



Department of Transportation, Infrastructure and Energy
PO Box 2000
Charlottetown
Prince Edward Island
Canada C1A 7N8 Tel: 902 368 5180

**CAPITAL PROJECTS
ADDENDUM NUMBER 3
for
CLYDE RIVER BRIDGE CROSSING - TCH EXTENSION
(Scheduled Tender Closing 22 February, 2018)**

TO: All Bidders

**FROM: Darrell Evans, P.Eng.
A/Asst. Director**

DATE: 16 February, 2018

**SUBJECT: Tender Form - Errata
Schedule A - Clarification
Schedule C - Errata
Specifications - Errata and Clarification
Drawings - Errata**

1. Tender Form,. Please remove Sheet 1 of the Tender form, Revision 0 , and replace it with the attached sheet 1 of the Tender Form, Revision 1. The change is required to change the closing date for this tender opening.
2. Schedule 'A', Rev. 1, Value Engineering (VE) Proposals.

To clarify, those bidders wishing to submit a VE proposal on this project shall do so **at the time of Tendering**. Bids will be evaluated on the as-tendered design as well as VE proposals that are deemed acceptable to the department.
3. Schedule 'A', Rev. 1, Bid Item # 136270 - STEEL COFFERDAM - (PROVISIONAL).

To clarify, the intent of this item is to have an allowance for a steel cofferdam for the pier base if one is required. It is expected that the earthworks contractor shall have the pier base site prepared with shale to at or near the top of till elevation. It is the intent to excavate the select borrow down to underside of the pier base to allow for its construction. The steel cofferdam price is an allowance in case this proposed method of construction is deemed to be not practical or constructable.
4. Please see attached Schedule 'C', dated 16 Feb 2018. Please remove the existing Schedule 'C', dated 29 Jan 2018 and replace it with the attached. The change is required to remove the line item for catchbasins and to adjust the Mud Slab Concrete quantity.
5. Specification No. 07 19 10 Concrete Sealer and Coating. Please remove page 2, dated January 2018 and replace it with the attached, dated February 2018. The change is required to adjust the sealant requirements for the bridge.

6. Specification Section No. 31 09 16 Pile Driving Templates. This section will only be adhered to if the successful contractor feels it necessary to include pile driving templates in their works.
7. Attached is Drawing S10, Rev. 1, dated Feb 15/2018. Please remove sheet S10, dated Jan 26/18 and replace it with the attached. The change is required to update the bearing tables.
8. Attached is Drawing S32, Rev. 1, dated Feb. 15/2018. Please remove sheet S32, dated Jan 26/18 and replace it with the attached. The change is required to clarify the GFRP bars with asterisks.

A signed copy of this addendum must be included with your bid submission on this project.

Signature of Contractor

DEPARTMENT OF TRANSPORTATION, INFRASTRUCTURE & ENERGY
Province of Prince Edward Island
Revision 1

TENDER FORM AND AGREEMENT

THIS AGREEMENT made by and between, herein called the Contractor, the Party of the First Part and The Government of Prince Edward Island as represented by the Minister of Transportation, Infrastructure & Energy, the Party of the Second Part.

WITNESS, AS FOLLOWS:

1. Definitions

The definition of terms used in this Tender Form and Agreement shall conform in all respects to the definition of terms contained in the document entitled "General Provisions and Contract Specifications for Highway Construction," published by the Department of Transportation and Infrastructure Renewal of the Province of Prince Edward Island as amended on the date of closing of Tenders pursuant to this Agreement.

2. General Covenant

The Contractor hereby covenants and agrees with the Minister as herein provided in connection with the following work, namely:

CLYDE RIVER - BRIDGE CROSSING - TCH Extension Project

DISTRICT 17

The scope of this work includes, but is not necessarily limited to the following: the supply of all labour, equipment, and materials necessary to completely fabricate, erect and complete a new bridge structure. The work on this project shall consist of excavation; slope protection; environmental controls; steel piles; cofferdam; concrete formwork and accessories; cast-in-place concrete; structural steel girders; GFRP reinforced concrete; rip rap; and all other ancillaries required to completely install the structure to the satisfaction of the Owner.

