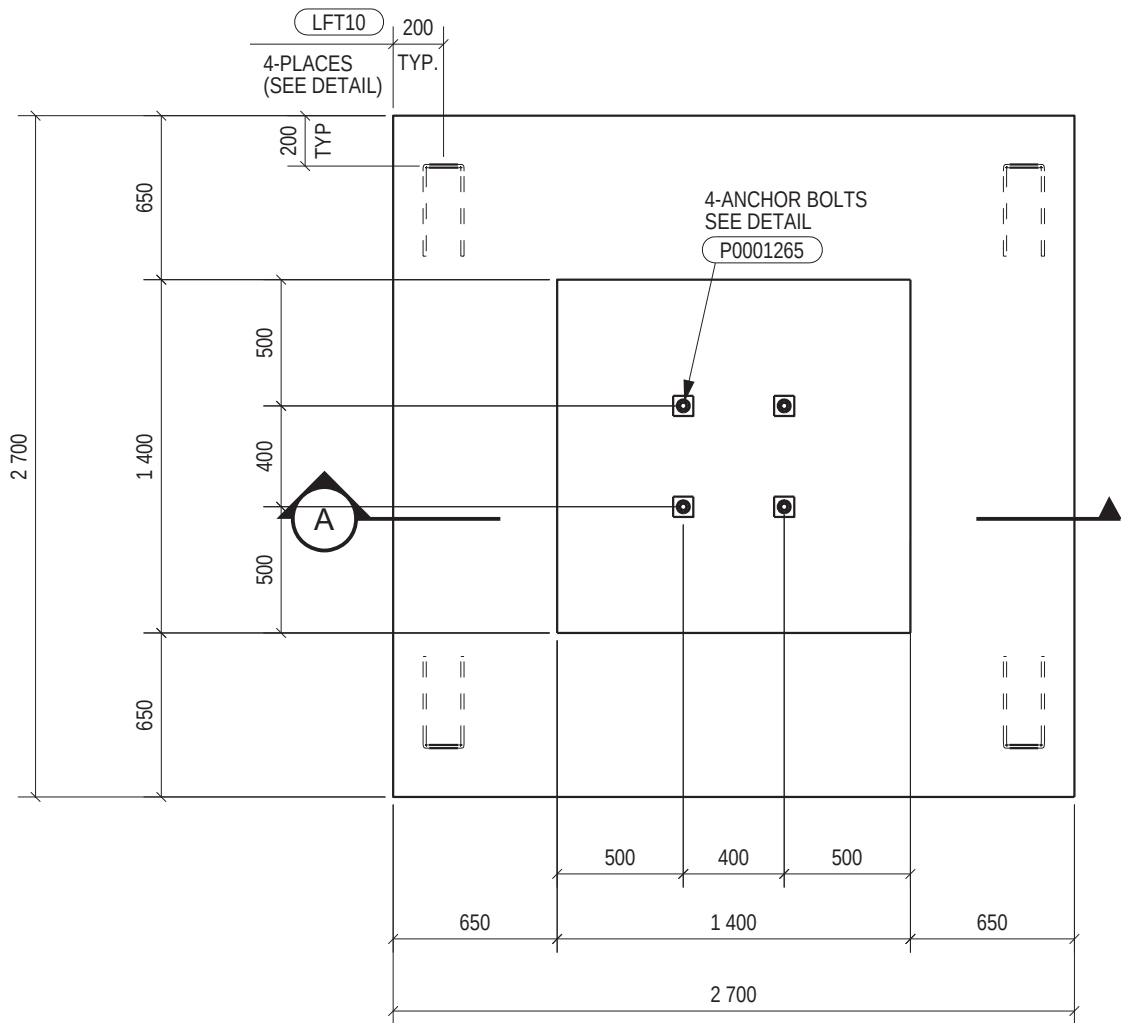


Jun. 13, 2017

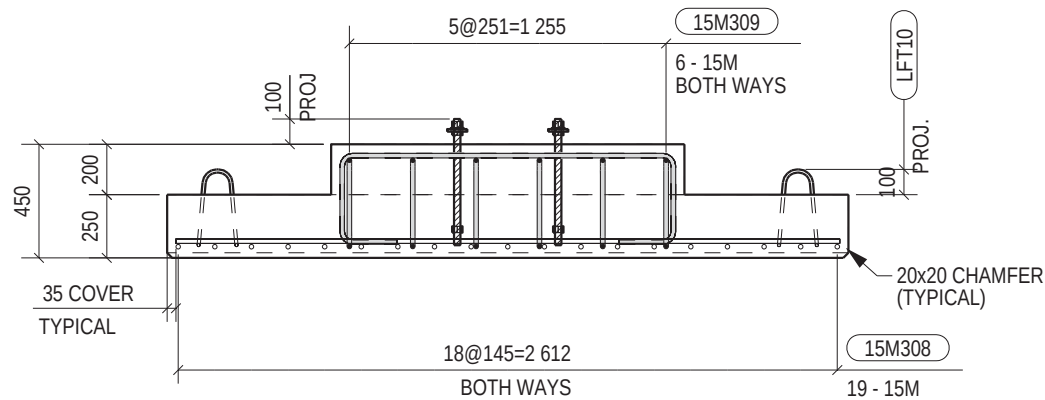
PROJECT: MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE: BALLAST WALL TYPE 2

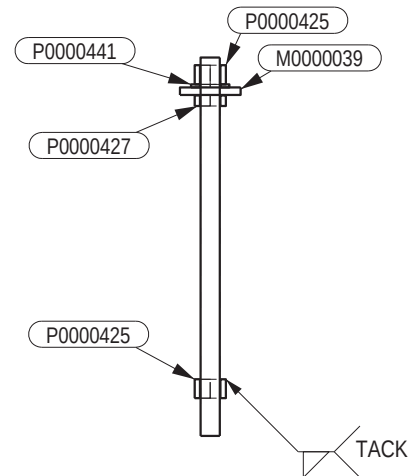
ENGINEERED BY: P.J. KING	DRAWN BY: J KASHUBA	JOB No: 7502	DRAWING No: 150-BW2-01	REV 0
-----------------------------	------------------------	-----------------	---------------------------	----------



