# CORPORATION OF THE TOWN OF RENFREW BY-LAW NO. 28-2017

Being a by-law to authorize the Mayor and Clerk to execute an agreement with WSP Consulting Engineers to design the repairs and provide construction management services relating to the rehabilitation of the Swinging Bridge.

WHEREAS under Section 11 of the Municipal Act, 2001, S.O. 2001, c.25, as amended, the Corporation of the Town of Renfrew has the authority to pass by-laws to enter into agreements; and

WHEREAS an Ontario Structure Inspection Manual (OSIM) inspection of the Swinging Bridge in 2016 identified several deficiencies that require correction; and

WHEREAS the proposal submitted by WSP Consulting Engineers is recommended for adoption by staff of the Development & Works Department.

**NOW THEREFORE** the Council of the Corporation of the Town of Renfrew hereby enacts:

- 1. THAT the Council of the Corporation of the Town of Renfrew approve of the awarding of the proposal from WSP Consulting Engineers in the amount of \$22,539.84, inclusive of 1.76% HST, to design the repairs and provide construction management services relating to the rehabilitation of the Swinging Bridge.
- 2. THAT the Mayor and Clerk be and are hereby authorized on behalf of the Corporation of the Town of Renfrew to execute an agreement with WSP Consulting Engineers to be attached hereto as Schedule "A" and to form part of this By-Law as if fully recited herein.
- 3. THAT the Mayor and Clerk be empowered to do and execute all things, papers and documents necessary to the execution of the said agreement.
- 4. <u>THAT</u> this By-law shall come into force and take effect immediately upon the passage thereof.

Read a first and second time this 9th day of May, 2017.

Read a third time and finally passed this 9th day of May, 2017.

Kim R. Bulmer, Clerk



# PROPOSAL FOR ENGINEERING SERVICES

TO:	Michel Asselin, P.Eng (Town of Renfrew)	DATE:	April 20, 2017
SUBJECT:	Proposal for Detailed Design of Repairs to	Swinging Bridge	

The Town of Renfrew has requested that WSP provide a proposal for engineering services related to the repairs to the Swinging Bridge, located in the Town of Renfrew. A detailed bridge condition survey for the structure was carried out by WSP in 2016. Based on the recommendations of this condition survey report, the Town intends to carry out only the immediately required repair work, as outlined in Option 1 of the report.

WSP's services will include the following:

- Part A Design:
  - Detailed design of repairs
  - o Preparation of tender ready drawings and specifications
  - Prepare a detailed cost estimate
- Part B Tendering and Construction:
  - Provide assistance to Town during tendering period, including;
    - Preparation of a contractor distribution list
    - Prepare construction advertisement for public
    - Answer questions from contractors
    - Review tender submissions and
    - Recommend final award of work
  - Provide Construction Administration services, including:
    - Chair kick-off and progress meetings
    - Prepare progress payments, change orders and recommend/approve payments
    - Manage scope changes with Contractor
    - Issue substantial completion certificates

The following is WSP's anticipated schedule for the design (Part A) component of the work:

Task	Duration
Preliminary Design and Field Visit	2 weeks
Detailed Design (Drawings and Specifications)	4 weeks
Preparation of Tender Ready Contract Package and Cost Estimate	2 weeks

## WSP's fees for the above services are as follows:

Task	Cost
Part A - Design	
Preliminary Design	\$2,720.00
Field Visit to Verify Design Details	\$1,160.00
Preparation of Design Drawings	\$4,950.00
Preparation of Specifications	\$2,350.00
Preparation of Tender Ready Contract Package	\$1,450.00
Part A Sub-Total (Excluding HST)	\$12,630.00



Proposal For Engineering Fees for Repairs to Swinging Bridge April 20, 2017 Page 2

Part B – Tendering and Construction	
Assistance During Tendering	\$890.00
Shop Drawing Review, Progress Payments, Change Orders, etc.	\$1,210.00
Part Time On-Site Contract Administration Services	\$5,120.00
(assume 4 week construction duration)	
Construction Meetings	\$1,500.00
Travel Disbursements	\$800.00
Part B Sub-Total (Excluding HST)	\$9,520.00
Grand Total (Excluding HST)	\$22,150.00

A detailed breakdown of the above engineering fees has been attached to this proposal.

Please do not hesitate to contact the undersigned if you have any questions regarding this proposal. Sincerely,

WSP Canada Inc.

Prepared By:

Approved By:

Matt Thom, EIT.

Structural Inspector / Designer

Julia Marson, P.Eng.

Marson

**Director - Bridges** 



Proposal For Engineering Fees for Repairs to Swinging Bridge April 20, 2017 Page 3

# Form of Agreement

This Form of Agreement herby confirms the intent of both parties (WSP Canada Inc. and the Town of Renfrew) in entering into a contract for the above scoped engineering services.

Signature of Consultant (WSP Canada Inc.):	
Julia Marson, P.Eng	Decamber 18,2017  Date:
Signature of Client (Town of Renfrew):	
Michel Asselin, P.Eng	Dec 18, 2017 Date:
Donterdy, Mayor	Dec 18, 2017
Kim R. Bulmer, Clerk	Drc.18/2017 Date:

## SWINGING BRIDGE INTERIM REPAIRS TOWN OF RENFREW

# **CONTRACT NO. 14-2017**

# INDEX TO CONTRACT DOCUMENTS

Description	Reference	
Information for Tenderers	Section "A"	
Form of Tender	Section "B"	
Contract Agreement	Section "C"	
General Conditions of Contract	Section "D"	
Special Provisions - General	Section "E"	
Special Provisions - Items	Section "F"	
Project Drawings	Section "G"	

# SWINGING BRIDGE INTERIM REPAIRS TOWN OF RENFREW

**CONTRACT NO. 14-2017** 

SECTION "A"

INFORMATION FOR TENDERERS

# **INFORMATION FOR TENDERS**

# **INDEX**

SECTION	DESCRIPTION	PAGE
A-1	Tender Call	1
A-1 A-2	Scope of Work	
	•	
A-3	Completion and Submission of Tenders	
A-4	Tender Deposit	
A-5	Agreement to Bond	
A-6	Guaranteed Maintenance Period	3
<b>A-7</b>	Informal or Unbalanced Tenders	3
A-8	Examination of Site	4
<b>A-</b> 9	Examination of Contract Documents	4
<b>A-</b> 10	Acceptance or Rejection of Tenders	4
A-11	Subcontractors	5
A-12	Index and Reference Numbers	5
A-13	Schedule of Items and Prices	5
A-14	Ability and Experience of Tenderers	5
A-15	Successful Tender - Bonding	5
A-16	Successful Tender - Workplace Safety Insurance Board	5
<b>A-17</b>	Successful Tender - Execution of Form of Agreement	6
A-18	Successful Tender - Insurance	6
<b>A-19</b>	Successful Tender - Time for Completion and Liquidated Damages	6
A-20	Successful Tender - Submission of Documentation	7
A-21	Successful Tender - Commencement of Work	7
A-22	Protection of Environment.	7
A-23	Taxes	7
A-24	Statutory Holdback	7
A-25	Oueries during Tendering Period	8

#### TOWN OF RENFREW

#### **CONTRACT NO. 14-2017**

## **SWINGING BRIDGE INTERIM REPAIRS**

#### A-1 TENDER CALL

The Town of Renfrew invites Tenders for:

Contract Number:

14-2017

Described as:

Swinging Bridge Interim Repairs

Tenders shall be addressed and delivered to:

Town of Renfrew 127 Raglan Street South, Renfrew, ON K7V 1P8 TEL: (613) 432-8166

ATT: Mr. Michel J. Asselin, Director of Development and Works

Tenders shall be received until:

Tuesday, December 5, 2017 at 2:00 pm

Contract Opening on:

Tuesday, December 5, 2017 at 2:00 pm

Substantial Completion of all Works:

Thursday, May 31, 2018

## A-2 GENERAL SCOPE OF WORK

The scope of work for this project includes, but is not necessarily limited to;

- Concrete repairs to the north pier foundation and north deadman anchor
  - o If required, Contractor is permitted to complete this portion of the work in the summer of 2018 when the water levels are lowest.
- Fabricate and install of new steel restraint system for east column of north pier
- Fabricate and install new pier cap connection assembly for north pier
- Epoxy inject gaps between tops of north tower columns and pier caps
- Replace sheared off bolt between columns of north pier
- Fabricate and install new steel collars for north pier columns (mid height of column)
- Install flashing on top of north pier cap
- Replace all existing galvanized turnbuckles in-kind (one at a time)
- Replace all existing threaded rods and fasteners below turnbuckles with similar stainless steel components (one at a time)
- Replace damaged/bent hanger rods (above turnbuckles) as required
- · Replace damaged timber deck boards
- Replace damaged timber barrier post braces
- Replace missing timber lateral bracing (below deck)
- Re-attach damaged timber lateral bracing (below deck)
- Level deck surface near middle of main span
- Remove and relocate cable anchorages for pedestrian barrier
- Concrete removals to the top of the old bridge foundation at the south end of the bridge
- Excavate fill below north end of bridge
- Place rip-rap at north end of bridge

## A-3 COMPLETION AND SUBMISSION OF TENDERS

The correct Tender Form, as supplied by the Town, must be used and in the possession of the Town on or before the Tender Closing Date and Time. Bids received after Closing Time will not be considered.

The Tender must be legible, written in ink or typewriter, and all items must be bid where stipulated with the unit price for every item and other entries clearly shown.

The bid must not be restricted by a statement added to the Tender Form or a covering letter, or alterations to the Tender Forms provided by the Town.

The Tenderer shall submit to the Town:

- a) the Tender;
- b) the Tender deposit;
- c) all Addenda issued by the Contract Administrator or Town with respect to this Contract.

## d) the Agreement to Bond

#### A-4 TENDER DEPOSIT

The Tender must be accompanied by a <u>certified cheque</u>, made payable to the Town in the amount of 10% of the total bid amount. A Bid Bond will also be accepted.

The deposits of the two low Tender submissions shall be retained by the Town until the Contract is executed save that if a Tender submitter has not been requested by the Town to execute the agreement within thirty (30) days, the deposits will be returned.

The Town shall return the deposit of unsuccessful Tenderers.

The Town reserves the right at its discretion, to retain the deposit of the successful tenderer, should the successful tenderer fail to execute or complete the Contract.

#### A-5 AGREEMENT TO BOND

At the time of tendering, the Tenderer shall submit, with the Tender, an Agreement to Bond completed and executed by the Tenderer's surety. The Agreement to Bond and the Tenderer's surety shall be in the form provided in the Form of Tender (Section 9 - Agreement to Bond).

#### A-6 GUARANTEED MAINTENANCE PERIOD

The Guaranteed Maintenance Period shall be a period of one (1) year from the issuance of the Substantial Completion Certificate. During this period, the Contractor shall maintain all work and carry out such repairs as directed by the Contract Administrator. Repairs, as requested by the Contract Administrator, shall be undertaken within twenty-four (24) hours of notice being given; otherwise, the Contract Administrator shall have such repairs carried out by others and charged against the Contractor.

#### A-7 INFORMAL OR UNBALANCED TENDERS

Tenders which are incomplete, conditional, illegible or obscure, or that contain additions not called for, reservations, erasures, alterations or irregularities of any kind, may be rejected as informal.

Tenders that contain prices which appear to be so unbalanced as likely to affect adversely the interests of the Town, may be rejected.