PUBLIC BIDS SHOULD BE RETURNED TO THE DEPARTMENT NO LATER THAN
2:00 PM, Thursday, March 1st, 2018
11 Kent Street, 3rd floor Jones Building, Charlottetown, PEI

Schedule C
schedule of item for tender

Item Description and Price	Estimated Quantity	Contractor Total Price
EXCAV:EARTH SURPLUS/SUITABLE		
Section: 203 Item: 20306		
.....	PER M3	
.....	\$	500.00 \$
.....	100	_____
EXCAVATION: EARTH WASTE		
Section: 203 Item: 20307		
.....	PER M3	
.....	\$	100.00 \$
.....	100	_____
CLASS D GRAVEL		
Section: 207 Item: 20709		
.....	PER Tonnes	
.....	\$	150.00 \$
.....	100	_____
BACKFILL ABUTMENTS		
Section: 207 Item: 20728		
.....	PER Tonnes	
.....	\$	1,500.00 \$
.....	100	_____
RANDOM RIP-RAP: R5		
Section: 213 Item: 21301		
.....	PER Tonnes	
.....	\$	2,610.00 \$
.....	100	_____
RANDOM RIP-RAP: R250		
Section: 213 Item: 21309		
.....	PER Tonnes	
.....	\$	2,230.00 \$
.....	100	_____
		Total Carried Forward \$ _____
		From Previous Page
		Total Carried Forward \$ _____

Item Description and Price	Estimated Quantity	Contractor Total Price
FILTER FABRIC		
Section: 218 Item: 21801		
.....	PER Square Metr	
.....	\$ PER M2	2,500.00 \$
.....	100	_____
APPROACH SLAB CONCRETE		
Section: 1101 Item: 110117		
.....	PER M3	
.....	\$ PER M3	65.00 \$
.....	100	_____
MUD SLAB		
Section: 1300 Item: 130023		
.....	PER M3	
.....	\$ PER M3	35.00 \$
.....	100	_____
CONCRETE ABUTMENTS & PIER		
Section: 1308 Item: 130822		
.....	PER M3	
.....	\$ PER M3	800.00 \$
.....	100	_____
EXPANSION JOINTS		
Section: 1308 Item: 130826		
.....	PER Metres	
.....	\$ PER M	27.00 \$
.....	100	_____
BEARING PADS		
Section: 1308 Item: 130827		
.....	PER unit	
.....	\$ PER unit	6.00 \$
.....	100	_____

Total Carried Forward \$ _____

From Previous Page

Total Carried Forward \$ _____

Item Description and Price	Estimated Quantity	Contractor Total Price
DECK DRAINS		
Section: 1308 Item: 130828		
.....	PER unit	
.....	\$	PER unit 4.00 \$
.....	100	_____
BRIDGE DECK, CURBS & PAREPET		
Section: 1308 Item: 130861		
.....	PER M3	
.....	\$	PER M3 615.00 \$
.....	100	_____
MISCELLANEOUS METALS		
Section: 1308 Item: 130864		
.....	PER Kg	
.....	\$	PER Kg 3,080.00 \$
.....	100	_____
GENERAL MOBILIZATION/DEMOLITION		
Section: 1308 Item: 130876		
.....	PER L.S.	
.....	\$	PER L.S. 1.00 \$
.....	100	_____
CONC. REINFORCEMENT:13mm DIA. GFRP		
Section: Item: 130913		
.....	PER Metres	
.....	\$	PER M 1,450.00 \$
.....	100	_____
CONC. REINFORCEMENT:16mm DIA. GFRP		
Section: Item: 130914		
.....	PER Metres	
.....	\$	PER M 20,330.00 \$
.....	100	_____
		Total Carried Forward \$ _____
		From Previous Page
		Total Carried Forward \$ _____