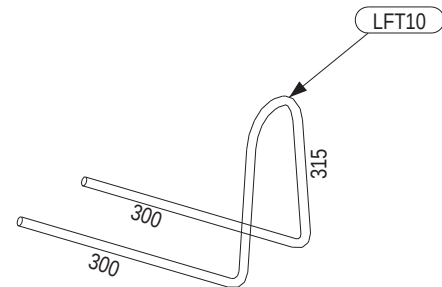
PLAN VIEW
1:30



A SECTION
1:30



ANCHOR DETAIL
1:10



STRAND LIFTING LOOP DETAIL
1:10

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION	SIZE	MIX	VOL. CU. M.	WT LBS EA
F	4	FOOTING	2700 x 2700 x 450	108.0	2.21 EA.	11950
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE	LENGTH	WT LBS ONE
15M308	12	48	FORMED REBAR - SEE DETAIL	15M	2358	97.9
15M309	38	152	REBAR	15M	2630	345.9
ITEM	QTY ONE	QTY ALL	DESCRIPTION	SIZE		WT LBS ONE
LFT10	4	16	12.7 DIA. STRAND	13 DIA. x 1349		10.6
M0000039	4	16	GR 300W WASHER PLATE	80.0 x 80 x 10		4.4
P0000425	8	32	ASTM A194-2H NUT	1"		3.2
P0000427	4	16	ASTM A194-2H JAM NUT	1"		0.9
P0000441	4	16	ASTM F436-1 FLAT WASHER	1"		0.4
P0001265	4	16	ASTM 193 TYPE B7 THREADED ROD	1" x 18 3/4" LONG		16.7

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF



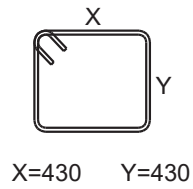
www.rapidspan.com

1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY. NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

PROJECT: MINISTRY OF FORESTS SKOOKUMCHUK RIVER CROSSING STRUCTURE NUMBER N2-108A 33.528 METER L100 COMPOSITE BRIDGE				
TITLE: FOOTING				
ENGINEERED BY:	DRAWN BY:	JOB No:	DRAWING No:	REV
	J KASHUBA	7502	170-F-01	0

10M500



10M008

X=125 Y=300

10M010

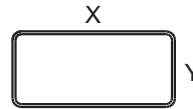
X=110 Y=250

10M012

X=130 Y=250

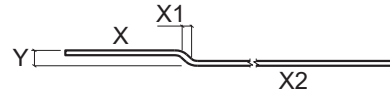
10M200

X=125 Y=500



10M501

X=790 Y=190

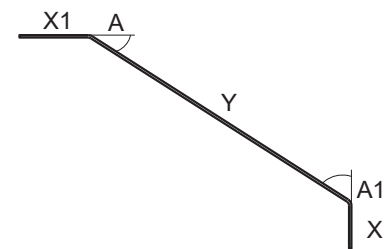


15M016

X=500 X1=21 X2=2456 Y=58

15M017

X=80 X1=21 X2=2876 Y=58



15M305

X=415 X1=700 Y=2736 A=56° A1=34°



20M001

X=2387 X1=2387 A=2°

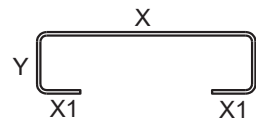
20M020

QTY	DIM X	DIM Y
1	2391	2387
1	2401	2387
1	2411	2387
1	2442	2387
1	2457	2388
1	2473	2388
1	2488	2388
1	2519	2388

25M007

1	2531	2388
1	2542	2388
1	2554	2388
1	2565	2388
1	2596	2388
1	2603	2388
1	2610	2388
1	2616	2388
1	2623	2388
1	2629	2388
1	2636	2388
1	2643	2388

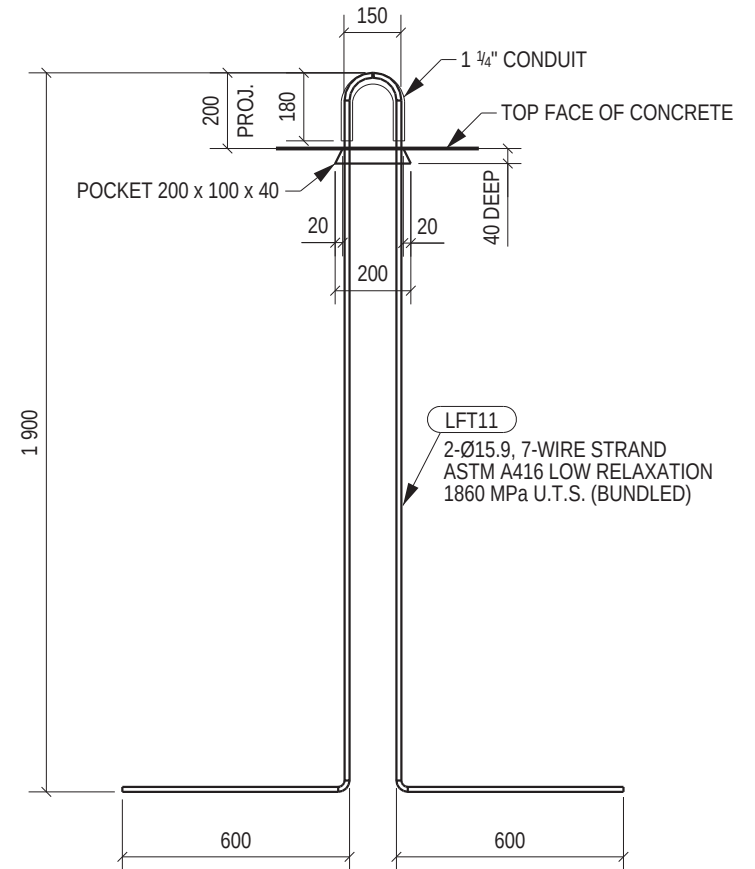
QTY	DIM X	DIM Y
1	2673	2388
1	2679	2388
1	2685	2388
1	2691	2388



15M309

X=1330 X1=225 Y=360

FORMED REBAR DETAILS

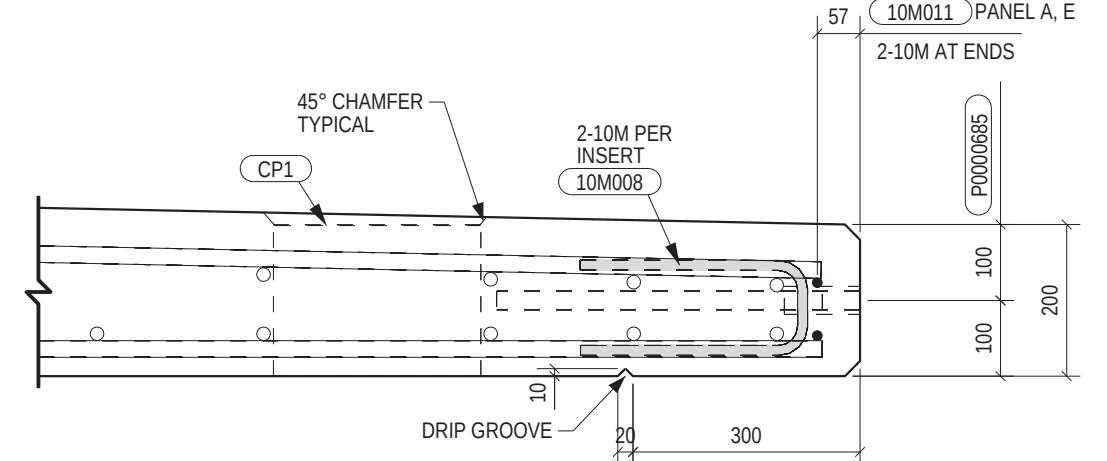


STRAND LIFTING DETAIL

1:20

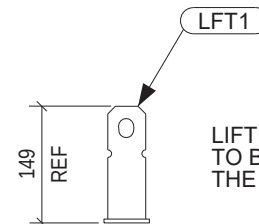
10M009 PANEL B, C & D
10M013 PANEL E
10M011 PANEL A, E