Wherever in a Tender the amount tendered for an item does not agree with the extension of the estimated quantity and the Tendered Unit Price, the Unit price shall govern and the amount shall be corrected accordingly.

The Town reserves the right to waive informalities at their discretion.

#### A-8 EXAMINATION OF SITE

Each Tenderer, at his convenience, must visit the work site before submitting his Tender and must satisfy himself by personal examination as to the local conditions to be met with during construction. He shall make his own estimate of the facilities and difficulties to be encountered. He is not to claim at any time after submission of his Tender that there was any misunderstanding of the terms and conditions of the Contract relating to site conditions. The Contractor shall contact the applicable water authority with respect to anticipated water levels during construction at the bridge site.

## A-9 EXAMINATION OF CONTRACT DOCUMENTS

Each Tenderer must carefully examine all Contract Documents before Submitting his tender and must satisfy himself by personal review of all details that there is no confusing information or discrepancy that could lead to future claims. He shall make his own written inquiry during the tendering period to ensure that he clearly understands all Contract conditions.

At any time after submission of his Tender, the Tenderer shall not claim that there was any misunderstanding of the interpretation of the Tender Documents for the purpose of this Tender. The Contract Documents are deemed correct provided that the correct information is available at least at one location in the Contract Documents.

## A-10 ACCEPTANCE OR REJECTION OF TENDERS

The Town reserves the right to reject any or all Tenders or to accept any Tender should it be deemed in the interests of the Town to do so, and, in particular, if only one Tender is received, the Town reserves the right to reject it.

Neither the Contract Administrator nor any officer or employee of the Contract Administrator has authority to make or accept an offer or to enter into a Contract on behalf of the Town or to create any right against or to impose any obligations on the Town. Recommendation of a Tender to the Town for acceptance does not constitute acceptance of the Tender by the Town.

A Tender is accepted by the Town and a Contract is made thereby between the Town and a Tenderer only when an Agreement is executed by the Town and by the Tenderer.

The Town shall not be responsible for any liabilities, costs, expenses, loss or damage incurred, sustained or suffered by any Tenderer prior to, subsequent to, or by reason of the acceptance or the non-acceptance of a Tender save as provided in the Contract. Tenders are subject to a formal Contract being prepared and executed. The Town reserves the right to reject any or all Tenders and to waive formalities as the interests of the Town may require without stating reasons. Therefore, the lowest or any Tender will not necessarily be accepted.

#### A-11 SUBCONTRACTORS

The Tenderer shall give on the sheet provided in the Form of Tender the name and address of each proposed subcontractor used in making up his Tender stating the portion of work allocated to each. Any changes in subcontractors require the approval of the Contract Administrator.

## A-12 INDEX AND REFERENCE NUMBERS

All index and reference numbers, either in the Tender Form, plans specifications, etc., are given for the convenience of the Contractor and as such must be taken only as a general guide to the item referred to. It must not be assumed that such numbering is the only reference to each item, but the plans and specifications as a whole must be fully read in detail for each item.

#### A-13 SCHEDULE OF ITEMS AND PRICES

The quantities shown in the Schedule of Items and Prices, furnished herewith, are for the sole purpose of indicating to the Tenderer the general magnitude of the work. For any work done on a unit price basis, the Contractor will be paid for a measured quantity at the unit price submitted in the Tender, subject to the provisions of the General Conditions.

#### A-14 ABILITY AND EXPERIENCE OF TENDERERS

It is the purpose of the Town not to award this Contract to any Tenderer who does not furnish satisfactory evidence that he has the ability and experience in the class of work, and that he has sufficient capital and plant to enable him to execute the work successfully and to complete it in the time named in the Contract. The Tenderer shall give in the Form of Tender, three references of projects of similar magnitude and scope. References to include project name, Owner, contact name and phone number. Reference projects shall involve concrete, timber and steelwork which is similar in scope and complexity as this project.

## A-15 SUCCESSFUL TENDERER - BONDING

The successful tenderer shall provide to the Town, a Performance Bond in the amount of fifty percent (50%) of the Total Bid Price, and a Labour and Material Payment Bond in the amount of fifty percent (50%) of the Total Bid Price.

### A-16 SUCCESSFUL TENDERER - WORKPLACE SAFETY INSURANCE BOARD

The successful Tenderer shall provide to the Town, prior to Contract signing, with a valid Workplace Safety Insurance Board Certificate of Clearance to the satisfaction of the Town and have its validity updated as necessary.

### A-17 SUCCESSFUL TENDERER - EXECUTION OF FORM OF AGREEMENT

The successful Tenderer shall execute, in triplicate, the Form of Agreement provided in the Contract Documents. He shall do so within seven (7) days from the day of Contract Award.

#### A-18 SUCCESSFUL TENDERER - INSURANCE

The successful Tenderer shall put in effect and maintain in full force and effect or cause to be put into effect and maintained for the period during which this Contract is in effect, with insurer's acceptable to the Town:

- a) Comprehensive General Liability insurance to an inclusive limit of not less than Two Million dollars (\$2,000,000.00) per occurrence for property, damage, bodily injury and personal injury including, at least, the following policy endorsements:
  - (i) The Town of Renfrew and WSP Canada Inc. as additional insured for the purpose of this Contract only;
  - (ii) Cross liability;
  - (iii) Contractual liability;
  - (iv) Independent Contractors;
  - (v) Products and completed operations;
  - (vi) Employer's liability and voluntary compensation;
  - (vii) 30 day written notice of cancellation;
  - (viii) Tenant and legal liability (if applicable); and
  - (ix) Non-owned automobile coverage with blanket contractual and physical damage coverage for hired automobiles; and
- b) All the necessary insurance that would be considered appropriate for a prudent Contractor of this type undertaking a project similar to this Contract, including, where appropriate and without limitation, property, construction and errors and omissions insurance.

Upon Contract Award, the Contractor shall provide the Town with a valid certificate of insurance that references this Contract, confirms the above requirements and identifies major exclusions in the policy.

# A-19 SUCCESSFUL TENDER - TIME FOR COMPLETION AND LIQUIDATED DAMAGES

1. The successful Tenderer shall achieve substantial completion of all work by May 31, 2018. Pursuant to Special Provision General No. E13, the liquidated damages shall be an amount of three hundred dollars (\$300.00) per day beyond May 31, 2018 for which substantial completion has not been achieved and the bridge is not re-opened to pedestrian traffic.

#### A-20 SUCCESSFUL TENDER - SUBMISSION OF DOCUMENTATION

The successful Tenderer shall submit the documentation required by Sections A15, A16, A17 and A18 of the Information for Tenderers, within seven (7) working days from the day of Contract award.

If the successful Tenderer fails to submit the required documentation on time, the Town may, at its sole discretion, withdraw its acceptance of the Tender and the Tenderer shall have no recourse whatsoever against the Town.

#### A-21 SUCCESSFUL TENDER - COMMENCEMENT OF WORK

The successful Tenderer shall not commence the work until he has received a Notice to Commence issued by the Town.

Notice to Commence will be issued by the Town expeditiously upon submission of all required documents and signing of the Contract by both parties.

#### A-22 PROTECTION OF THE ENVIRONMENT

The Contractor will be fully responsible to carry out his work in a manner to comply with all applicable regulatory requirements pertaining to air, water, land and noise pollution as specified in the Environmental Protection Act.

All other environmental protection measures, which are not specifically mentioned in the Contract Documents, but are required by environmental regulations, shall be deemed to be included in the Tendered price.

## A-23 TAXES

The Harmonized Sales Tax shall be included as indicated on the Form of Tender.

All other applicable taxes and duties shall be included in the tender prices.

## A-24 STATUTORY HOLDBACK

The Town will retain a Statutory Holdback in accordance with the Construction Lien Act.

# A-25 QUERIES DURING TENDER PERIOD

All queries regarding this project shall be address to:

Matt Thom, B.Eng. WSP Canada Inc. 2611 Queensview Drive Ottawa, ON K2B 8K2

Tel: (613) 829-2800 Fax: (613) 829-8299

Email: matt.thom@wsp.com

# SWINGING BRIDGE INTERIM REPAIRS TOWN OF RENFREW

**CONTRACT NO. 14-2017** 

SECTION "B"

## FORM OF TENDER

(Photocopy this entire section for submission with the Tender)

# FORM OF TENDER

# **INDEX**

	DESCRIPTION	PAGE
1.	Identification of Tenderer	1
2.	Declaration of Tenderer	2
3.	Addenda	5
4.	Schedule of Prices	6
5.	Summary Sheet	8
6.	Memorandum of Agreement	9
7.	Examination of Site / Contract Documents	10
8.	List of Subcontractors	11
9.	Agreement to Bond	13

## TOWN OF RENFREW

# **CONTRACT NO. 14-2017**

## **SWINGING BRIDGE INTERIM REPAIRS**

1.	IDENTIFICATION OF TENDERER
A.	Tender by:
	Telephone:
	Fax:
	Address:
	Contact Person;
	Position of Contact Person:
	Alternative Contact:

E-mail:

#### 2. DECLARATION OF TENDERER

The Tenderer declares that:

- (a) No persons, other than the Tenderer, has any interest in this Tender or in the Contract proposed to be entered into.
- (b) This Tender is made without any connection, knowledge, comparison of figures, or arrangement with any other person or persons making a Tender for the same work, and is in all respects fair and without collusion or fraud.
- (c) The several matters stated in the said Tender are in all respects true.
- (d) The Tenderer has carefully examined the locality and site of the proposed works, as well as all the Contract Documents, and hereby accepts the same as part and parcel of this Contract, and do as hereby tender and offer to enter into a Contract to do all the work, provide the labour and to provide, furnish, deliver, place and erect all materials mentioned and described or implied therein, including in every case freight, duty, exchange, and all other charges on the terms and conditions, and under the provisions therein set forth, and to accept in full payment therefore in accordance with the schedule of prices hereto annexed, and the Tenderer also agrees that this offer is to remain open to acceptance until the formal Contract is executed by the successful Tenderer for said work, and that the Town may at any time without notice accept this Tender whether any other Tender has been previously accepted or not.
- (e) The prices offered in this schedule take into account in all respects the cost of execution of the work under all weather conditions and any water level.
- (f) The submission of this Tender is based on the terms and conditions of the draft form of agreement included and any addenda identified herein. It is agreed that in the event of conflict between the unit prices and definitions of this Tender Form, and those contained in the specifications, then this Tender Form shall govern.
- (g) In tendering for the work and in entering into the Contract, the Tenderer has investigated for himself the character of the work to be done and all local conditions that might affect his Tender of his acceptance of the work.

The Tenderer also declares that in tendering for the work and in entering into the Contract, he did not and does not rely upon verbal information furnished by the Town or Contract Administrator.

The Tenderer hereby agrees that the work specified in this contract will be performed in strict accordance with the following Provisions, Plans, Specifications and Conditions:

## A. SPECIAL PROVISIONS

Special Provisions - General Special Provisions - Items

#### B. PLANS

Cover sheet of Contract Drawings Drawings 1 to 5

## C. STANDARD DETAIL DRAWINGS

Standard detail Drawings referenced in the Contract Documents may be viewed online at <a href="https://www.raqsb.mto.gov.on.ca/techpubs/ops.nsf/OPSHomepage">https://www.raqsb.mto.gov.on.ca/techpubs/ops.nsf/OPSHomepage</a>.