Item Description and Price	Estimated Quantity	Contractor Total Price
CONC. REINFORCEMENT:19mm DIA. GFRP		
Section: Item: 130915		
.....	PER Metres	
.....	PER M	14,680.00 \$
.....	100	_____
CONC. REINFORCEMENT:25mm DIA. GFRP		
Section: Item: 130916		
.....	PER Metres	
.....	PER M	5,900.00 \$
.....	100	_____
16mm DIA GFRP BENT		
Section: 1300 Item: 130922		
.....	PER Metres	
.....	PER M	2,680.00 \$
.....	100	_____
19mm DIA GFRP BENT		
Section: 1300 Item: 130923		
.....	PER Metres	
.....	PER M	1,920.00 \$
.....	100	_____
25mm DIA GFRP BENT		
Section: 1300 Item: 130924		
.....	PER Metres	
.....	PER M	4,670.00 \$
.....	100	_____
CONC. REINFORCEMENT:22mm DIA. GFRP		
Section: 1300 Item: 130927		
.....	PER Metres	
.....	PER M	1,450.00 \$
.....	100	_____
Total Carried Forward \$		_____
From Previous Page		
Total Carried Forward \$		_____

Item Description and Price	Estimated Quantity	Contractor Total Price
22mm DIA GFRP BENT		
Section: 1300 Item: 130928		
.....	PER Metres	
.....	PER M	4,290.00 \$
.....	100	_____
CONC. REINFORCEMENT:10mm DIA.(#3) GFR		
Section: 1300 Item: 130929		
.....	PER Metres	
.....	PER M	190.00 \$
.....	100	_____
CONC. REINFORCEMENT:32mm DIA.(#9) GFR		
Section: 1300 Item: 130930		
.....	PER Metres	
.....	PER M	8,060.00 \$
.....	100	_____
CONC. REINFORCEMENT:16mm DIA. GFRP (F		
Section: 1300 Item: 130931		
.....	PER Metres	
.....	PER M	920.00 \$
.....	100	_____
CONC. REINFORCEMENT:19mm DIA. GFRP (F		
Section: 1300 Item: 130932		
.....	PER Metres	
.....	PER M	11,020.00 \$
.....	100	_____
DECK MEMBRANE DRAINS		
Section: 1300 Item: 130994		
.....	PER unit	
.....	PER unit	7.00 \$
.....	100	_____
		Total Carried Forward \$ _____
		From Previous Page
		Total Carried Forward \$ _____

Item Description and Price	Estimated Quantity	Contractor Total Price
PROJECT LAYOUT		
Section: 1351 Item: 135101		
.....	PER L.S.	
.....	\$	1.00 \$
.....	100	_____
PIPE PILES: SUPPLY		
Section: 1352 Item: 135220		
.....	PER Metres	
.....	\$	760.00 \$
.....	100	_____
PIPE PILES: DRIVE		
Section: 1352 Item: 135221		
.....	PER Metres	
.....	\$	660.00 \$
.....	100	_____
SILANE SEALER		
Section: 1361 Item: 136122		
.....	PER Square Metr	
.....	\$	1,220.00 \$
.....	100	_____
STEEL COFFERDAM		
Section: 1362 Item: 136270		
.....	PER L.S.	
.....	\$	1.00 \$
.....	100	_____
STEEL SUPERSTRUCT: FAB & ERECT		
Section: 1381 Item: 138116		
.....	PER L.S.	
.....	\$	1.00 \$
.....	100	_____
		Total Carried Forward \$ _____
		From Previous Page
		Total Carried Forward \$ _____
		HST \$ _____
		Grand Total \$ _____