2-10M AT ENDS



TYPICAL EACH END
END DETAIL B

1:10



SAFE WORKING LOAD = 8250 LBS
GALVANIZED FINISH

DAYTON SUPERIOR FL509 DETAIL

1:10



www.rapidspan.com

1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

PROJECT:

MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE:

FORMED REBAR AND
PRECAST DETAILS

ENGINEERED BY:

DRAWN BY:

JOB No:

DRAWING No:

REV

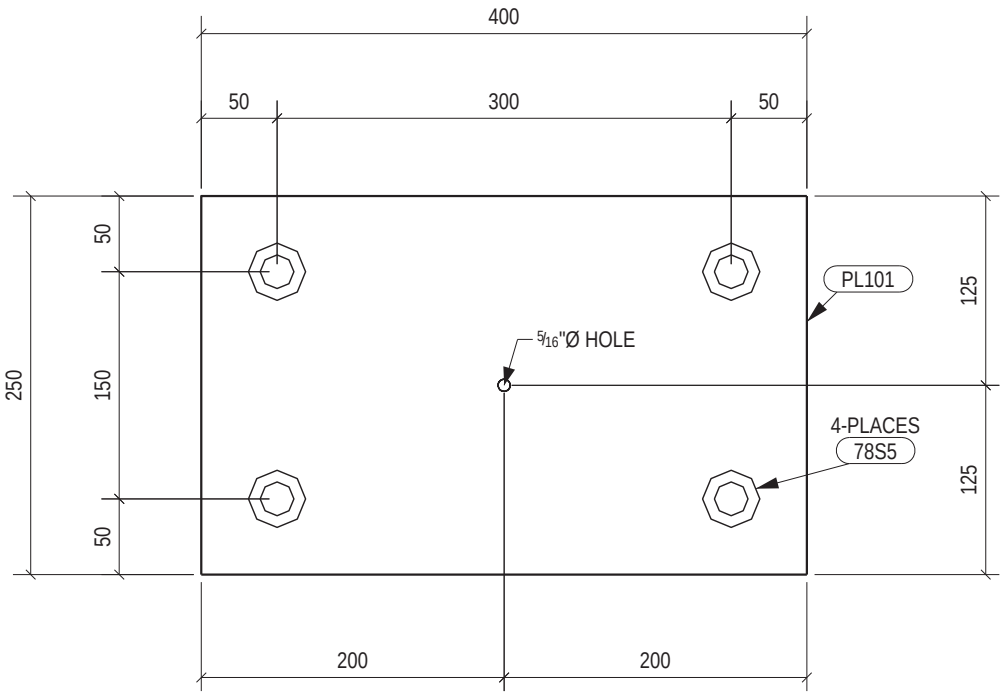
J KASHUBA

7502

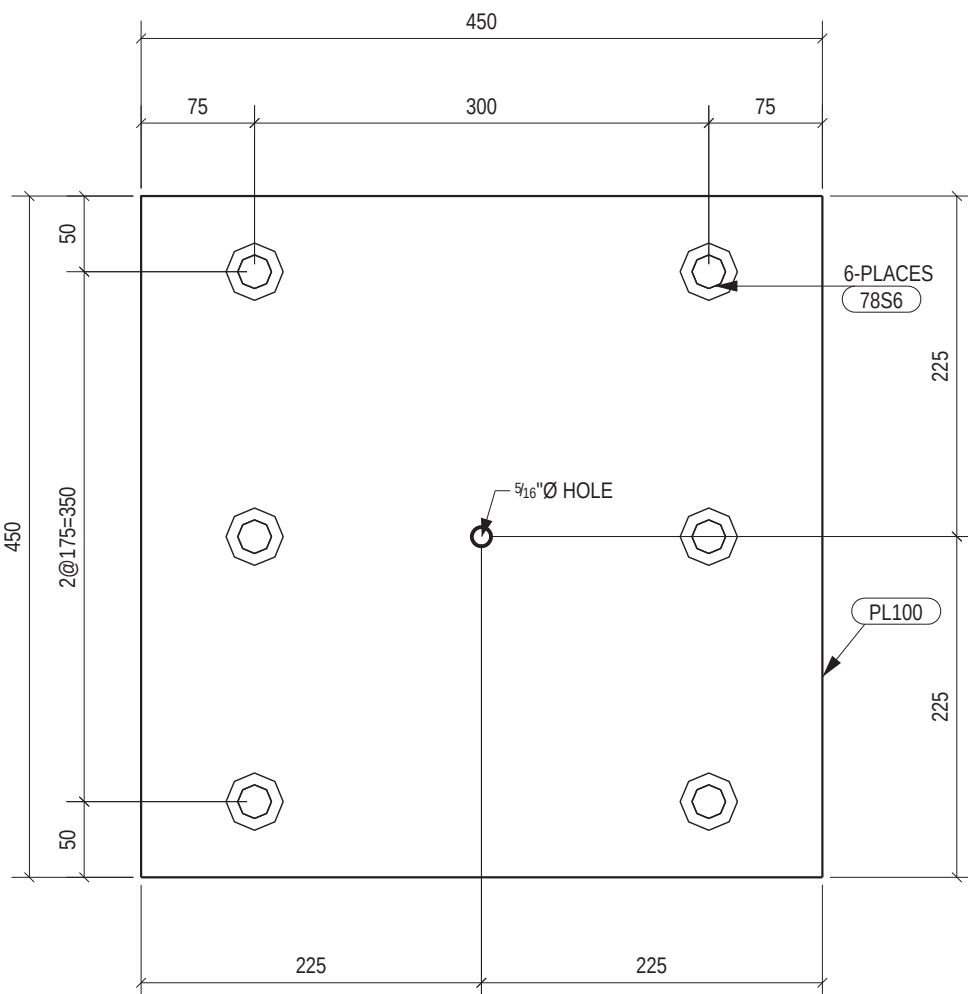
190-DET-01

0

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF



EMB1 PLAN VIEW
1:5



EMB2 PLAN VIEW
1:5



EMB1 ELEVATION
1:5



EMB2 ELEVATION
1:5

BILL OF MATERIALS - JOB # 7502

ITEM	QTY	DESCRIPTION OR NAME	SIZE	WT.LBS. TOTAL
EMB1	8	EMBEDDED PLATE ASSEMBLY	143 x 250 x 400	247.4
PL101	8	PLATE	15.9 x 250 x 400	219.9
78S5	32	ASTM A108 STUD	7/8" DIA. x 5" LONG	27.5