## D. STANDARD SPECIFICATIONS

The following Ontario Provincial Standard Specifications apply to this contract and shall include, where applicable, additional Specification Numbers referred to within the Standard Specifications listed. Additional OPSS may be listed and are cross referenced in the specific description of Work.

OPSS	Date	OPSS	Date
182	Nov-12	930	Nov-14
206	Nov-13	1002	Apr-13
501	Nov-14	1004	Nov-13
510	Nov-14	1301	Nov-07
511	Nov-13	1302	Sep-96
805	Nov-15	1350	Nov-14
904	Nov-14	1440	Nov-16
905	Nov-14	1860	Apr-12
906	Nov-12		
907	Apr-11		
919	Nov-11		
928	Apr-12		

1	FΩ	P	M	OF	<b>TENDER</b>	
ı	ロモノ	'n	IVI	V/F		

Page 4

The Contractor shall be responsible to obtain copies of the Ontario Provincial Standard Specifications listed above. These will be available for viewing at the Consultants Office during normal business hours.

E.	GENERAL CONDITIONS OF THE CONTRACT				
	DATED at	this	day of	2017_	

## NOTE:

(Witness)

If the Tenderer is a Corporation, the Corporate seal must be affixed under the signature of a duly authorized officer or officers of the Corporation.

(Tenderer's Signature)

(Seal)

- If the Tenderer is a Partnership, each member of the Partnership must sign in the presence of a witness who must also sign.
- If the Tenderer is not a Corporation or a Partnership, the Tenderer must sign in the presence of a witness who must also sign.

T.	$\Delta D$	3.4	OF	וגיוים	DER
г	UK	JVI	Ur.	I DiN	DEK

Page 5

-	4 300 3		
3.	A 131	DEND	- Α
~Z+	$-\Delta U$		~

The Tenderer will acknowledge receipt of all addenda and list them as followed
--

Number	Dated	Initial
Number	Dated	Initial

#### 4. **SCHEDULE OF PRICES**

## **TOWN OF RENFREW** SCHEDULE OF UNIT PRICES

**CONTRACT No.:** <u>14-2017</u>

**SUBJECT:** 

Swinging Bridge Interim Repairs

Item	OPSS	Description	Units	Est. Qty.	Unit Cost	Price
Gene	ral		·			
1	SP-1	Sitework	LS	1.00		
	SP-2, 805, 182	Environmental Protection / Erosion		1.00		
2	(MUNI)	and Sediment Control	LS	1.00		
3	SP-3	Access to Work Area	LS	1.00		
Subst 4	ructure 928 (MUNI)	Concrete Removal - North Pier Footing	m <sup>2</sup>	6.00		
5	928 (MUNI)	Concrete Removal - Top of Old Abutment at South End of Bridge	m <sup>2</sup>	1.00		
6	928 (MUNI)	Concrete Removal - North Deadman Anchor	m <sup>2</sup>	3.00		
7	904 (MUNI) 905	Dowels Into Concrete	Ea	80.00		
8	(MUNI)	15M Reinforcing Steel Bar	t	0.10		
9	SP-4, 904 (MUNI)	Concrete in North Pier Footing	m <sup>3</sup>	2.00		
10	SP-4, 904 (MUNI)	Concrete in North Deadman Anchor	m <sup>3</sup>	1.00		
11	930 (MUNI)	Concrete Patching of Old Bridge Abutment	LS	1.00		
12	SP-5, 906	Fabricate and Install New Restraining System for East Column	LS	1.00		
Super	structure					
13	510 (MUNI)	North Pier - Remove Existing Connection Plates Between Columns and Pier Caps	LS	1.00		
14	SP-6, 906	North Pier - Fabricate and Install Pier Cap Connection Assembly	LS	1.00		
15		North Pier - Epoxy Inject Gaps Between Timber Columns and Pier Caps	LS	1.00		
16	906	North Pier - Replace Sheared off Bolt Between Columns	LS	1.00		

COD	M	OF	TENDER
PUK	IVI	L JP	TENDER

Page 7

17	906	North Pier - Fabricate and Install New Intermediate Collars for Columns	Ea	2.00	
18		North Pier - Install Aluminum Flashing Over Top Surface of Pier Cap	LS	1.00	
19	SP-7, 906	Replace Turnbuckles and Threaded Rod Assemblies	Ea	104.00	
20	SP-8, 906	Replace Damaged Hanger Rods (Above Turnbuckles)	Ea	9.00	
21	SP-9, 907	Selective Replacement of Damaged Deck Boards	Ea	165.00	
22	SP-10, 907	Replace Damaged Barrier Post Braces	Ea	3.00	]
23	SP-10, 907	Reattach Damaged Lateral Bracing	Ea	6.00	
24	SP-10, 907	Replace Missing Lateral Bracing	Ea	2.00	
25	SP-11, 907	Level Deck Surface Near Middle of Main Span	m	7.00	
26	SP-12, 906	Remove and Relocate Cable Anchorages for Pedestrian Barrier	LS	1.00	
Lands	caping				
27	SP-13, 206 (MUNI)	Excavate Fill at North End of Bridge	m <sup>3</sup>	15.00	
28	SP-14, 511	Rip-Rap	m <sup>2</sup>	30.00	

	F0	ORM OF TENDER	F
5. SUMMARY S	SHEET		
TOTAL			\$
13% H.S.T.			\$
TOTAL TENDER P	RICE		\$
Γhe Contractor by this nerein.	Tender, offers to com	plete this Contract in accordar	nce with the terms conta
DATE AT	THIS	DAY OF	2017.
PENINEDED'S SIGNIA	TURE AND SEAL:		
IENDEKEK S SIGNA			
TENDERER'S POSITI	ION:		
ENDERER'S POSIT			

	FORM OF TENDER	Page 9
6.	MEMORANDUM OF AGREEMENT	
I/We	, the undersigned hereby acknowl	edge and
agree to med (including, Explosives Information the Town is	to receed health and safety requirements included in all Legislative Act or exceed health and safety requirements included in all Legislative Act but not limited to, The Occupational Health and Safety Act, The Peact of Canada, The Workers' Compensation Act and Workplace Has System), as amended, and that failure to abide by these acts and regular scuance of a stop work order, and, in the case of a repetitive infract of the contract or purchase order.	ts and Regulations esticides Act, The zardous Materials tions may result in
Health and protective for without price	I accept that I or any worker in my employ found to be in violation of Safety Act with respect to failure to wear protective clothing such as prototwear, protective eyewear and an approved safety vest (as applicable) or notification. In such an event, I concur that the Town shall not be lime as a direct result of such dismissal.	otective headwear, may be dismissed
Dates this _	day of	, 2017.
(Sign	nature of Contractor)	
(With	aess)	

(Authorized by a Representative from the Town of Renfrew)

7.	EXAMINA	TION O	F SITE /	CONTRA	CT DOCUME!	NTS
f =	THE STATE OF THE S	IIVII V	T. DILLIE			

In submitting this Tender,	
I/We	, hereby acknowledge the following:
(Name of Contractor)	

- 1. We have carefully examined all the Contract Documents and fully understand the scope and overall nature of the work to be carried out under this Contract. We are fully aware of all of our obligations under this Contract including, but not necessarily limited to, submission requirements, work restrictions, permit acquisitions, authorities approvals, etc. Our Total Tender Price submitted includes all costs associated with all equipment, labour, material and transportation required to complete the work (including any and all necessary incidental work whether or not explicitly detailed in the Contract Documents) and meet all of our obligations all in strict conformance with the Contract requirements.
- 2. We have carefully examined the site, field verified all as-built dimensions and made our own assessment as to the overall nature of the work to be performed and any difficulties or delays which may be encountered in order to complete the required work and have included all such associated costs in our Total Tender Price. In examining the site and Contract Documents, we are satisfied that the all the work required under this Contract can be successfully carried out in strict conformance with the Contract requirements without changes to the Contract Documents.
- 3. All work carried out under this Contract will be completed under the direct supervision of a qualified Project Manager and a qualified Site Foreman. We will submit proof of qualification for the Project Manager and the Site Foreman upon project award. We acknowledge that, should personnel changes occur during the course of the project, equally qualified personnel will be employed as a replacement, and proof of qualification will be submitted to the Town. We acknowledge that the Town reserves the right, at his sole discretion, to accept or reject all proposed personnel.
- 4. All Workmanship will be the best quality, executed by workers experienced and skilled in the respective duties for which they are employed. We will not employ any person unfit or unskilled in their required duties. We acknowledge that the Town reserves the right, at his sole discretion, to require the dismissal from site, workers deemed incompetent, careless, insubordinate or otherwise objectionable.

Dated this	day of	, 2017
/D:		
(Sign	nature of Contractor)	

(Witness)

## 8. LIST OF SUBCONTRACTORS

In the space provided below, the Tenderer shall give the name and address of each of the proposed subcontractors used in the making up of this Tender stating the portion of the work allocated to each subcontractor. Any changes in subcontractors require approval of the Contract Administrator.

Subcontractor #1	(1)
Name:	
Address:	
Work to be performed:	
Subcontractor #2	=======================================
Name:	
Address:	
Work to be performed:	= = = = = = = = = = = = = = = = = = = =
Subcontractor #3	
Name:	
Address:	
Work to be performed:	

	FORM OF TENDER	Page 1
Subcontractor #4		
Name:		
Subcontractor #5		
Name:		
Address:		
Work to be performed:		
Subcontractor #6		
Name:		

	FC	ORM OF TENDER	Page 13
9. AGREEME	ENT TO BOND		
We, the undersigned	l, hereby agree to becom	e bound as surety for:	
in a bond conformin works of the Tender		nents attached hereto, for the full ar	nd due performance of the
Swinging Br	idge Interim Repairs – T	Own of Renfrew	
is accepted by the T	own.		
Performance Bond (value) shall be con	(50% of Contract value)	the above-mentioned Tender is and Labour and Material Paymer rigned within seven (7) days of a land void.	nt Bond (50% of Contract
DATE AT	THIS	DAY OF	2017.
WITNESS:			
		Signature of Autho signing for Bondin (COMPANY	ig Company
Name of Bonding	Company	(POSITION)	

Note: Use this form or attached equivalent.

# SWINGING BRIDGE INTERIM REPAIRS TOWN OF RENFREW

**CONTRACT NO. 14-2017** 

**SECTION "C"** 

**CONTRACT AGREEMENT** 

CONT	FRACT AGREEMENT	Page 1
PROJECT:		
TOWN OF RENFRE	EW	
SWINGING BRIDG	E INTERIM REPAIRS	
CONTRACT NO. 14	4-2017	
THIS AGREEMENT made in triplicate this	s day of	
in the year 2017.		
BETWEEN:		
	(Hereinafter called t "Contractor") of the first part.	
and	•	4
The Town of Renfrew	(Hereinafter called t "Town") of the second part.	he

WITNESSETH that the Contractor and the Town, for the considerations hereinafter indicated, undertake and agree as follows:

## **ARTICLE I**

- a) This contract is for miscellaneous bridge interim repair work in accordance with details set out more specifically hereafter and as shown on the accompanying Contract plans.
- b) The following documents, which have been signed or initialed in triplicate for identification by both parties, are to be read herewith and form part of this present agreement for each Contract as fully and completely to all intents and purposes as though all the stipulations thereof have been embodied herein:
  - 1. This Agreement
  - 2. Information for Tenderers
  - 3. Form of Tender
  - 4. General Conditions of Contract (including Supplementary General Conditions)
  - 5. Special Provisions
  - 6. Addendum No. \_\_ to No. \_\_
  - 7. Ontario Provincial Standard Specifications and Drawings
  - 8. Contract Plans

## **ARTICLE II**

The Contractor undertakes and agrees as follows:

- a) To provide, at his own expense, all and every kind of labour, machinery, plant, structures, roadways, materials, appliances, articles and things necessary for the due execution and completion of all the work set out elsewhere in this Contract and shall forthwith according to the instructions of the Contract Administrator commence the works and diligently execute the respective portions thereof, and deliver the works complete in every particular to the Town within the time specified in the Contract.
- b) To grant the Town the right to use completed portions of all Contract construction prior to completion of the Contract without any additional compensation.