PART 3 - EXECUTION

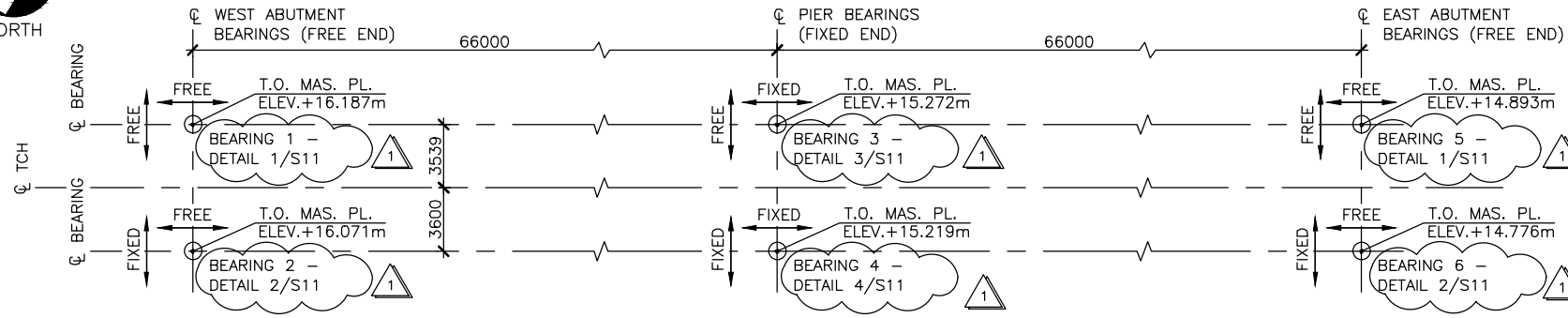
3.1 APPLICATION

- .1 Bridge:
- .1 Apply concrete coating to tops and sides of traffic barriers and crash blocks, outside edges of the bridge deck for the full length of the bridge; underside of the bridge deck from the exterior girder lines to the outside edges of the bridge only (each side of deck, full length of the bridge); and exposed surfaces of wingwalls and abutments, projecting down 600mm (min) below finished grades. Apply the coating along the exterior edge of the deck and curbs, with the coating terminated at the top edge of the 25 x 25 chamfer at the top of the curbs, leaving the top surface and inside edge of both the narrow and wide curbs uncoated.
 - .2 Do not apply if rain is imminent.
 - .3 Surface ambient temperature must not be less than 7°C or above 32°C during 24 hours after the application.
 - .4 Fresh concrete must be cured for ten days prior to application.
 - .5 Install to manufacturer's recommendations.

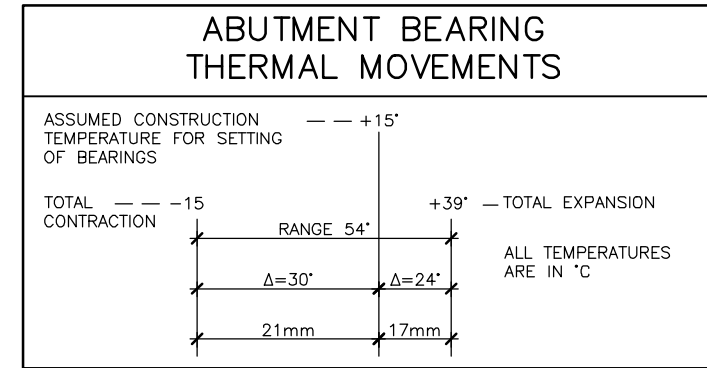
END OF SECTION



NORTH



BEARING LAYOUT PLAN
N.T.S.



NOTES:

1. BEARING DETAILS AND DIMENSIONS SHOWN ARE BASED ON GOODCO Z-TECH POT BEARINGS. ALTERNATE SYSTEMS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
2. FOR ACCEPTABLE BEARING SYSTEMS SEE SPECIFICATIONS.
3. BEARINGS TO BE REMOVABLE FOR REPLACEMENT.
4. THE BEARING MANUFACTURER MUST COORDINATE ALL DIMENSIONAL CHANGES WITH THE GENERAL CONTRACTOR.
5. LOCKNUTS REQUIRED ON ALL BEARING ASSEMBLIES.
6. BEARING MANUFACTURER TO PROVIDE BEARING ASSEMBLY COMPLETE WITH ANCHORAGE TO SUPERSTRUCTURE.
7. BEARING ASSEMBLY SOLE PLATES TO ACCOMMODATE TRANSVERSE DECK SLOPES AND LONGITUDINAL ROAD SLOPES, DEAD LOAD ROTATION AND RESIDUAL CAMBER SUCH THAT BEARING IS LEVEL UNDER PERMANENT DEAD LOAD CONDITIONS.
8. GALVANIZE ALL STEEL.
9. THERMAL ZINC-SPRAY/ZINC-METALIZE GALVANIZED SURFACES DAMAGED BY FIELD WELDS.
10. CONTROL HEAT FOR FIELD WELDS SO AS NOT TO DAMAGE BEARING. BEARING DAMAGED BY WELDS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE CONTRACT.
11. REMOVE ALL TEMPORARY/SHIPPING HARDWARE FOLLOWING BEARING INSTALLATION.