EMB2	4	EMBEDDED PLATE ASSEMBLY	168 x 450 x 450	250.9
PL100	4	PLATE	15.9 x 450 x 450	222.9
78S6	24	ASTM A108 STUD	7/8" DIA. x 6" LONG	28.0

REV	DATE	DESCRIPTION	DRAWN	CHK
0	JUN 08, 2017	ISSUED FOR CONSTRUCTION	JK	
B	JUN 01, 2017	ISSUED FOR APPROVAL	JK	DA
A	MAY 23, 2017	PRELIMINARY	JK	BF



www.rapidspan.com 1-800-661-2047

NOTICE: THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF RAPID-SPAN STRUCTURES LTD AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY; AND IN CONSIDERATION OF THE LOAN OF THIS DRAWING, THE BORROWER PROMISES AND AGREES TO RETURN IT UPON REQUEST AND AGREES THAT IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY. NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS FURNISHED.

PROJECT:

MINISTRY OF FORESTS
SKOOKUMCHUK RIVER CROSSING
STRUCTURE NUMBER N2-108A
33.528 METER L100 COMPOSITE BRIDGE

TITLE:

BALLAST WALL & CAP EMBED

ENGINEERED BY:

P.J. KING

DRAWN BY:

J KASHUBA

JOB No:

7502

DRAWING No:

190-RSS-01

REV

0

GENERAL NOTES:

1. MATERIAL STRENGTH:
 - 1.1. ROLLED SECTIONS: GRADE 350W
 - 1.2. HSS – GRADE 350W and/or A500 GRADE C
 - 1.3. MISCELLANEOUS PLATE – GRADE 350W
2. WELDING STANDARD:
 - 2.1. WELDING TO CSA W59–M
3. MATERIAL FINISH:
 - 3.1. ALL POSTS (411P1) ARE GALVANIZED AFTER FABRICATION, GALVANIZING TO BE IN ACCORDANCE WITH ASTM A123/A123M
 - 3.2. HSS RAILS (411R1 TO 411R3) AND DELINEATOR PLATE (411M1) ARE POWDER COATED SAFETY YELLOW AFTER FABRICATION.
4. DO NOT SCALE PRINTS.

DRAWING INDEX

<u>DRAWING NUMBER</u>	<u>DESCRIPTION</u>	<u>REVISION</u>	<u>REVISION DATE</u> (DDMONYY)
100-G-001	MINISTRY OF FORESTRY BRIDGE GUARDRAIL GENERAL NOTES	0	07JUN17
100-E-001	MINISTRY OF FORESTRY BRIDGE GUARDRAIL ERECTION	0	07JUN17
100-E-002	MINISTRY OF FORESTRY BRIDGE GUARDRAIL END DETAIL	0	07JUN17
100-A-001	MINISTRY OF FORESTRY BRIDGE GUARDRAIL ASSEMBLY SHEET 1 OF 3	0	07JUN17
100-A-002	MINISTRY OF FORESTRY BRIDGE GUARDRAIL ASSEMBLY SHEET 2 OF 3	0	07JUN17
100-A-003	MINISTRY OF FORESTRY BRIDGE GUARDRAIL ASSEMBLY SHEET 3 OF 3	0	07JUN17
100-P-001	MINISTRY OF FORESTRY BRIDGE GUARDRAIL PARTS	0	07JUN17

MARCON INTERNAL USE ONLY

ESTIMATED HOURS:

PROCESSING DUE DATE:

FINAL DUE DATE:

INSTALLATION (YES / NO):

SEE SHOP NOTES

THE INFORMATION CONTAINED ON THIS DRAWING HAS BEEN PREPARED SOLELY FOR THE OWNER AND IS NOT TO BE USED FOR ANY OTHER PURPOSE OR FOR ANY OTHER PROJECT. ANY UNAUTHORIZED REUSE OF THIS INFORMATION IS A BREACH OF COPYRIGHT AND WILL BE PURSUED AS SUCH. THE USER OF THE INFORMATION ON THIS DRAWING IN WHOLE OR IN PART OTHER THAN AS INTENDED FOR THE INTENDED PURPOSE IS AT THE SOLE RISK OF THE USER.

DWG. NO.

REFERENCE DRAWINGS

SHOP ISSUE

REV
A
0
-
-
-
-
-

-	
-	
-	
-	
-	
ISSUED FOR FABRICATION	
ISSUED FOR APPROVAL	
	DESCRIPTION

07JUN
24MAY
DATE

DISCIPLINE: STEEL	
PROJECT MANAGER: AB	
SCALE: NONE	DATE
DRAWN BY: HT	24MAY17
CHECKED BY: —	—
APPROVED BY: SB	07JUN17

201 - 7156 Brown Street, Delta, British Columbia, Canada, V4G 1G8
Phone (604)940-0977 Fax (604)940-0978
www.marconmetalfab.com

marconi® 

CUSTOMER NAME: Rapid-Span Structures

MOF BRIDGE N2-108A RS7502
MINISTRY OF FORESTRY
CL-2 BRIDGE GUARDRAIL
GENERAL NOTES

PROJECT NUMBER
17411

DRAWING NUMBER
100-G-001

REV.
0

NOTES:

1. SEE DWG #: 100-G-001 FOR GENERAL NOTES.

THE INFORMATION CONTAINED ON THIS DRAWING HAS BEEN PREPARED SOLELY FOR THE OWNER FOR USE ON THIS PROJECT AND IS COPYRIGHTED. ANY UNAUTHORIZED USE OF THIS INFORMATION IS A BREACH OF COPYRIGHT AND WILL BE PURSUED AS SUCH. USE OF THE INFORMATION ON THIS DRAWING IN WHOLE OR IN PART OTHER THAN FOR THE INTENDED PURPOSE IS AT THE SOLE RISK OF THE USER.	—	—
	—	—
	—	—
	—	—
	—	—
	—	—
	—	—
DWG. NO.	REFERENCE DRAWINGS	