## **ARTICLE III**

The Town undertakes and agrees as follows:

- a) To pay the Contractor in lawful money of Canada for the performance of the work of the Contract (subject to additions and deductions as provided in the General Conditions of the Contract) at the unit prices set out in the schedule of unit prices, as described in the Form of Tender, annexed to this Agreement. It is estimated (without limiting the foregoing) that the aggregate payable under this Agreement will be in the amount of \$ Dollars (Including HST) based on the unit prices bid and applied to the measurements of the work.
- b) To make payments on account thereof upon the certificate of the Contract Administrator (when the Contract Administrator is satisfied that payments due to Subcontractors have been made) as follows:
  - (i) On the 25<sup>th</sup> day of each calendar month, the Contractor shall prepare and deliver to the Contract Administrator, for checking, a written estimate of the value of the labour and material incorporated in the work of the Contract up to the 25<sup>th</sup> day of that month. The Contract Administrator shall, by the first day of the following month, issue in favour of the Contractor a certificate for ninety percent (90%) of the value of labour and materials incorporated in the work up to the 25<sup>th</sup> day of the previous month as estimated by the Contractor and approved by the Contract Administrator, less the aggregate of previous payments. Within thirty (30) days after delivery by the Contract Administrator to the Town of each approved certificate, the Town shall pay to the Contractor the amount of the monies owing.
  - (ii) Payment by the Town of the ten percent (10%) holdback shall be in accordance with the Construction Lien Act, and the provision of the following:
    - 1. A satisfactory certificate of clearance from the Workplace Safety Insurance Board.

2. A statutory declaration completed by a signing officer of the company (Contractor) in a form satisfactory to the Contract Administrator that all liabilities incurred by the Contractor and his Subcontractors in carrying out the Contract have been paid and that there are no liens, garnishes, attachments of claims relating to the work.

## **ARTICLE IV**

In the event that the Tender provides for and contains a contingency allowance, it is understood and agreed that such contingency allowance is merely for the convenience of accounting by the Town, and the Contractor is not entitled to payment thereof except for extra or additional work carried out by him in accordance with the Contract and only the extent of such extra or additional work as approved in writing by the Town.

## **ARTICLE V**

No implied Contract of any kind whatsoever by or on behalf of the Town shall arise or be implied from anything in this Contract contained, nor from any position or situation of the parties at any time, it being clearly understood that the express covenants and agreements herein contained made by the Town shall be the only covenants and agreements upon which any rights against the Town may be founded.

## **ARTICLE VI**

The Contractor declares that in tendering for the works and in entering into this Contract, he has either investigated for himself the character of the work and all local conditions that might affect his Tender or his acceptance of the work, or that not having so investigated, he is willing to assume and does hereby assume all risk of conditions arising or developing in the course of the work which might or could make the work, or any items thereof, more expensive in character, or more onerous to fulfill, than was contemplated or known when the Tender was made or the Contract signed. The Contractor also declares that he did not and does not rely upon information furnished by any methods whatsoever by the Town or Contract Administrator, being aware that any information from such sources was not in any manner warranted or guaranteed by the Town.

## ARTICLE VII

The Contractor and the Town for themselves, their successors, and assigns, hereby undertake and agree to the full performance of the covenants contained herein and in the Contract documents as listed in Article 1 herein.

## **ARTICLE VIII**

The Contractor further agrees that he will deliver the whole of the works completed in accordance with this agreement on or before May 31, 2018, and shall not close the bridge to pedestrian use after this

date. Only concrete repairs to the north pier will be permitted to be completed after this date (while bridge is open to pedestrians) if spring water levels are too high to complete the work at that time.

The Contractor agrees that any monies due to the Town as a result of non-completion of the works within the time stipulated may be deducted from any monies due to the Contractor on any account whatsoever.

## **ARTICLE IX**

If and whenever either party hereto desires to give notice to the other party under or in connection with this Agreement, such notice will be effectively given if sent by registered mail

To the Contractor at:	
	-
To the <u>Town</u> at:	The Town of Renfrew
	100 D 1 04 40 41
	127 Raglan Street South
	Renfrew, ON K7V 1P8
And to the Contract	
Administrator at:	WSP Canada Inc.
	2611 Queensview Drive
	AVAL QUOUND IAVIT MAATU
	Ottawa ON, K2H 8R2

and will be considered as having been so given at the time of the deposit hereof in the post office.

CONTR	ACT	AGREEN	<b>JENT</b>

Page 5

In witness whereof, the parties hereto have executed this Agreement the day and year first above written.

SIGNED, SEALED AND DELIVERED In the presence of

(SEAL) (Contractor)	
SEAL) (Town)	

# SWINGING BRIDGE INTERIM REPAIRS TOWN OF RENFREW

**CONTRACT NO. 14-2017** 

**SECTION "D"** 

# GENERAL CONDITIONS OF CONTRACT (OPSS.MUNI 100, NOVEMBER 2006)

COPIES OF THE GENERAL CONDITIONS OF CONTRACT ARE AVAILABLE ONLINE AT <a href="http://www.raqsb.mto.gov.on.ca/techpubs/ops.nsf/OPSHomepage">http://www.raqsb.mto.gov.on.ca/techpubs/ops.nsf/OPSHomepage</a>

Alternatively, copies may be viewed at the offices of WSP Canada Inc., Monday to Friday from 8 am to 4:30 pm

# SWINGING BRIDGE INTERIM REPAIRS TOWN OF RENFREW

**CONTRACT NO. 14-2017** 

**SECTION "E"** 

**SPECIAL PROVISIONS - GENERAL** 

### ENGINEER AND CONTRACT ADMINISTRATOR

Special Provision General No. - E01

For the purpose of this Contract the words: "Engineer" and "Contract Administrator" are equivalent.

#### **DEFINITION OF CONSTRUCTOR**

Special Provision General No. - E02

For the purpose this Contract, the Contractor will be the Constructor.

#### EXISTING UTILITIES AND OPERATIONAL CONSTRAINTS

Special Provision General No. - E03

- 1. The location of utilities should be determined by consulting the municipal authorities and utility companies concerned.
- 2. The Contractor is solely and fully responsible for contacting all applicable utility companies for locates and operational constraints, and for providing such utility companies with details of proposed work.
- The Contractor shall devise methodology of work and carry out the work in a manner as not to affect utility and shall be fully responsible for adequate protection of utilities from damage during construction.
- The Contractor shall co-operate with utility companies which may need to carry out separate work on utilities during this Contracts work.
- 5. In addition to all other Contract requirements, the provisions contained in O.Reg. 213/91, Section 186 shall apply for work in the vicinity of all Hydro installations.

#### COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT

Special Provision General No. - E04

The Contractor shall be fully and solely responsible for compliance with the Occupational Health and Safety Act.

#### **EMPLOYMENT**

Special Provision General No. - E05

### The Contractor and any Sub-Contractor of the Contractor shall;

- 1. Employ only residents of Canada, and
- In employing persons, refrain from discriminating against any person by reason of race, religious views or political
  affiliations.

# OCCUPATIONAL HEALTH AND SAFETY ACT COMPLIANCE

Special Provision General No. - E06

#### List of Designated Substances

In accordance with the Occupational Health and Safety Act, R.S.O. 1990, c. 0.1, the Contractor is advised of the presence of the following Designated Substances.

Substance (Ontario Regulation Number)	Location
Asbestos on Construction Projects and in Buildings and	N/A
Repair Operations (O. Reg. 278/05)	
Benzene (R.R.O. 1990, Reg. 839)	Vehicle Emissions
Mercury (R.R.O. 1990, Reg. 844)	Vehicle Emissions
Vinyl Chloride (R.R.O. 1990, Reg. 846)	Vehicle Emissions
Coke Oven Emissions (R.R.O. 1990, Reg. 840)	
Ethylene Oxide (R.R.O. 1990, Reg. 841)	
Acrylonitrile (R.R.O. 1990, Reg. 835)	
Isocyanates (R.R.O. 1990, Reg. 842)	
Silica (R.R.O. 1990, Reg. 845)	Concrete and Granular
Arsenic (R.R.O. 1990, Reg. 836)	Vehicle Emissions
Lead (R.R.O. 1990, Reg. 843)	N/A
Bat / Bird / Rodent Droppings	Throughout Site
Creosote	Existing Timber Columns

The Contractor is further advised that the Designated Substances silica (Ontario Regulation Number R.R.O. 1990, Reg. 845), lead (R.R.O 1990, Reg. 843) and arsenic (R.R.O. 1990, Reg. 836) are generally present throughout the Working Area, occurring naturally or as a result of vehicle emissions. Exposure to these substances may occur as a result of activities by the Contractor such as sweeping, grinding, crushing, drilling and cutting.

Contractor is also herby warned that Poison Ivy is located on the embankments adjacent to and below the bridge structure.

IDENTIFICATION OF LOCAL REGULATORY AUTHORITIES		
Special Provision General No. – E07		

The following is provided for information only, to facilitate contact with and notification to regulatory authorities as specified in the Contract Documents:

Regulatory Authority	Notification Requirement
MOE: Spills Action Centre (SAC)	For notification of a spill to the environment under the
1-800-268-6060	Environmental Protection Act
Municipality: Town of Renfrew	For notification of a spill to the environment under the
127 Raglan Street South, Renfrew, ON	Environmental Protection Act
Renfrew, ON K7V 1P8	
MOE: Ministry of the Environment	For Waste Management Approval under the
2430 Don Reid Drive	Environmental Protection Act
Ottawa, Ontario K1H 1E1	
MNR: Ministry of Natural Resources – Renfrew	For notification of the release of a deleterious
County	substance to a watercourse under the Fisheries Act
31 Riverside Drive	
Pembroke, Ontario K8A 8R6	
DFO: Department of Fisheries and Oceans	For notification of the release of a deleterious
Sarnia (Regional Headquarters)	substance to a watercourse under the Fisheries Act
520 Exmouth Street	
Sarnia Ontario N7T 8B1	
Local Police: Ontario Provincial Police – Renfrew	For notification of a Dangerous Occurrence involving
Detachment	dangerous goods under the Transportation of
410 O'Brien Road,	Dangerous Goods Act
Renfrew, ON K7V 3Z2	

STRUCTURAL REFERENCE PLANS AND REPORT	
Special Provision General No. – E08	

Design drawings from 1983 bridge rehabilitation of the Swinging Bridge are available for viewing at the WSP office during normal working hours.

WSP Canada Inc.

