



INVITATION TO TENDER (ITT)

AMENDMENT #3

RETURN BIDS TO:

Parks Canada Agency Bid Receiving Unit
National Contracting Services

Bid Email:

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Tender to: Parks Canada Agency

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

Comments:

Vendor/Firm Name and Address:

Issuing Office

Parks Canada Agency - Central Registry
Contracting Operations,
111 Water Street East
Cornwall, Ontario, K6H 6S2

Title-Sujet Boundary Swing Bridge Rehabilitation for Trent Severn Waterway National Historic Site.		
Solicitation No. - No. de l'invitation 5P201-20-0002/A	Date : May 8, 2020	
GETS Reference No. - No de reference de SEAG PW-20-00912549	Client Ref. No. - No. de réf du client. 341.09	
Solicitation Closes (YY-MM-DD):		
at - à 2:00 PM	on - le 2020-05-21	Time Zone - Fuseau horaire : EDT - HAE
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>		
Address Inquiries to: Adresser toute demande de renseignements à : Sheldon Lalonde (sheldon.lalonde@canada.ca)		
Telephone No. - No de telephone: (343) 585-3836		
Destination of Goods, Services, and Construction: Destinations des biens, services et construction : See Herein - Voir aux présentes		
TO BE COMPLETED BY THE BIDDER (type or print) À ÊTRE COMPLÉTER PAR LE SOUMISSIONNAIRE (taper ou écrire en caractères d'imprimerie)		
Vendor/Firm Name - Nom du fournisseur/de l'entrepreneur		
Address - Adresse		
Name of person authorized to sign on behalf of the Vendor/Firm Nom de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur		
Titale - Titre		
Telephone No. - N° de téléphone : _____		
Facsimile No. - N° de télécopieur : _____		
Signature	Date	

AMENDMENT #3

THE PURPOSE OF THIS AMENDMENT IS TO GIVE EFFECT TO THE FOLLOWING CHANGE;

1. Closing Date and Time: May 21, 2020 at 2 pm EDT

2. Questions and Answers #2:

- 10)** Part 1.1 of spec section 03 20 00 states that "This Section covers the requirements for concrete reinforcing, above water." and "This Section does not cover underwater concrete reinforcing". However, part 1.3.3 states that "The price for Stainless Steel Reinforcing includes both steel reinforcing above and below water". Please clarify.?

Answer: .03 20 00 Part 1.1.1 is revised to state "This Section covers the requirements for concrete reinforcing, above and below water." 03 20 00 Part 1.1.3 "This Section does not cover underwater concrete reinforcing." is deleted as this section under Item No 3 "Stainless Steel Reinforcing Steel" includes bars that will extend or be placed under water.

- 11)** Detail H/7 shows HSS 102x102x3.2 125mm high for post additions. Are the post additions required? If yes, please advise dimensions?

Answer: 1. Detail H7 creates a socket for a future post. The railing and posts were not present in the current structure but provisions for their future addition are easier to incorporate in the current construction than to retrofit later if required.

12) Section 03 20 00 Concrete Reinforcing:

Part 1, Article 1.3.3 "The price for Stainless Steel Reinforcing includes both steel reinforcing above and below water except for dowels above and below the water and all reinforcing associated with the approach slabs."

Part 1, Article 1.3.5 "The price for Dowels Set in Epoxy shall include all costs associated with the drilling and the bonding of the stainless-steel dowel reinforcing steel at the dowel location to develop the full strength of the bar."

For all the dowels, please confirm that the drilling and bonding are paid at items 4 and 5 and the steel bar of the dowel will be paid by the kg at item 3.?

Answer: No the price of the stainless steel reinforcing for the dowels shall be included in the dowel items 4 and 5.

- 13)** Part 1.6.1.12 of spec section 01 11 22 states that Items also included in the Lump Sum Price are: "Design/build cofferdam and dewatering system." Is a cofferdam /dewatering required? The documents appear to indicate that the under water work will be completed by divers without cofferdam and dewatering?

Answer: It is anticipated that work will be completed with divers however if the contractor chooses to use a cofferdam or dewatering system all costs are to be included in the contract lump sum.

14) We received the following question from our Underwater/Dive subcontractor.

Kindly provide clarification: A minimum placement temperature of 5 degrees Celsius is required for the UW unformed patching (unit price item no. 9 / no. 10).

See attached spec sheets for 2 of these underwater patching products. **(Removed)**

We highly recommend minimum water temps of 8 to 10 degrees celsius to achieve a positive bond and set.

Can some works (i.e. inspection and unformed repairs) be conducted prior to the closing of the TSW with navigation management to ensure the operation will not affect boat traffic in a negative way and no restriction on the swing bridge operations?

Answer: Under water work that can be completed without affecting the Navigation channel and that does not affect boat traffic, vehicle traffic and swing bridge operation can be completed prior to the closing of the TSW provided the work also meets all Environmental constraints of the contract and all permits and approvals are in place, health and safety is addressed and other contract restrictions are addressed. The duration of the work and the appearance of the site will be a consideration relative to the timing and the appearance of an open construction site without any work being completed must be avoided. If the operation is of reasonably short duration and can vacate the site completely or immediately proceeds the timing of the

allowable mobilization it will be allowed.

- 15) Drawing 5 shows 2 Zones where the Roadway needs to be rebuilt Full Depth for a total of 86m². Items C12 quantity is 300m². Please clarify?

Answer: The Quantity should be 86m².

- 16) Can the extension be extended to May 21, 2020? Our structural steel structural steel fabricators have requested this to complete preliminary drafting for takeoff purposes.

Answer: No

- 17) Pertaining to the structural steel and mechanical drawings, who is the designer of record?