SHOP
ISSUE

—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
0	ISSUED FOR FABRICATION	07JUN17	HT		
A	ISSUED FOR APPROVAL	24MAY17	HT		
REV. No.	DESCRIPTION	DATE	BY		

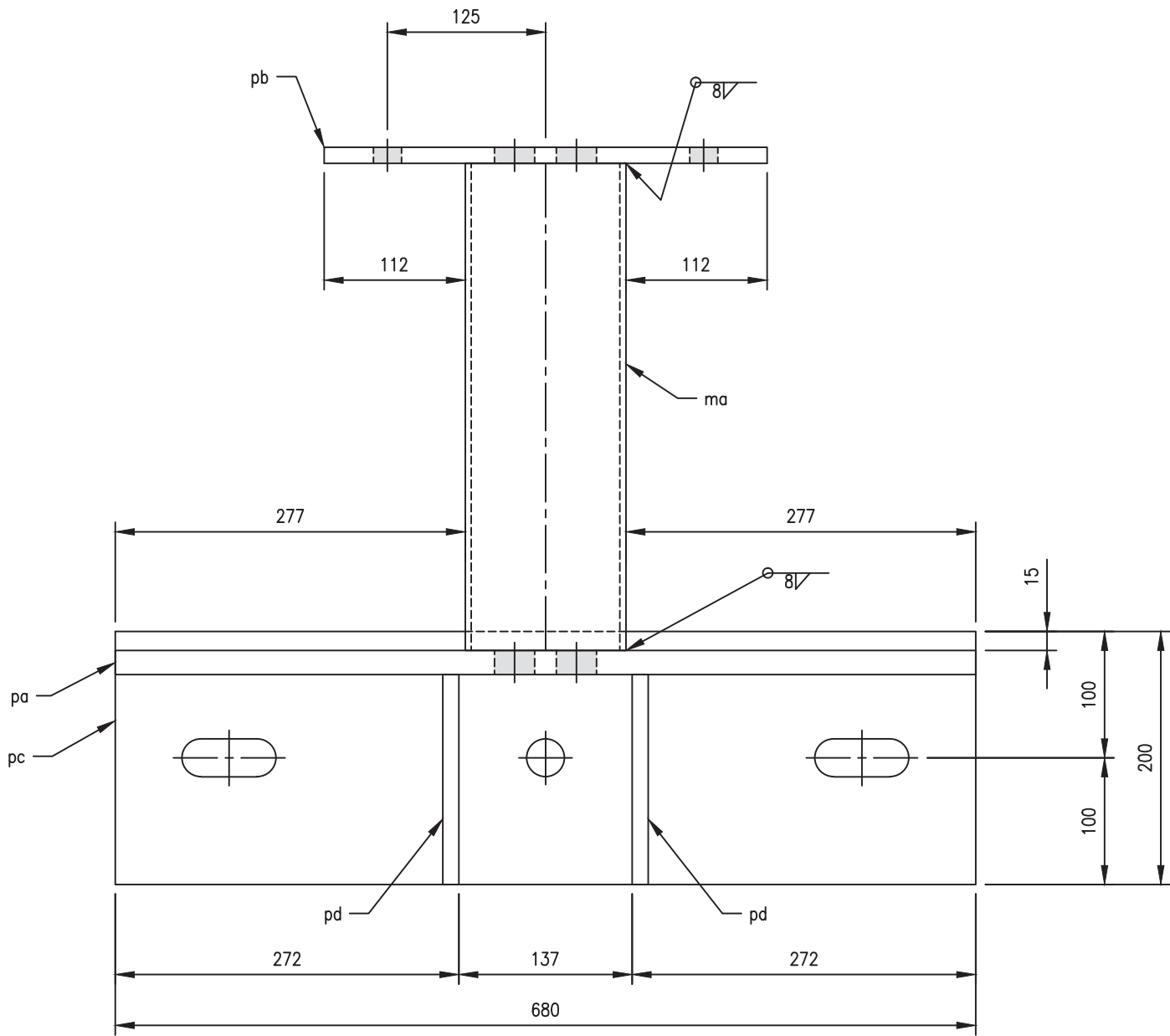
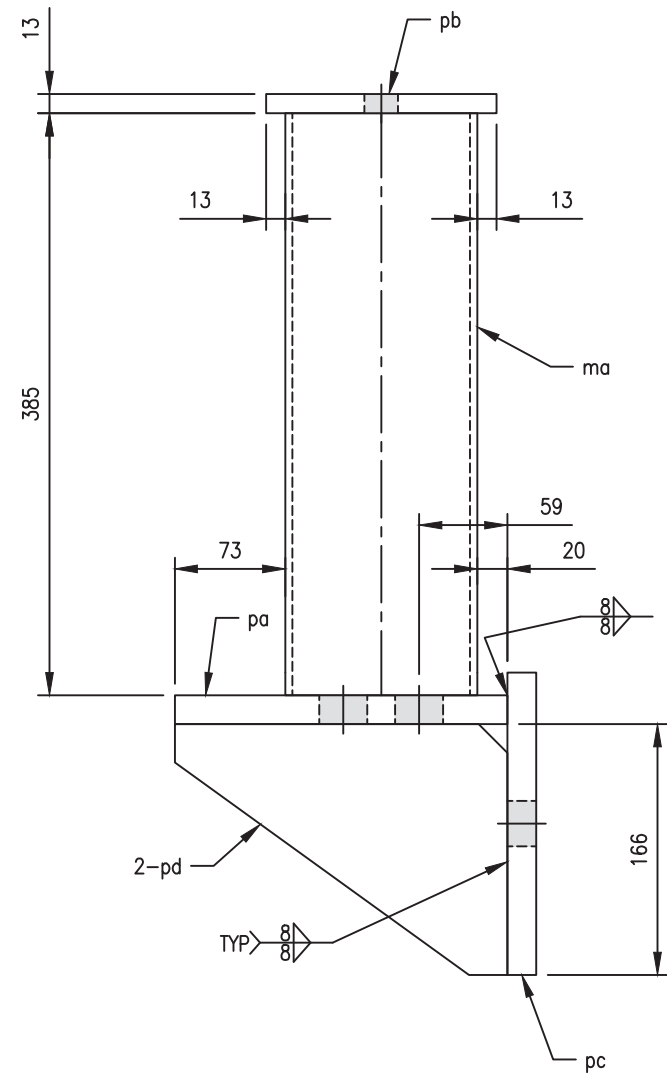
DISCIPLINE:	STEEL
PROJECT MANAGER:	AB
SCALE:	1:8
DRAWN BY:	HT
CHECKED BY:	—
APPROVED BY:	SB
DATE	24MAY17
	07JUN17