2611 Queensview Drive, Suite 300 Ottawa, Ontario K2B 8K2, Canada

#### **AS-BUILT MARK-UPS**

Special Provision General No. – E09

As-built mark-up drawings shall be supplied by the Contractor to the Contract Administrator within two weeks of the final completion of the Contract. Unless otherwise specified, as-built mark-up drawings will consist of a set of marked-up drawings with all differences from the Contract drawings shown in red ink, and with references to the Contractor's survey and/or quality control inspection records noted beside each entry.

#### SPILLS REPORTING

Special Provision General No. - E10

Spills or discharges of pollutants or contaminants under the control of the Contractor, and spills or discharges of pollutants or contaminants that are a result of the Contractor's operations that cause or are likely to cause adverse effects shall forthwith be reported to the Contract Administrator. Such spills or discharges and their adverse effects shall be as defined in the Environmental Protection Act R.S.O. 1980.

All spills or discharges of liquid, other than accumulated rain water, from luminaries, internally illuminated signs, lamps and liquid type transformers under the control of the Contractor, and all spills or discharges from this equipment that are a result of the Contractor's operations shall, unless otherwise indicated in the Contract, be assumed to contain PCB's and shall forthwith be reported to the Contract Administrator.

This reporting will not relieve the Contractor of his legislated responsibilities regarding such spills or discharges.

#### SUBMISSIONS

#### Special Provision General No. - E11

The following submissions, but not limited to this list, shall be made to the Contract Administrator for review a minimum of 2 weeks prior to beginning the work. Further submissions as required are listed in specific Sections of Work, Ontario Provincial Standard Specifications and elsewhere in the Contract Specifications.

- Environmental Protection, Erosion and Sediment Control plan.
- Health and Safety Plan.
- Structural Steel Shop Drawings
  - Restraining system for east columns of north pier
  - o North pier cap connection assembly
  - o Intermediate column collars for north pier
  - o New turnbuckles (to match existing)
  - o New hanger rods (above turnbuckles) to match existing
  - o Product sample for steel connection plates for lateral bracing connections.
- Material Information / Product Samples
  - Concrete mix designs (refer to Special Provision General No. E15 below for specifics).
  - Epoxy for dowels into concrete
  - Epoxy for injection above columns (north pier)
  - o Proof of CSA welding certification from companies and individuals involved in welding on this project.
  - Mill Certificates for Structural Steel.

Shop drawings / data sheets do not require an engineer's stamp unless proposed design differs from that shown in the Contract Drawings.

#### **OUALITY CONTROL PROGRAM**

#### Special Provision General No. - E12

In addition to the Contractor's quality control requirements and any other quality control requirements as may be specified elsewhere in the Contract, the following apply:

- 1. If Contractor chooses ready-mix concrete, contractor shall arrange for the concrete supplier to provide on-site concrete testing services for air content, temperature and slump at the time of concrete placement. The concrete tester shall be certified as a concrete field testing technician by the Canadian Council of Independent Laboratories (CCIL).
- 2. If contractor uses proprietary pre-blended concrete product (mix on site and as specified elsewhere in contract)
  Contractor must submit the product specifications and manufacturers recommendations to Contract Administrator for approval. No additional testing is required with use of proprietary pre-blended concrete product, however Contractor must comply with all manufacturers product recommendations.
- 3. Reinforcing Steel Placement reinforcing steel placement for all concrete Repairs will be inspected by the Contract Administrator prior to placing concrete. Contractor to provide assistance for access.

#### LIQUIDATED DAMAGES

Special Provision General No. – E13

#### Fixed Completion Date and Charges

#### 1. Time

Time shall be the essence of this Contract.

### 2. Progress of the Work and Time for Completion

The Contractor shall achieve substantial completion of this Contract by May 31, 2018.

If the Contractor cannot achieve the above completion date working a normal number of hours each day or week on a single daylight shift basis, it is expected that additional and/or augmented daylight and night shifts will be required throughout the life of the Contract to the extent deemed necessary by the Contractor to ensure that the Work will be completed to achieve the above milestone date. Any additional costs occasioned by compliance with these provisions will be considered to be included in the prices bid for the various items of work and no additional compensation will be allowed therefore.

Contractor shall not close the bridge to pedestrian use after May 31, 2018.

The only portion of the work which will be permitted to be completed after May 31, 2018 is the concrete repairs to the north tower footing. If required, the contractor may complete this work during the summer of 2018 when water levels are at their lowest.

# 3. Liquidated Damages as Related to the Completion of this Contract

It is agreed by the parties to the Contract that in case all the Work called for under the Contract is not finished or completed within the date of completion specified aforementioned (May 31, 2018) a loss or damage will be sustained by the Town. Since it is and will be impracticable and extremely difficult to ascertain and determine the actual loss or damage which the Town will suffer in the event of and by reason of such delay, the parties hereto agree that the Contractor will pay to the Town the sum of \$ 300.00 as liquidated damages for each and every calendar day's delay in finishing the work beyond the date of completion prescribed (May 31, 2018). It is agreed that this amount is an estimate of the actual loss or damage to the Town which will accrue during the period in excess of the prescribed date of completion.

#### PROTECTION OF ENDANGERED SPECIES

#### Special Provision General No. - E14

#### **Protection of Endangered Species**

Governed by Ontario's Endangered Species Act (ESA 2007) for all species listed on Species at Risk in Ontario (SARO List). The act prohibits killing, harming, harassing, capturing, possessing, etc. any species that is extirpated, endangered or threatened.

The Contractor shall not harm and adversely affect any wildlife encountered in the Contract. The Contractor is responsible for ensuring all SAR sighted or encountered within the project limits are protected and relocated as necessary.

The Contractor shall ensure that all SAR and especially EMR sighted/encountered within the contract limits, and which are under immediate threat of harm from construction activities are captured live for relocation elsewhere.

The Contract Administrator shall be contacted immediately in the event that any SAR species are encountered within the contract limits. All SAR sightings, dead or alive, shall be reported to the Contract Administrator.

The Contractor shall not destroy active nests of protected migratory birds. When these nests are encountered the Contract Administrator must be contacted.

Further information can be obtained by contacting the Ministry of Natural Resources as identified in Special Provision E07 above. General information can be obtained from the internet at: <a href="https://www.mnr.gov.on.ca/en/Business/Species">www.mnr.gov.on.ca/en/Business/Species</a>

# SWINGING BRIDGE INTERIM REPAIRS TOWN OF RENFREW

**CONTRACT NO. 14-2017** 

**SECTION "F"** 

**SPECIAL PROVISIONS - ITEMS** 

SP-1

Page 1 of 1

### **SCOPE OF WORK**

The following work, activities and costs shall be included under this Item:

- Bonds, administration and supervisory costs.
- Mobilization and demobilization of equipment material and Contractor's forces.
- Schedules and cash flow forecast.
- All costs associated with locates and protection of utilities.
- Installation of temporary barricades, hoarding and other required protection for pedestrians.
- Installation of secure and lockable fencing around perimeter of work area to prevent pedestrian access through site during entire duration of construction. Security measures shall be assessed during the work and may be required to be improved upon should they be deemed inadequate to prevent pedestrian access.
- Bridge permitted to be closed to pedestrian use for a maximum period of 14 consecutive days. All work to be completed when the bridge is closed to pedestrian use.
- Install "Bridge Closed" signage at both ends of bridge.
- 2 weeks prior to the start of construction, Contractor shall provide the dates for which the bridge will be closed to pedestrian use (2 week maximum) so that pubic can be made aware of the closure.
- Cost of supplying and maintenance of adequate sanitary facilities.
- Removal of brush on-site as required to complete work
- Restoration of staging areas to original or better condition
- Restoration of all landscaped areas of the site. Any grassed areas which are damaged shall be repaired with imported topsoil and new sod.

The Contractor shall submit a detailed Work Schedule to the Engineer at the Pre-Construction Meeting.

The Contractor is advised that no additional payment will be made for any repeated mobilization and demobilization for any of the construction activities covered by this Contract; interrupted by weather or by any other construction activity included in any part of this Contract.

#### MEASUREMENT AND BASIS OF PAYMENT

Payment at the Contract lump sum price for the Item "Sitework" shall be full compensation for all labour, materials and equipment required to complete the work. Payment for this Item shall be made as follows:

- 20% upon commencement of on-site construction activity.

- 60% to be prorated over the duration of the Contract as per the approved schedule. 20% upon completion of all construction works

SP-2

Page 1 of 4

OPSS 805 and OPSS 182 shall govern except as extended herein:

# Scope of Work

The Contractor shall design, erect, maintain and remove upon completion, the protection schemes necessary for carrying out the work without letting any harmful materials enter the waterway (concrete, debris, other construction materials, etc.), to MNRF approval and satisfaction. Contractor shall also be responsible for the off-site removal of all sediment/material accumulated by the control measures.

#### **Environmental Protection - General**

The Contractor is fully and solely responsible for compliance with MNRF as related to protection of fish habitat and protection of the environment. Contractor is fully and solely responsible for compliance with all Federal, Provincial and Municipal Acts and regulations as related to environmental protection.

# **Erosion and Sediment Control Plan**

#### General

The Contractor acknowledges that surface erosion and sediment runoff resulting from his construction operations will have a detrimental impact to any downstream watercourse, and that all construction operations that may impact water quality shall be carried out in a manner that strictly meets the requirements of all applicable legislation and regulations.

As such, the Contractor shall be responsible for supplying and installing any appropriate control measures, so as to prevent sediment laden runoff from entering any watercourse within - or downstream of - the Working Area.

The Contractor acknowledges that no single measure is likely to be 100% effective for erosion protection and controlling sediment runoff. Therefore where necessary, the Contractor shall implement successive measures so as to achieve the required level of sediment control. Specific measures shall be installed in accordance with the requirements of OPSS 805 (where appropriate), or in accordance with manufacturer's recommendations.

Where, in the opinion of the Contract Administrator or MNRF, the installed control measures fail to perform adequately, the Contractor shall supply and install additional or alternative measures as directed by the Contract Administrator or MNRF. As such, the Contractor shall have additional control measure materials on site at all times, which are easily accessible, and may be implemented by him immediately.

Before commencing the Work, the Contractor shall submit to the Contract Administrator a detailed Erosion and Sediment Control (ESC) Plan. The ESC Plan will consist of a written description and detailed drawings indicating the on-site activities and measures to be used to control erosion and sediment movement for each step of the Work. The written description and drawings shall bear the stamp and signature of a qualified Professional Engineer licensed in Ontario.

### Contractor's Responsibilities

The Contractor shall ensure that all workers (including sub-contractors) are aware of the importance of the erosion and sediment control measures, and are informed of the consequences of failure to comply with the requirements of the MNRF and the specifications detailed herein. The Contractor shall periodically, and when requested by the Contract Administrator, clean out accumulated sediment deposits at the sediment control devices, including those deposits that may originate from outside the construction area. Accumulated sediment shall be removed in such a manner that prevents the deposition of this material into any watercourse and avoids damage to the control measure. The sediment shall be removed from the site at the Contractor's expense and managed in compliance with the requirements for excess earth material, as specified elsewhere in the Contract.

The Contractor shall immediately report to the Contract Administrator any accidental discharges of sediment material into the watercourse. Failure to report will be constitute a breach of this specification and the Contractor may also be subject to the penalties imposed by the MNRF. Appropriate response measures, including any repairs to existing control measures or the implementation of additional control measures, shall be carried out by the Contractor without delay. The sediment control measures shall only be removed when, in the opinion of the Contract Administrator, the measure or measures, is no longer required. No control measure may be permanently removed without prior authorization from the Contract Administrator. All sediment and erosion control measures shall be removed in a manner that avoids the entry of any equipment, other than hand-held equipment, into any watercourse, and prevents the release of any sediment or debris into any watercourse within, or downstream of, the Working Area.