LEGEND:

- SW - SOUTH WEST
- SE - SOUTH EAST
- NW - NORTH WEST
- NE - NORTH EAST
- PN - PIER NORTH
- PS - PIER SOUTH

SCHEDULE OF POT BEARINGS

SERVICEABILITY LIMIT STATE (SLS)

LOCATION NUMBER	LOCATION	REFERENCE BEARING SIZE	DEAD LOAD (kN)	LIVE LOAD MAX. (kN)	LIVE LOAD MIN. (kN)	TOTAL LOAD MAX. (kN)	TOTAL LOAD MIN. (kN)	LONGITUDINAL BRAKING LOAD (kN)	TRANSVERSE WIND LOAD ON LIVE (kN)	TRANSVERSE WIND LOAD (kN)	LONGITUDINAL TRANSLATIONS (mm)	TRANSVERSE TRANSLATIONS (mm)	LIVE LOAD ROTATION (rad)	INSTALLATION TOLERANCE (rad)
BEARING 1 (FREE)	NW	PM3000	2013	948	-160	2961	1853	-	-	-	SEE TABLE	SEE TABLE	0.0026	±0.0035
BEARING 2 (UNI-LONGITUDINAL)	SW	PMCG3000	2013	948	-160	2961	1853	-	129	419	SEE TABLE	NONE	0.0026	±0.0035
BEARING 3 (UNI-TRANSVERSE)	PN	PMG10000	7582	1801	-196	9383	7386	155	-	-	NONE	SEE TABLE	0.0015	±0.0035
BEARING 4 (FIXED)	PS	PF10000	7582	1801	-196	9383	7386	155	174	581	NONE	NONE	0.0015	±0.0035
BEARING 5 (FREE)	NE	PM3000	2013	948	-160	2961	1853	-	-	-	SEE TABLE	SEE TABLE	0.0026	±0.0035
BEARING 6 (UNI-LONGITUDINAL)	SE	PMCG3000	2013	948	-160	2961	1853	-	129	419	SEE TABLE	NONE	0.0026	±0.0035

ULTIMATE LIMIT STATE (ULS)

LOCATION NUMBER	LOCATION	REFERENCE BEARING SIZE	VERTICAL LOADS						HORIZONTAL LOADS					ROTATIONS		
			DEAD LOAD MAX. (kN)	LIVE LOAD MAX. ULS 1 (kN)	TOTAL LOAD MAX. ULS 1 (kN)	DEAD LOAD MIN. (kN)	WIND LOAD MIN. (kN)	TOTAL LOAD MIN. ULS 4 (kN)	LONGITUDINAL SEISMIC LOAD ULS 5 (kN)	TRANSVERSE SEISMIC LOAD ULS 5 (kN)	LONGITUDINAL BRAKING LOAD ULS 1 (kN)	TOTAL LONGITUDINAL LOAD ULS 1 (kN)	TRANSVERSE WIND LOAD ULS 4 (kN)	TRANSLATIONS (mm)	LIVE LOAD ROTATION ULS 1 (rad)	ADDITIONAL LONGITUDINAL ROTATIONAL REQUIREMENTS (rad)
BEARING 1 (FREE)	NW	PM3000	2476	1791	4267	1748	-723.8	1024	-	-	-	-	-	±25	±0.0049	±0.0174
BEARING 2 (UNI-LONGITUDINAL)	SW	PMCG3000	2476	1791	4267	1748	-723.8	1024	-	403	-	-	586.6	±25	±0.0049	±0.0174
BEARING 3 (UNI-TRANSVERSE)	PN	PMG10000	9283	3401	12684	6611	-2205	4406	1161	-	263.5	263.5	-	NONE	±0.0027	±0.0174
BEARING 4 (FIXED)	PS	PF10000	9283	3401	12684	6611	-2205	4406	1161	1516	263.5	263.5	813.4	NONE	±0.0027	±0.0174
BEARING 5 (FREE)	NE	PM3000	2476	1791	4267	1748	-723.8	1024	-	-	-	-	-	±25	±0.0049	±0.0174
BEARING 6 (UNI-LONGITUDINAL)	SE	PMCG3000	2476	1791	4267	1748	-723.8	1024	-	403	-	-	586.6	±25	±0.0049	±0.0174

THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF THE PROVINCE OF PRINCE EDWARD ISLAND VALID FOR THE YEAR 2017

COLIN K. JIM
NO. 1741

DATE: JAN. 26/18

LICENSED PROFESSIONAL ENGINEER
PROVINCE OF PRINCE EDWARD ISLAND

CLYDE RIVER BRIDGE – ABUTMENT GFRP BARS															
REF. DWG. SHEET S24, S25 & S27															
MARK	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	LENGTH	QTY.
A1001	ST	1050												1050	180
A1501	2	1375	1375											2750	288
A1502	17		560	1400	560									2520	144
A1503	ST	2925												2925	144
A1504	ST	3900												3900	24
A1505	ST	1600												1600	4
A1506	ST	3150												2600	144
A1507	17		400	500	400									1300	144
A1508	T3	980	650											1630	330
A1509	T2	410	930	825	930	825		465						4385	11*
A1510	T2	410	960	825	960	825		480						4460	10*
A1511	T2	560	1340	1125	1340	1125		560						6050	5*
A1512	T2	560	1270	1125	1270	1125		560						5910	4*
A2001	ST	14200												14200	46
A2002	ST	3850												3850	288
A2501	ST	14200												14200	80
A2502	ST	645												645	12
A2503	ST	3290												3290	18
A2504	ST	1445												1445	12
A2505	ST	1890												1890	54

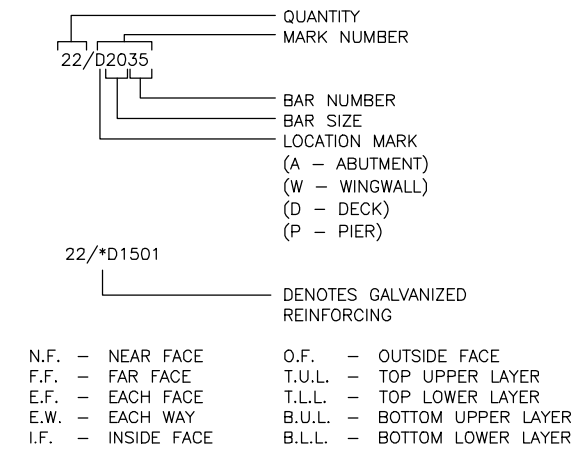
CLYDE RIVER BRIDGE – WINGWALL GFRP BARS																	
REF. DWG. SHEET S26 & S27																	
MARK	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	LENGTH	QTY.		
W1301	ST	1655												1655	180		
W1302	ST	1330												1330	4		
W1501	ST	3900												3900	48		
W1502	ST	6630												6630	16		
W1503	ST	6480												6480	4		
W1504	ST	6450												6450	4		
W1505	HEADED	930												930	184		
W1506	ST	1655												1655	180		
W1507	ST	6630												6630	16		
W1508	ST	6480												6480	4		
W1509	ST	6450												6450	4		
W1510	ST	1330												1330	4		
W2001	17		2280	400	2280									4960	36		
W2002	17		2500	400	2500									5400	24		
W2003	17		2600	400	2600									5600	36		
W2004	17		2825	400	2825									6050	60		
W2005	17		2850	400	2850									6100	30		
W2006	17		2600	400	2600									5600	30		
W2007	ST	1285												1285	30		
W2008	ST	8190												8190	2		
TO	ST														11 BARS CUT IN STEPS 390	TO	2
W2019	ST	3900												3900	2		
W2020	ST	8250												8250	16		
W2021	ST	6530												6530	16		
W2022	17		2075	400	2075									4550	4		
TO	17														23 BARS 'B' & 'D' CUT IN STEPS 50	TO	4
W2045	17		875	400	875									2150	4		
W2046	ST	8175												8175	1		
TO	ST														8 BARS CUT IN STEPS 475	TO	1
W2054	ST	3900												3900	1		
W2055	17	8125												8125	1		
TO	17														12 BARS CUT IN STEPS 325	TO	1
W2067	17	3900												3900	1		
W2068	17		2320	400	2320									5040	2		
TO	17														22 BARS 'B' & 'D' CUT IN STEPS 50	TO	2
W2090	17		1480	400	1480									3360	2		