201 - 7156 Brown Street, Delta, British Columbia, Canada, V4G 1G8
Phone (604)940-0977 Fax (604)940-0978
www.marconmetalfab.com



CUSTOMER NAME: Rapid-Span Structures

MOF BRIDGE N2-108A RS7502 MINISTRY OF FORESTRY CL-2 BRIDGE GUARDRAIL END DETAIL		
PROJECT NUMBER	DRAWING NUMBER	REV.
17411	100-E-002	0



NOTES:

1. SEE DWG #: 100-G-001 FOR GENERAL NOTES.

THE INFORMATION CONTAINED
ON THIS DRAWING HAS BEEN
PREPARED SOLELY FOR THE OWNER
FOR USE ON THIS PROJECT AND
IS COPYRIGHTED. ANY UNAUTHORIZED
USE OF THIS INFORMATION IS
A BREACH OF COPYRIGHT AND
WILL BE PURSUED AS SUCH.
USE OF THE INFORMATION ON
THIS DRAWING IN WHOLE OR
IN PART OTHER THAN FOR
THE INTENDED PURPOSE IS AT
THE SOLE RISK OF THE USER.

DWG. NO.

REFERENCE DRAWINGS

SHOP
ISSUE

REV.
No.

DESCRIPTION

DATE
BY

DISCIPLINE: STEEL
PROJECT MANAGER: AB
SCALE: 1:5
DATE
DRAWN BY: HT 24MAY17
CHECKED BY: -
APPROVED BY: SB 07JUN17

201 - 7156 Brown Street, Delta, British Columbia, Canada, V4G 1G8
Phone (604)940-0977 Fax (604)940-0978
www.marconmetalfab.com

marcon

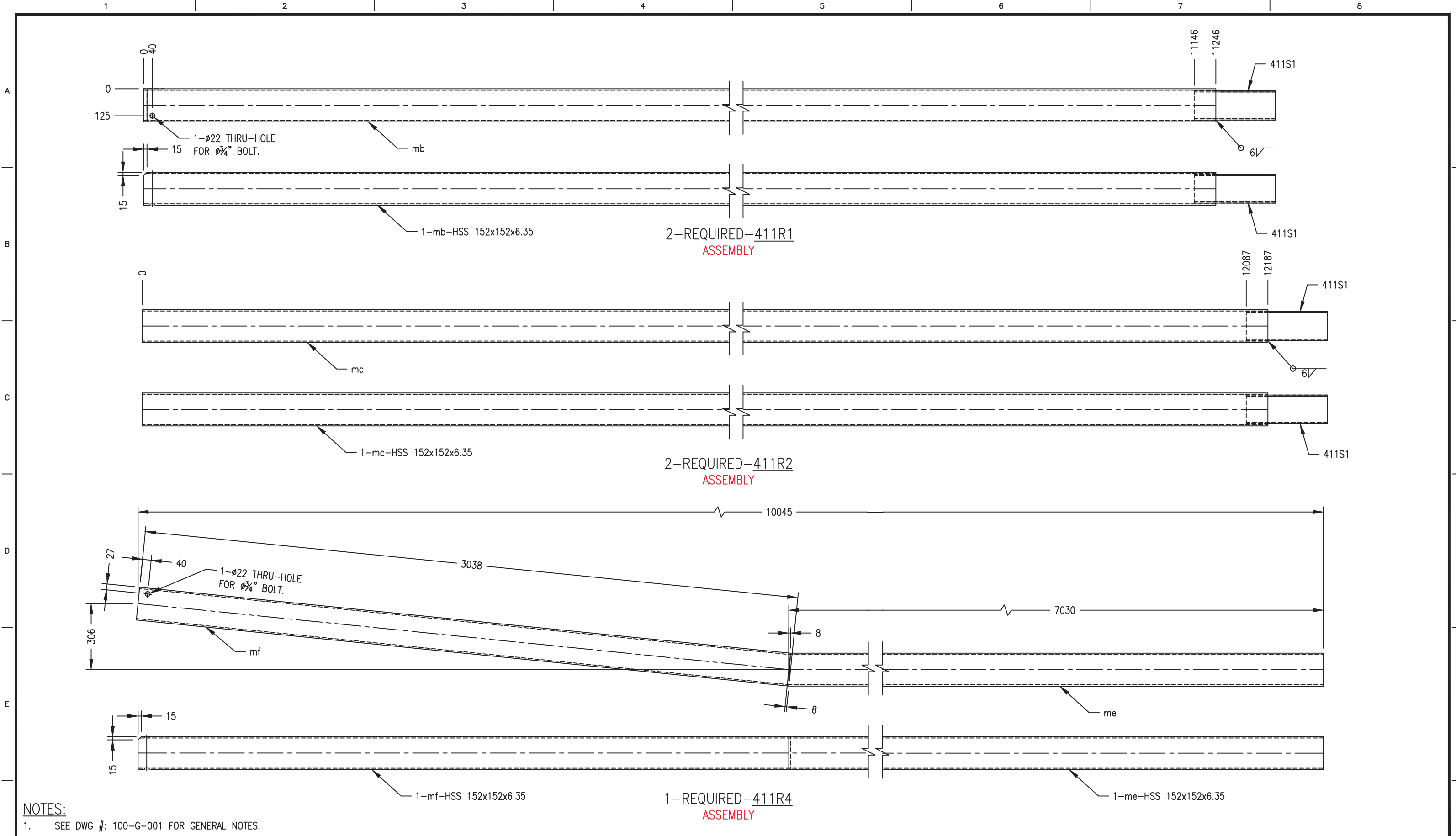
CUSTOMER NAME: Rapid-Span Structures

MOF BRIDGE N2-108A RS7502
MINISTRY OF FORESTRY
CL-2 BRIDGE GUARDRAIL
ASSEMBLY
SHEET 1 OF 3

PROJECT NUMBER
17411

DRAWING NUMBER
100-A-001

REV.
0



NOTES:

1. SEE DWG #: 100-G-001 FOR GENERAL NOTES.

THE INFORMATION CONTAINED ON THIS DRAWING HAS BEEN PREPARED SOLELY FOR THE OWNER FOR USE ON THIS PROJECT AND IS COPYRIGHTED. ANY UNAUTHORIZED USE OF THIS INFORMATION IS A BREACH OF COPYRIGHT AND WILL BE PURSUED AS SUCH. USE OF THE INFORMATION ON THIS DRAWING IN WHOLE OR IN PART OTHER THAN FOR THE INTENDED PURPOSE IS AT THE SOLE RISK OF THE USER.	-	-
	-	-
	-	-
	-	-
	-	-
	-	-
DWG. NO.	REFERENCE DRAWINGS	