Where, in the opinion of either the Contract Administrator or the MNRF, any of the terms specified herein have not been complied with or performed in a suitable manner (or at all) the Contract Administrator and/or the MNRF has the right to immediately withdraw its permission to continue the work but may renew permission upon being satisfied that the deficiencies in the performance of the control/protection measures have been remedied. No compensation will be owed or paid to the Contractor for the withdrawal of permission to do the work resulting from non-compliance with the requirements of this specification or the MNRF.

If the Contractor refuses to perform or rectify protection system deficiencies within forty-eight (48) hours of the receipt of the written demand of the Contract Administrator to do so, the Owner is hereby entitled to enter upon the Working Area and either complete the work in conformity with the Contract or have the work done that is considered necessary to complete the Work to its intended condition, whichever, in the Owner's sole opinion, is the most reasonable course of action. The Contractor and the Owner further agree that the costs incurred for any such work shall be retained by the Owner from monies otherwise due to the Contractor, should any such monies be available.

#### **Erosion and Sediment Control Details**

The sediment control measures include, but are not necessarily limited to the following:

- a) Silt curtains/fence barriers
- b) Debris and effluent catchment system during removals
- c) Debris and effluent catchment system during construction of new

The contractor is hereby required to adhere to the following:

- 1. Use erosion-resistant material, such as gravel fill with rip-rap or geotextile lining, in order to prevent the entry of sediment into the watercourse.
- 2. Prevent any silt from excavation and backfill from entering the waterway.
- 3. Equipment and materials should be stored well back from the water's edge.
- 4. Do not clean concrete buckets, wheelbarrows, or shovels in water body. Instead, wash them with hoses so that run-off is filtered through vegetation. Prevent the entry of lime, cement or fresh concrete into waterways.
- 5. The Contractor shall ensure that no contamination, waste, debris, construction materials or other substances which may be detrimental to marine life or quality of water shall enter the watercourse as either a direct or indirect result of construction and the Contractor shall meet all requirements of government authorities and applicable agencies with respect to environmental protection.
- 6. The Contractor shall immediately clean up any spills or contamination, waste, debris, construction materials or other substances which may be either detrimental to marine life or water quality. In the event of a spill, the Contractor shall immediately commence a clean-up operation. The Contractor shall be liable for all damages and/or charges laid which result, either directly or indirectly, from the spill, or contamination of any kind, which result from its construction operations.

# **Anticipated Water Flows and Local Conditions**

The Contractor must satisfy himself with the local conditions and anticipated water flows, levels and flow velocities to be met with during construction. He shall make his own estimate of the facilities required and difficulties to be encountered, including the nature of subsurface materials and conditions.

Hydro dam structures located upstream and downstream of the bridge. Hydro structures may cause the water levels to fluctuate at the bridge which may have impact on the work.

#### **Submissions to Contract Administrator**

In addition to requirements as detailed elsewhere, the Contractor shall submit to the Contract Administrator two copies of all protection schemes a minimum of 14 calendar days prior to proceeding with the work. The submission shall be comprehensive and shall provide descriptions, working drawings and schedules that detail the sequence of this work and the temporary protection systems.

Permission to proceed with the work will be provided if the Contract Administrator and/or the MNRF determine that all the details of the Contractor's operations meet the requirements specified in the Contract Documents and as may be specified by MNRF.

# **Ineffectiveness of Installed System**

Whenever protection measures are found to be inadequate by the Contract Administrator and/or MNRF, changes shall immediately be made, which will ensure watercourse, embankment, streambed and fisheries protection, at no extra cost to the Owner.

# **Basis for Payment**

Payment at the Contract lump sum price for the Item "Environmental Protection" shall be full compensation for all labour, materials and equipment required to complete the work.

# Measurement for Payment

Payment for this lump sum Item will be as follows:

- 30% upon installation of environmental protection,
- 55% to be prorated over the scheduled duration of the Contract per the approved schedule,
- 15% upon removal of all environmental protection.

SP-3

Page 1 of 1

#### **SCOPE OF WORK**

The scope of work under the item 'Access to Work Area' includes, but is not necessarily limited to, all required access equipment, temporary structures (scaffolding, platforms, etc.) required for accessing the various work locations on the site.

### MEASUREMENT FOR PAYMENT

There will be no measurement for payment for the above item as this item will be paid for by lump sum.

### **BASIS OF PAYMENT**

Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment, and Material to do the work.

# CONCRETE IN NORTH PIER FOOTING - Item No. 9 CONCRETE IN NORTH DEADMAN ANCHOR - Item No. 10

SP-4 Page 1 of 1

OPSS 904 shall apply except as amended and extended herein.

904.04 DESIGN AND SUBMISSION REQUIREMENTS

904.04.01 Submission Requirements

Section 904.04.01 is amended by the addition of the following:

904.04.01.06 Use of Pre-Blended Concrete

Contractor may use a "pre-blended" proprietary concrete product for all concrete used in this project. The following product is pre-approved for use on this project:

• King FA-S10

Equivalent products to the above may be used. Contractor shall submit to Contract Administrator for review and acceptance the specifications/data sheets for the proposed product to be used.

# 904.08 QUALITY ASSURANCE

Section 904.04.01 is amended by the addition of the following:

# 904.08.05 Concrete Testing

If contractor choses to use "pre-blended" concrete product (approved by Contract Administrator), no on-site testing of plastic concrete is required.

If contractor uses ready-mix concrete, the contractor shall retain the services of a qualified concrete tester to check the air, temperature and slump of the plastic concrete.

# <u>FABRICATE AND INSTALL NEW RESTRAINING SYSTEM FOR EAST COLUMN</u> - Item No. 12

SP-5

Page 1 of 2

OPSS 906 shall apply except as amended and extended herein.

906.01

SCOPE OF WORK

Section 906.01 is amended by the addition of the following:

The scope of work under the item 'Fabricate and Install New Restraining System for East Column' includes, but is not necessarily limited to the fabrication, and installation of a steel restraining bracket to restrain the base of the east timber column of the north pier as detailed in the Contract Documents.

OPSS 906 is amended by the addition of the following:

906.04.04

SHOP DRAWINGS

Contractor shall submit to the Contract Administrator for review and approval detailed shop drawings for the new restraining system for the east column. Contractors schedule shall allow one (1) week for the Contract Administrator to review the submitted shop drawings. Shop drawings do not require engineers stamp, unless the proposed system is modified from the design shown in the Contract Drawings.

906.07 CONSTRUCTION

Section 906.07 is amended by the addition of the following:

906.07.10 Installation

Contractor shall install the restraining bracket before the new concrete is placed in the repair areas of the north pier footing. The bracket shall be installed tightly against the east column to restrain and prevent any outward movement of the column.

906.10 BASIS OF PAYMENT

Section 906.10 is amended by the addition of the following;

907.10.05 Fabricate and Install New Restraining Bracket for East Column - Item

Payment at the Contract price for the above tender items shall be full compensation for all labour,

Equipment, and Material to do the work.

# NORTH PIER - FABRICATE AND INSTALL PIER CAP CONNECTION ASSEMBLY - Item No. 14

SP-6

Page 1 of 2

OPSS 906 shall apply except as amended and extended herein.

906.01

#### SCOPE OF WORK

Section 906.01 is amended by the addition of the following:

The scope of work under the item 'North Pier - Fabricate and Install Pier Cap Connection Assembly' includes, but is not necessarily limited to the fabrication, and installation of a pier cap connection assembly for the north tower of the bridge, as specified in the Contract Documents.

OPSS 906 is amended by the addition of the following:

906.04.04

#### **SHOP DRAWINGS**

Contractor shall submit to the Contract Administrator for review and approval detailed shop drawings for the new pier cap connection assembly. Contractors schedule shall allow one (1) week for the Contract Administrator to review the submitted shop drawings. Shop drawings do not require engineers stamp, unless the proposed assembly is modified from the design shown in the Contract Drawings.

#### 906.07

#### CONSTRUCTION

Section 906.07 is amended by the addition of the following:

#### 906.07.10

### **Installation Sequence**

Contractor shall install the connection assembly in such a manner that no more than one (1) of the four (4) timber columns of the north tower is disconnected from the pier cap at any given time. Duration of time for which a single column is disconnected from the pier cap shall be minimized and shall be only long enough for the work to be carried out. All four columns shall be positively connected to the pier cap (either by the existing or new connections) when the contractor is not on-site.

#### 906.10

#### **BASIS OF PAYMENT**

Section 906.10 is amended by the addition of the following;

# 907.10.05 Fabricate and Install Pier Cap Connection Assembly - Item

Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment, and Material to do the work.

**SP-7** 

Page 1 of 2

OPSS 906 shall apply except as amended and extended herein.

906.01

#### **SCOPE OF WORK**

Section 906.01 is amended by the addition of the following:

The scope of work under the item 'Replace Turnbuckles and Threaded Rod Assemblies' includes, but is not necessarily limited to the replacement in-kind of all turnbuckles, and the replacement of all existing galvanized threaded rods below turnbuckles with matching stainless steel components, which form the lower part of the vertical deck hanger assemblies. Replacement of nuts, washers, cotter pins and any other components associated with the work are included under this item.

This item also includes the tightening of the existing nuts (and replacement of any missing nuts, or fastening plates) where the upper hanger rod attaches to the main steel support cable.

Section 906.04 is amended by the addition of the following:

#### 906.04.04

#### SHOP DRAWINGS/DATA SHEETS

Contractor shall submit to the Contract Administrator detailed shop drawings/data sheets for the new turnbuckle and threaded rod assemblies. Contractors schedule shall allow one (1) week for the Contract Administrator to review the submission. Shop drawings/data sheets do not require engineers stamp.

#### 906.04.05 REPLACEMENT PROCEDURE

Contractor shall submit to the Contract Administrator a detailed procedure for the replacement of the turnbuckles and threaded rods assemblies. Procedure shall specify how the end of the floor beam will be temporarily supported during replacement of these components and shall specify the details of all materials and equipment used. Contractors schedule shall allow one (1) week for the Contract Administrator to review the submission. Procedure does not require engineers stamp. A high-strength ratchet-strap (3000lb working load limit) is permitted to support the end of the floor beam by attaching the floor beam to the main suspension cable.

#### 906.05

#### **MATERIALS**

Section 906.05 is amended by the addition of the following:

#### 906.05.07 Threaded Rods

The threaded rods below the turnbuckles which are to be replaced shall be stainless steel, grade 350W.

# 906.07 CONSTRUCTION

Section 906.07 is amended by the addition of the following:

### 906.07.10 Replacement Sequence

Contractor shall replace one hanger assembly at a time.

Contractor shall ensure that all vertical hanger assemblies are intact (either existing or newly replaced components) when the contractor is not on-site. Other temporary support measures are only permitted for the replacement of the vertical hanger assemblies and shall not be relied upon for support for periods of time.

OPSS 906 is amended by the addition of the following section;

#### 906.09 MEASUREMENT FOR PAYMENT

Measurement for payment for the Item "Replace Turnbuckles and Threaded Rod Assemblies" will be for each vertical hanger of which the specified hanger components are replaced.