CLYDE RIVER BRIDGE – WINGWALL GFRP BARS (CONT.)																	
REF. DWG. SHEET S26 & S27																	
MARK	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	LENGTH	QTY.		
W2091	17		2400	400	2400									5200	2		
TO	17														22 BARS 'B' & 'D' CUT IN STEPS 50	TO	2
W20113	17		1200	400	1200									2800	2		
W2501	19		3605	3385					1525		3020			6990	2		
W2502	19		2625	1275					2340		1185			3900	2		
W2503	19		3530	330					1225		3165			6900	1		
W2504	19		1820	2490					2315		905			4310	1		
W2505	19		3630	3130					2725		1530			6760	1		
W2506	19		1400	2985					1460		2600			4385	1		
W2507	ST	8250												8250	2		
TO	ST														14 BARS CUT IN STEPS 290	TO	2
W2521	ST	3900												3900	2		
W2522	ST	8250												8250	21		
W2523	ST	6530												6530	24		
W2524	2	660	8250											8910	8		
W2525	ST	8220												8220	1		
TO	ST														11 BARS CUT IN STEPS 360	TO	1
W2536	ST	3900												3900	1		
W2537	ST	8235												8235	1		
TO	ST														16 BARS CUT IN STEPS 255	TO	1
W2553	ST	3900												3900	1		

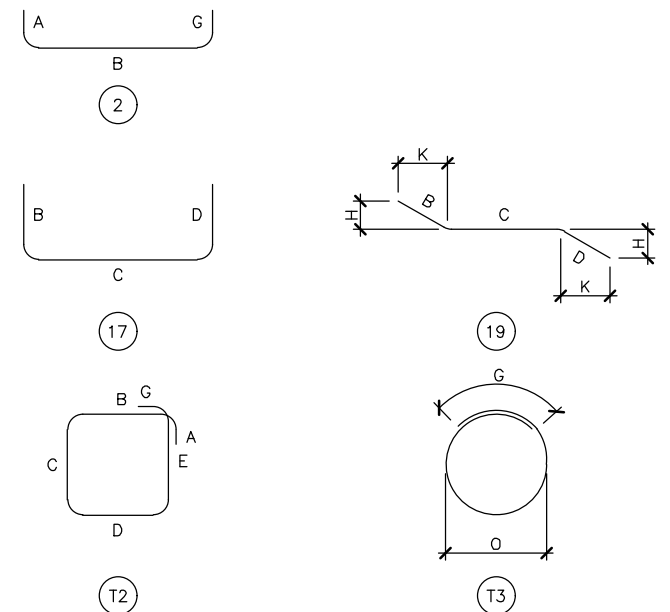
CLYDE RIVER BRIDGE – DECK GFRP BARS																	
REF. DWG. SHEET S30 & S31																	
MARK	TYPE	A	B	C	D	E	F	G	H	J	K	O	R	LENGTH	QTY.		
D1301	ST	1275												1275	896		
D1501	17		990	400	990									2380	98		
D1502	ST	14200												14200	4		
D1503	ST	3300												3300	30		
D1504	19		525	1100	525				370		370			2160	1		
TO															24 BARS CUT 'C' IN STEPS 10	TO	2
D1528	19		525	860	525				370		370			1871	51		
D1529	ST	1505												1505	108		
D1530	ST	6850												6850	110		
D1531	ST	13300												13300	116		
D1532	ST	12200												12200	833		
D1533	ST	7300												7300	392		
D1534	HEADED	810												810	922		
D1535	ST	1275												1275	922		
D1536	ST	2880												2880	630		
D2001	ST	14200												14200	871		
D2002	HEADED E.S.	14200												14200	436		
D2003	HEADED	5550												5550	870		
D2501	ST	14200												14200	36		
D2502	17		550	300	550									1400	536		
D2503	17		1220	370	1220									2810	196		
D2504	ST	6850												6850	216		
D2505	ST	12200												12200	49		
D2506	17		435	350	435									1220	536		
D2507	ST	13300												13300	24		

* NUMBER OF BARS MAY VARY DEPENDING ON ACTUAL PLINTH HEIGHT – SEE S11

REINFORCING LEGEND



TYPICAL BAR BENDS



THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF THE PROVINCE OF PRINCE EDWARD ISLAND VALID FOR THE YEAR 2017

Colin K. Jim

COLIN K. JIM
NO. 1741

DATE: JAN. 26/18

LICENSED PROFESSIONAL ENGINEER
PROVINCE OF PRINCE EDWARD ISLAND