SHOP
ISSUE

-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
0	ISSUED FOR FABRICATION	07JUN17	HT	-	-
A	ISSUED FOR APPROVAL	24MAY17	HT	-	-
REV. No.	DESCRIPTION	DATE	BY	CHECKED BY:	APPROVED BY:

DISCIPLINE: STEEL	
PROJECT MANAGER: AB	
SCALE: AS NOTED	DATE
DRAWN BY: HT	24MAY17
CHECKED BY: -	-
APPROVED BY: SB	07JUN17

201 - 7156 Brown Street, Delta, British Columbia, Canada, V4G 1G8
Phone (604)940-0977 Fax (604)940-0978
www.marconmetalfab.com

CUSTOMER NAME: Rapid-Span Structures

MOF BRIDGE N2-108A RS7502 MINISTRY OF FORESTRY CL-2 BRIDGE GUARDRAIL ASSEMBLY SHEET 2 OF 3		
PROJECT NUMBER	DRAWING NUMBER	REV.
17411	100-A-002	0

1 2 3 4 5 6 7 8

A

B

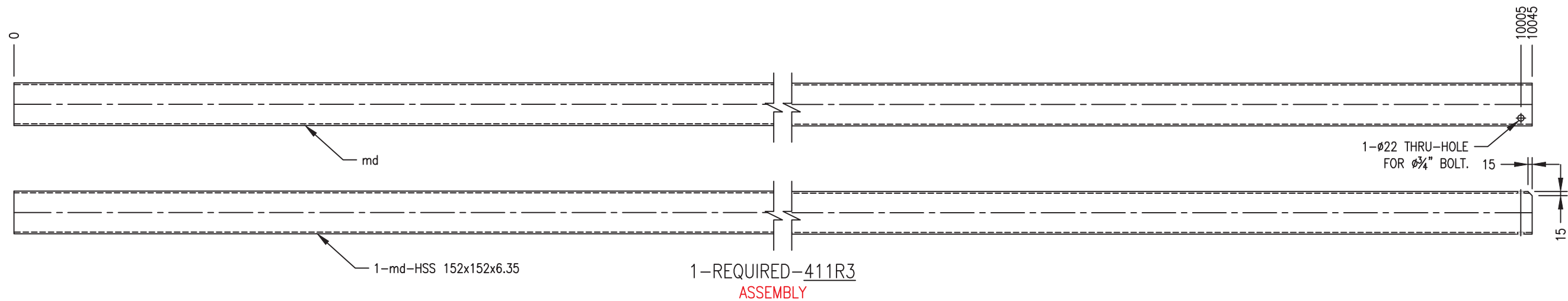
C

D

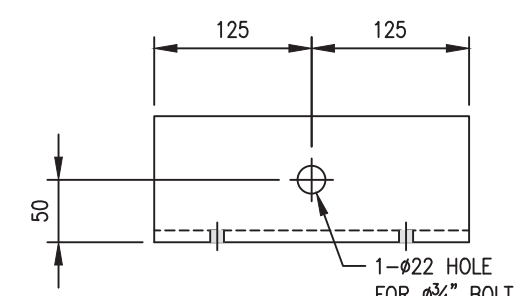
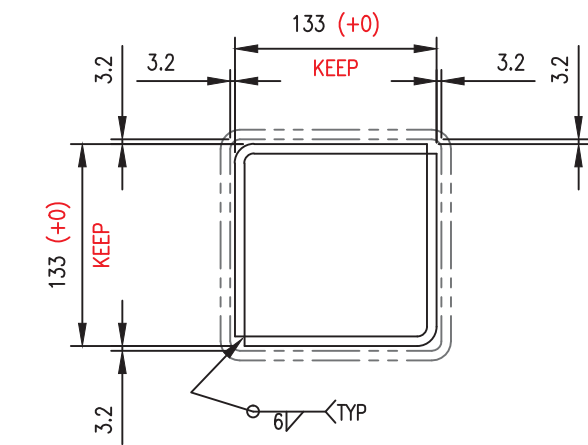
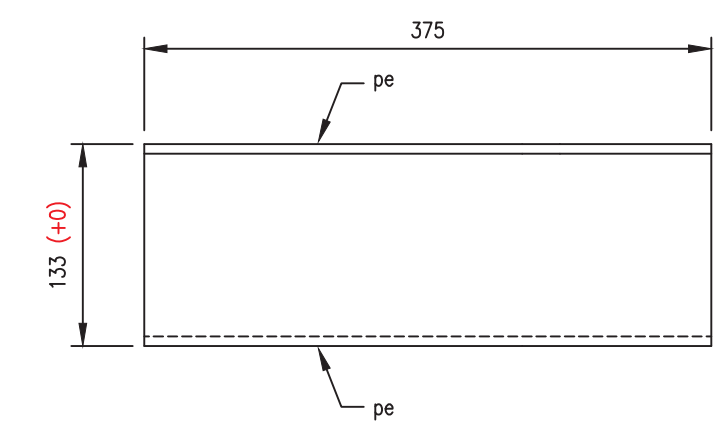
E

F

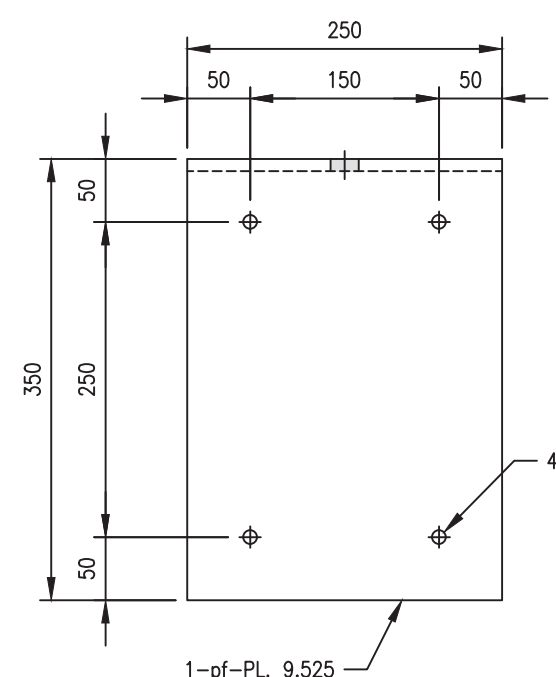
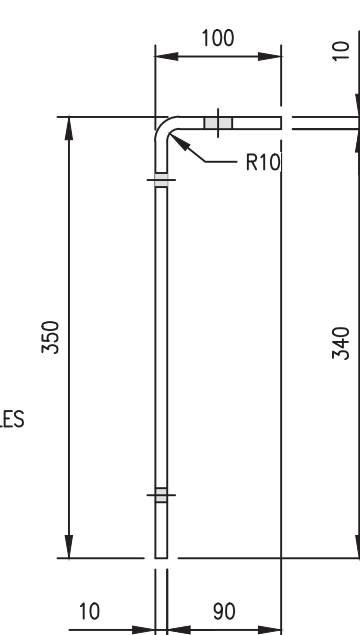
11 x 17 6/7/2017 1:50 PM