#### 906.10 BASIS OF PAYMENT

Section 906.10 is amended by the addition of the following;

## 906.10.05 Replace Turnbuckles and Threaded Rod Assemblies - Item

Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment, and Material to do the work. Selective replacement of the hanger rods located above the turnbuckles shall be paid for under separate item.

SP-8

Page 1 of 2

OPSS 906 shall apply except as amended and extended herein.

#### 906.01

# **SCOPE OF WORK**

Section 906.01 is amended by the addition of the following:

The scope of work under the Item 'Replace Damaged Hanger Rods (Above Turnbuckles)' includes, but is not necessarily limited to the replacement in-kind of bent/deformed vertical hanger rods and all associated components of the vertical hanger assemblies located above the turnbuckles. These associated components include the plate washers and nuts at rod connections to the main support cables. New hanger rods shall match the existing hanger rod in appearance. Contractor acknowledges that the damaged rods vary in overall length from location to location throughout the bridge and each rod must be custom made for each location. For bidding purpose, Contractor shall assume that the longest hander rods are those which require replacement.

Section 906.04 is amended by the addition of the following:

#### 906.04.04

#### SHOP DRAWINGS

Contractor shall submit to the Contract Administrator for review and approval detailed shop drawings for the new hanger rods (above turnbuckles). Contractors schedule shall allow one (1) week for the Contract Administrator to review the submission. Shop drawings do not require engineers stamp.

#### 906.05

# **MATERIALS**

Section 906.05 is amended by the addition of the following:

#### 906.05.07

#### Hanger Rods (Above Turnbuckles)

The hanger rods (above turnbuckles) which are to be replaced shall be grade 350W and shall be hot-dip galvanized.

OPSS 906 is amended by the addition of the following section;

#### 906.09

#### MEASUREMENT FOR PAYMENT

Measurement for payment for the Item 'Replace Damaged Hanger Rods' will be for each vertical hanger of which the specified rods and associated hanger components are replaced.

# 906.10 BASIS OF PAYMENT

Section 906.10 is amended by the addition of the following;

# 906.10.05 Replace Bent Hanger Rods (Above Turnbuckles) - Item

Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment, and Material to do the work.

#### SELECTIVE REPLACMENT OF DAMAGED DECK BOARDS - Item No. 21

SP-9

Page 1 of 2

OPSS 907 shall apply except as amended and extended herein.

#### 907.01

#### **SCOPE OF WORK**

Section 907.01 is amended by the addition of the following:

The scope of work under item 'Selective Replacement of Damaged Deck Boards' includes, but is not necessarily limited to the replacement of loose, damaged or missing deck boards as required throughout the entire length of the bridge. Boards requiring replacement will be identified by the Contract Administrator.

Also included in the scope of work for this item is the following:

- Replacement of deck boards as required for levelling the deck near the middle of the main span.
- Replacement of deck boards as required for re-attachment/replacement of the damaged/disconnected lateral bracing below the bridge deck.
- Replacement of deck boards at the north end of the bridge as required to complete concrete repairs to the south face of the north deadman anchor.

For all the above situations, this item shall include the supply of screw fasteners to secure the new boards as well as a generous bead of construction adhesive to secure the boards to the stringers.

#### 907.05

#### **MATERIALS**

Section 907.05 is amended by the addition of the following section;

#### 907.05.08

#### Screws

Screws used to secure the new deck boards shall meet the following requirements:

- Screws shall be stainless steel or shall have a coating which allows for use with pressure treated wood.
- Length shall be 3" inches
- Screw diameter shall be size #10

#### 907.07 CONSTRUCTION

Section 907.07 is amended by the addition of the following section;

# 907.07.10 Securing New Deck Boards

9/64" diameter pilot holes shall be drilled into the new deck boards and existing stringers for each new screw installed.

A generous bead of construction adhesive shall be placed between the existing stringer and the new deck boards which are installed. Contractor shall fill the old nail holes in the stringers with the construction adhesive before installing the new deck boards.

907.09 MEASUREMENT FOR PAYMENT

907.09.01 Actual Measurement

Section 907.09.01 is amended by the addition of the following;

907.09.01.02 Selective Replacement of Damaged Deck Boards

Measurement for payment shall be per each board replaced.

#### 907.10 BASIS OF PAYMENT

Section 907.10 is amended by the addition of the following;

# 907.10.03 Selective Replace Damaged Deck Boards - Item

Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment, and Material to do the work.

# REPLACE DAMAGED BARRIER POST BRACES - Item No. 22 REATTACH DAMAGED LATERAL BRACING - Item No. 23 REPLACE MISSING LATERAL BRACING - Item No. 24

SP-10

Page 1 of 3

OPSS 907 shall apply except as amended and extended herein.

907.01

**SCOPE OF WORK** 

Section 907.01 is amended by the addition of the following:

The scope of work under item 'Replace Damaged Barrier Post Braces' includes, but is not necessarily limited to the complete replacement of barrier post braces which have been damaged, are loose or are missing. Post braces requiring replacement will be identified by the Contract Administrator. Work under this item will include the replacement of all existing fasteners used in securing the railing post braces.

The scope of work under item 'Reattach Damaged Lateral Bracing' includes, but is not necessarily limited to the re-attachment (where loose or disconnected) of lateral bracing on the underside of the bridge deck. Braces requiring reattachment will be identified by the Contract Administrator. Work under this item will include the supply and use of new steel connection plates and screw fasteners to secure the existing bracing members.

The scope of work under item 'Replace Missing Lateral Bracing' includes, but is not necessarily limited to the installation of lateral bracing (where missing) on the underside of the bridge deck. Work under this item will include the supply of new timber braces (new braces shall match the dimensions of the existing lateral brace members found elsewhere in the structure), new steel connection plates, and new screw fasteners to secure the new braces in place.

907.04

**DESIGN AND SUBMISSION REQUIREMENTS** 

907.04.01

**Submission Requirements** 

Section 907.04.01 is amended by the addition of the following:

907.04.01.05

**Connection Plate for Lateral Bracing** 

Contractor shall submit to the Contract Administrator for approval a data sheet and/or shop drawing for the proposed connection plate to be used to connect the ends of the lateral braces with the stringers.

### 907.05 MATERIALS

Section 907.05 is amended by the addition of the following;

#### 907.05.08 Screws for Lateral Bracing

Screws for lateral bracing shall meet the following requirements:

- Screws shall be stainless steel or shall have a coating which allows for use with pressure treated wood.
- Screw length shall be the full width of both timber members being jointed less 3/8 of an inch
- Screw size (diameter) shall be size #10

## 907.05.09 Connection Plate for Lateral Bracing

The ends of the lateral bracing members (either replaced or reattached) shall be secured with steel connection plates. Plates shall meet the following requirements:

- Plates shall be constructed from 12 gauge, galvanized steel
- Plates shall have a minimum length of 300 inches and minimum width of 100 inches
- Plate shall be field bent in middle to exactly match the angle of the intersection of the bracing and stringers
- Plates shall allow for a minimum of 6 fasteners to be installed (3 on each side of the connection)

#### 907.07 CONSTRUCTION

Section 907.07 is amended by the addition of the following:

# 907.07.10 Access for Lateral Bracing Repairs

Contractor may temporarily remove decking boards in order to access and replace/reattach the missing/damaged lateral bracing located on the underside of the bridge. Contractor shall only remove and replace deck boards as required for the completion of the work. All removed boards shall be replaced with new boards. Deck board replacement shall be carried out as specified in SP-9.

Locations of damaged lateral bracing are within the north span of the bridge, and near the north tower in the main (south) span of the bridge.

### 907.07.11 Securing Lateral Bracing

Contractor shall secure lateral bracing with screws (2 screws at each end of brace) and connection plates (total of 6 screws in each plate).

9/64 pilot holes shall be drilled for each new screw fastener installed.

907.09 MEASUREMENT FOR PAYMENT

907.09.01 Actual Measurement

Section 907.09.01 is amended by the addition of the following;

907.09.01.02 Replace Damaged Barrier Post Braces

Measurement for payment shall be per each barrier post brace replaced.

907.09.01.03 Reattach Damaged Lateral Bracing

Measurement for payment shall be per each lateral brace re-attached.

907.09.01.04 Replace Missing Lateral Bracing

Measurement for payment shall be per each lateral brace installed.

907.10 BASIS OF PAYMENT

Section 907.10 is amended by the addition of the following;

907.10.03 Replace Damaged Barrier Post Braces – Item

Reattach Damaged Lateral Bracing – Item Replace Missing Lateral Bracing – Item

Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment, and Material to do the work. Deck boards replaced as required to carry out work in above items shall be paid for under separate item.

SP-11 Page 1 of 2

OPSS 907 shall apply except as amended and extended herein.

#### 907.01 SCOPE OF WORK

Section 907.01 is amended by the addition of the following:

The scope of work under the item 'Level Deck Surface' includes, but is not necessarily limited to the removal of decking boards, installation of additional stringer members (connected to existing stringers at higher elevations to level deck boards) and spacer blocks as detailed in the Contract Drawings. Installation of new deck boards shall be performed as specified in SP-9 and shall be paid for under separate item.

Contract Administrator shall delineate the area of the deck to be leveled.

#### 907.05 MATERIALS

Section 907.05 is amended by the addition of the following:

#### 907.05.08 Screws

Screws for securing the new stringers to the existing stringers shall meet the following requirements:

- Screws shall be stainless steel or shall have a coating which allows for use with pressure treated wood.
- Screw length shall be the full width of both timber members being jointed less 3/8 of an inch
- Screw size (diameter) shall be size #10

#### 907.07 CONSTRUCTION

Section 907.07 is amended by the addition of the following:

# 907.07.10 Installation of New Stringers

9/64" diameter pilot holes shall be drilled into the new and existing stringers where new screws are to be installed. Three (3) screws shall be installed every 200mm. along the length of the new stringer.

A generous bead of construction adhesive shall be placed between the new and existing stringers. Contractor shall fill the old nail holes in the stringers with the construction adhesive before installing the new deck boards.

907.09

MEASUREMENT FOR PAYMENT

907.09.01

**Actual Measurement** 

Section 907.09.01 is amended by the addition of the following;

907.09.01.02

Level Deck Surface Near Middle of Main Span

Measurement for payment shall be per linear meter of bridge deck where the leveling repairs are carried out.

907.10

**BASIS OF PAYMENT** 

Section 907.10 is amended by the addition of the following;

907.10.03

Level Deck Surface Near Middle of Main Span - Item

Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment, and Material to do the work.

# REMOVE AND RELOCATE CABLE ANCHORAGE FOR PEDESTRIAN BARRIER - Item No. 26

SP-12 Page 1 of 2

OPSS 906 shall apply except as amended and extended herein.

#### 906.01 SCOPE OF WORK

Section 907.01 is amended by the addition of the following:

The scope of work under item 'Remove and Relocate Cable Anchorage for Pedestrian Barrier' includes, but is not necessarily limited to, the removal, relocation and reinstallation of the cable anchorage plates which secure the steel cable at the base of the pedestrian barrier to the exterior stringers along the full length of the bridge. This item includes the replacement of existing screws/nails (between plate and stringer) and replacement of existing tie wires (connecting cable to plates).

This item also includes the re-attachment of the pedestrian barriers' chain-link fencing to the steel cable with new wire along the entire length of the bridges pedestrian barriers.