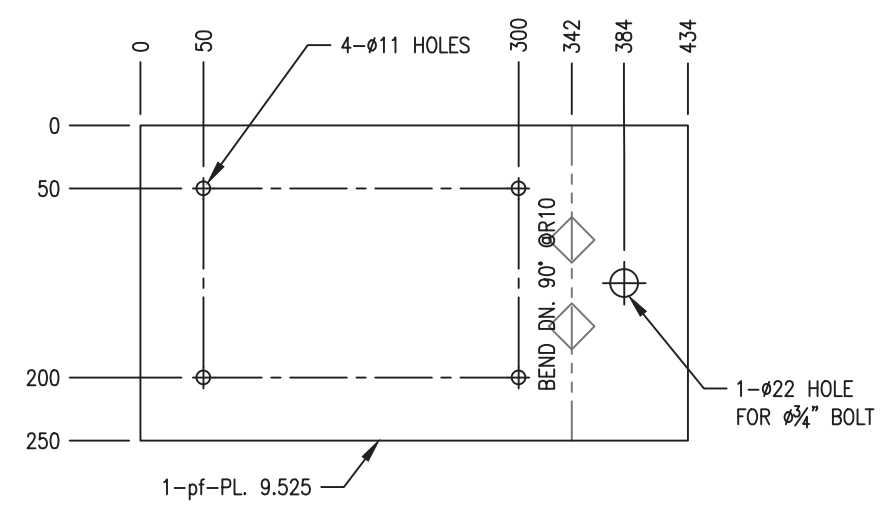
1-REQUIRED-411R3
ASSEMBLY



4-REQUIRED-411S1
ASSEMBLY



4-REQUIRED-411M1
SHIP LOOSE
SCALE: 1:6



STRETCH-OUT OF "pf"

NOTES:

1. SEE DWG #: 100-G-001 FOR GENERAL NOTES.

THE INFORMATION CONTAINED ON THIS DRAWING HAS BEEN PREPARED SOLELY FOR THE OWNER FOR USE ON THIS PROJECT AND IS COPYRIGHTED. ANY UNAUTHORIZED USE OF THIS INFORMATION IS A BREACH OF COPYRIGHT AND WILL BE PURSUED AS SUCH. USE OF THE INFORMATION ON THIS DRAWING IN WHOLE OR IN PART OTHER THAN FOR THE INTENDED PURPOSE IS AT THE SOLE RISK OF THE USER.		
DWG. NO.		REFERENCE DRAWINGS

SHOP
ISSUE

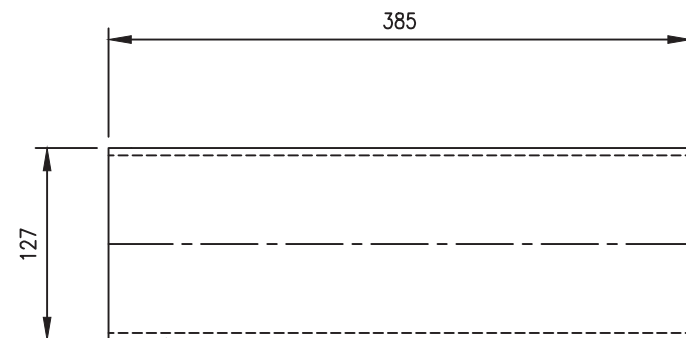
REV. No.	DESCRIPTION	DATE	BY
0	ISSUED FOR FABRICATION	07JUN17	HT
A	ISSUED FOR APPROVAL	24MAY17	HT

DISCIPLINE:	STEEL
PROJECT MANAGER:	AB
SCALE:	AS NOTED
DATE:	
DRAWN BY:	HT
24MAY17	
CHECKED BY:	-
APPROVED BY:	SB
07JUN17	

201 - 7156 Brown Street, Delta, British Columbia, Canada, V4G 1G8
Phone (604)940-0977 Fax (604)940-0978
www.marconmetalfab.com

marcon

MOF BRIDGE N2-108A RS7502 MINISTRY OF FORESTRY CL-2 BRIDGE GUARDRAIL ASSEMBLY SHEET 3 OF 3		
PROJECT NUMBER	DRAWING NUMBER	REV.
17411	100-A-003	0



Technical drawing of a rectangular plate with dimensions and hole locations. The plate has a width of 350 and a height of 152. The top edge is at 0, and the bottom edge is at 152. The left edge is at 0, and the right edge is at 350. The drawing shows three vertical holes: two Ø22 holes for Ø $\frac{1}{2}$ " bolts, located at 50 and 151 from the left edge, and two Ø31.8 vent holes, located at 200 and 300 from the left edge. The holes are positioned at 51 from the top edge and 76 from the bottom edge. A 1-pb-PL, 12.7 thick plate is indicated at the bottom left. The drawing also shows a 76 dimension from the right edge to the center of the Ø31.8 vent hole at 300.

Technical drawing showing the dimensions of a 90-degree elbow and a straight section of a 1-pe-PL 6.35 pipe. The elbow has a 127 mm radius and 6 mm wall thickness. The straight section is 375 mm long.

Technical drawing of a rectangular plate. The plate has a width of 680 and a height of 200. The material is 1-pc-PL. 19.05. The plate features three circular holes and two elongated slots. The holes are located at horizontal positions 90, 340, and 590, and vertical position 100. The slots are located at horizontal positions 90 and 590, and vertical position 100. The holes are labeled Ø30 HOLE FOR Ø1" BOLTS. The slots are labeled 2-Ø30x76 SLOTS FOR Ø1" BOLTS.

Technical drawing of a structural member with the following dimensions and features:

- Overall width: 220
- Overall height: 166
- Left flange thickness: 25
- Right flange thickness: 19
- Web thickness: 19
- Bottom flange thickness: 25
- Label: 1-pd-PL. 12.7 (pointing to the sloped cutout)

Technical drawing of a 1-pe-PL 6.35 profile. The drawing shows a cross-section of the profile with dimensions: 375 (width), 244 (height), and 122 (flange thickness). The profile is labeled 1-pe-PL 6.35.

\\MARCON-SERVER2\MARCONDATA\DRAWINGS\JOBS\17400-17499\17411-RAPID-SPAN STRUCTURES-MOF BRIDGE N2-108A RS7502\100-MOF CL-2 GUARDRAIL.DWG