#### 906.05 MATERIALS

Section 906.05 is amended by the addition of the following:

#### 906.05.07 Screws

Screws used to secure the new deck boards shall meet the following requirements:

- Screws shall be stainless steel or shall have a coating which allows for use with pressure treated wood.
- Screw length shall be at least the full width of the timber stringer and steel plate less 3/8 of an inch
- Screw diameter shall be size #8

#### 906.05.08 Fence Tie Wire

PVC coated tie wire (specific for use with chain-link fencing) shall be used to secure the existing chain-link fence on the bridges traffic barrier to the steel cable at the base of the traffic barrier.

#### 906.07 CONSTRUCTION

Section 906.07 is amended by the addition of the following:

# 906.07.10 Relocating Cable Anchorage Plates

Contractor shall remove and relocated the existing cable anchorage plates so that the new screws are secured into solid wood which is not rotten. Distance that anchorage plates are moved shall be minimized as much as possible and shall not exceed 150mm (either left of right) of the existing anchorage location, unless approved by Contract Administrator.

# 906.07.11 Connecting Chain-Link Fence to Steel Cable

Contractor shall secure the chain-link fence of the pedestrian barrier to the steel cable at regular intervals of no more than 500mm along the entire length of the cables.

OPSS 906 is amended by the addition of the following section:

#### 906.09 MEASUREMENT FOR PAYMENT

There will be no measurement for payment for the above item as this item will be paid by lump sum.

#### 906.10 BASIS OF PAYMENT

Section 906.10 is amended by the addition of the following:

### 906.10.05 Remove and Relocate Cable Anchorage for Pedestrian Barrier - Item

Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment, and Material to do the work.

SP-13

Page 1 of 1

OPSS 206 shall apply except as amended and extended herein.

206.01

**SCOPE OF WORK** 

Section 206.01 is amended by the addition of the following:

The scope of work under the item 'Excavate Fill at North End of Bridge' includes, but is not necessarily limited to, the excavation and removal of existing fill material at the north end of the bridge as shown in the Contract Drawings. This item also includes the excavation of fill material around the north Deadman anchor as required to complete concrete repairs.

206.06

**EQUIPMENT** 

Section 206.06 is amended by the addition of the following;

206.06.02

**Hand Excavation** 

Contractor shall assume that all excavation will be carried out by hand. Equipment access under the north end of the bridge is limited.

206.09

MEASUREMENT FOR PAYMENT

Section 206.01 is amended by the addition of the following:

206.09.01.06

**Excavate Fill at North End of Bridge** 

Measurement for payment for the Item 'Excavate Fill at North End of Bridge' will be by cubic meter of earth fill excavated and removed from site.

206.10

BASIS OF PAYMENT

Section 206.10 is amended by the addition of the following;

206.10.10

Excavate Fill at North End of Bridge - Item

Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment, and Material to do the work.

SP-14 Page 1 of 1

OPSS 511 shall apply except as amended and extended herein.

#### 511.01 SCOPE OF WORK

Section 511.01 is amended by the addition of the following:

The scope of work under the item 'Rip-Rap' includes, but is not necessarily limited to the placement of Rip-Rap over geotextile fabric at the north end of the bridge as shown in the Contract Drawings. Geotextile supply and placement shall be included in this Item.

#### 511.05 MATERIALS

Stone to be used is classified as "G-10 Gabion Stone" (as specified in OPSS MUNI.1004) with an average diameter of approximately 150mm.

### 511.09 MEASUREMENT FOR PAYMENT

Section 511.09 is amended by the addition of the following;

# 511.09.01.05 Rip-Rap

Measurement of rip-rap and geotextile shall be by area in square metres following the contour of the ground.

#### 511.10 BASIS OF PAYMENT

Section 511.10 is amended by the addition of the following;

# 511.10.02 Rip-Rap - Item

Payment at the Contract price for the above tender items shall be full compensation for all labour, Equipment, and Material to do the work.

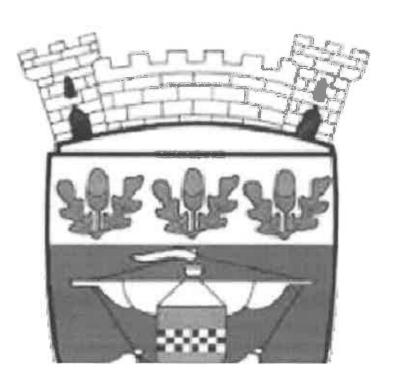
# SWINGING BRIDGE INTERIM REPAIRS TOWN OF RENFREW

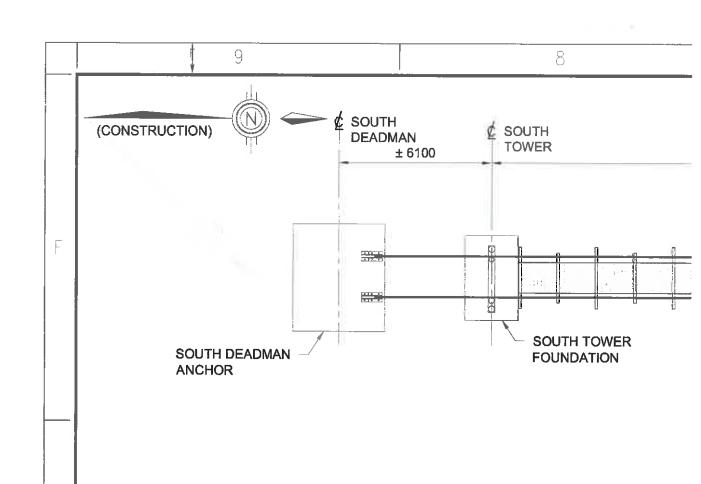
**CONTRACT NO. 14-2017** 

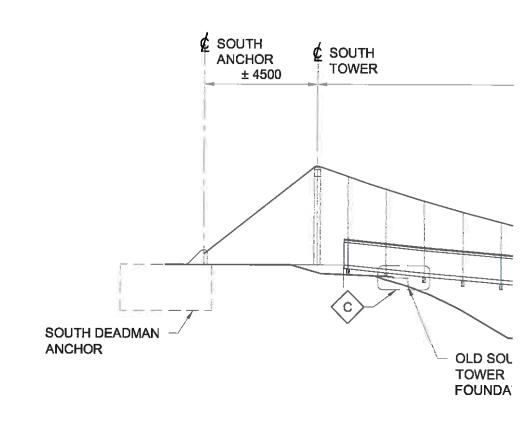
**SECTION "G"** 

PROJECT DRAWINGS

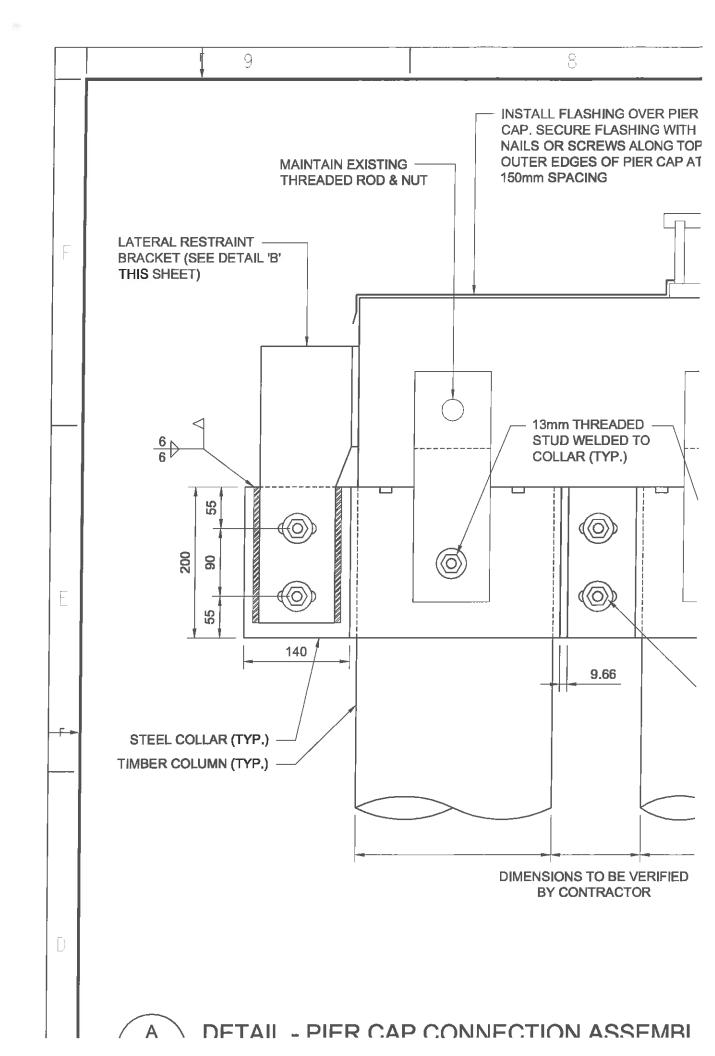
ı

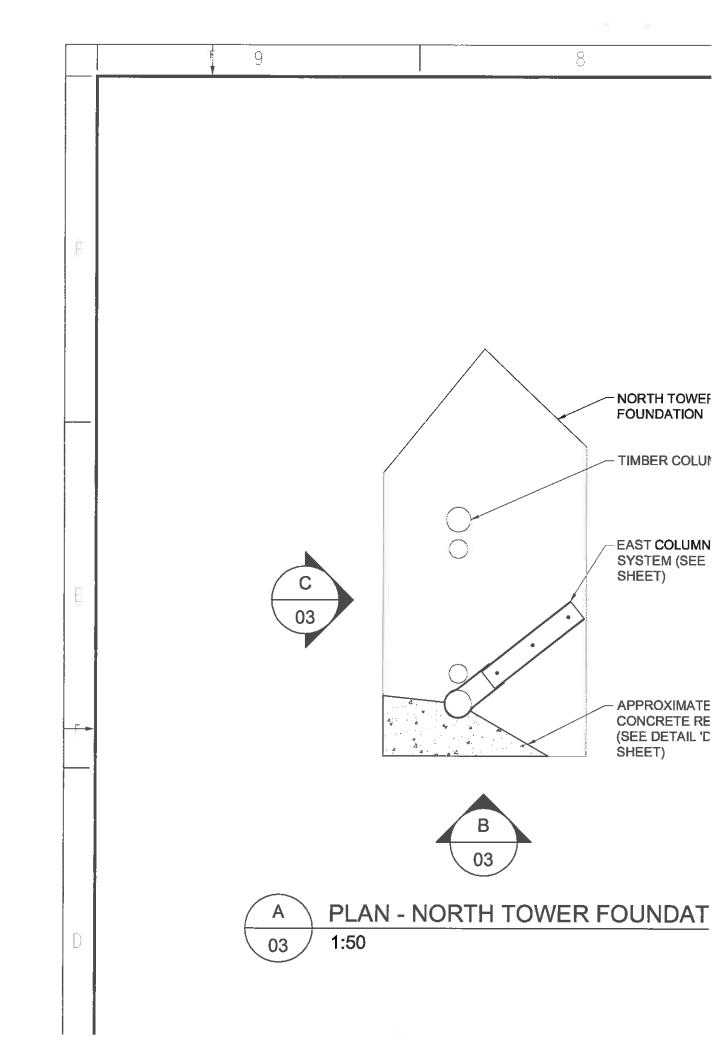






 $\mathbb{D}$ 





- € <sup>1</sup>