Answer: There are many definitions of the term "Designer of Record" and we do not intend to address all definitions. The consultants have prepared a design and the contractor is to execute and complete construction. There are design tasks in even executing false work etc. that will be required from the contractor. Some Mechanical and Electrical tasks and applications have to be adjusted to suit the items supplied by the manufacturer of the various devices and components (also see other answers in this addendum). The contractor is expected to purchase a set of items that can be combined or adjusted based on their choices to meet the performance requirements of the components described in the documents.

- 18) Do shop drawings need to be stamped by an engineer for conformance with the tender documents?

Answer: Section 01 33 00 Submittals indicates requirements for shop drawings. In several sections' stamps are required (for example section 13 10 00 Mechanical Part 2.2.2).

- 19) What are the contractor's engineering requirements?

Answer: All temporary and erection works especially those where it is specifically listed as requiring stamps and all phases of construction erection etc. are to be engineered by the contractor and the contractor's engineer. For the Mechanical Electrical components, the Documentation are intended to provide a design concept only and is not intended to be used 'as is' for construction purposes, however this design concept including identified materials should be followed as closely as possible. As per section 26 05 17 Electrical Part 1.1.7.2 – "The contractor shall develop and produce electrical drawings and documentation to support the installation and maintenance of the bridge power and control system. The contractor is responsible to complete all necessary design details including but not limited to design layouts, assembly and installation drawings, bills of material, schematics diagrams, wiring details, cable and wire tags, terminal layouts etc. in order to manufacture a fully functional system that meets all applicable electrical safety codes and functional requirements." As per Section 13.10.00 Mechanical Part 1.2.1 – "It is the contractor's responsibility to prepare all detail, assembly and installation drawings" and Part 2.2.2 – "All drawings shall bear the stamp of approval from a Licensed Professional Engineer in the Province of Ontario."

- 20) What qualifications are required for the steel fabricator?

Answer: As per Section 05 12 33 Structural Steel for Bridges Part 3.4.4 - "All fabrication, installation, erection removals, and steel work to be completed by a fabricator and the fabricator's workers certified under Division 1 or 2 of CSA W47 Certification of Companies for Fusion Welding of Steel. The fabricator must provide proof that the workers have been employed by the fabricator for a period of longer than 1 year, completing similar tasks, or the workers experience must be reviewed and approved by the Departmental Representative." As per Section 13.10.00 Mechanical Part 3.2.7 – "Welding shall be made in accordance with CSA W59 and shall be performed by a welder qualified under CSA W47.1."

- 21) What qualifications are required for the mechanical sub-contractor and engineer?

Answer: As per Section 13.10.00 Mechanical Part 3.1.1 – "The work specified in the "EXECUTION" section must be performed by a licensed Millwright or by a person who is under the direct supervision of a licenced Millwright. Per Part 2.2.2 – "All drawings shall bear the stamp of approval from a Licensed Professional Engineer in the Province of Ontario."

- 22) The Structural drawings, drawing 00 to drawing 22 issued with Amendment # 1 appear to be the same structural drawings as the original issue on April 16, 2020. Please confirm there were no revisions to the structural drawings.

Answer: There were no additional changes intended in Drawings 00 to Drawing 22 issued in Amendment #1. These drawings

were included in the addendum to provide a full set.

- 23)** The drawings issued with Amendment # 1, list drawing M-15 and M-16 under the list of drawings on drawing 00. These drawings were not included in Amendment # 1?

Answer: Drawings M-15 and M16 were reference drawings of similar Locking Pin and Bumper installations at other bridges and will not be issued with the tender. The intent is to modify and reinforce the mounting of the locking pin mechanism such that it is actuated by a Hydraulic Cylinder Bore 80mm, Stroke 400 mm and Rod 45 mm. The mounting will have to be strengthened to resist the forces generated and all clevises slides and guides etc. will have to be rebuilt. The Locking pin extended and locking pin retracted limit switches must be change and retrofitted in this design. The limit switches shall be Eaton E50 Style with Stainless Steel Operators. Coordinate location of the abutment Bumper with the contract administrator The Bumper shall include a 19 MM fabricated angle approximately 325mm x325mm with two 19 mm Gussets and capable of mounting a Black EPDM Extruded Bumper with Stainless Steel Inner Retainer Similar to Duramax Marine Code No DB-125 or Approved Equal (custom length depending on contact location). The bumper frame shall be mounted with six 25 mm diameter 316 Stainless steel threaded anchors set in epoxy with sufficient embedment to develop the full strength of the anchors.

- 24)** Is it possible to provide more information (size, dimensions etc.) on the end stop to be replaced on the rest pier, as noted on photo 9, drawing 18?

Answer: The current stop to be replaced should be inspected in the field. It appears to be a simple fabrication of a c channel vertically and horizontally and two angle struts. The price for replacement should include stainless steel threaded anchors epoxied into the concrete to match the current size and fully develop the anchor. The stop is intended as a guide and a place to lock the bridge in the open position. It intended that the stop would fail before imparting too large of a load on the bridge and the new stop should be of similar strength and stiffness.

- 25)** Drawing C5 has a 'dry land trench detail' and notes 'dry land covered trench (to be installed where practicable)'. Please provide layout or quantity of dry land trench. Where not practicable to install the dryland trench should the electric/hydraulic services be surface mounted or direct buried?

Answer: As per section 26 05 17 section 1.1.7.6.8 – "Field cables and raceways, on dry land, from the building to the bridge to be mounted in covered trench wherever practicable. At minimum, allow for 2.5m of trench from 0.5m inside the mechanical room extending outside of the exterior under the wall. Where not practicable to install in dryland trench, electrical and hydraulic services to be direct buried.

- 26)** The specification state that the approach slabs shall not be measured and shall be included in the lump sum price. Please clarify if the sleeper slabs as shown on drawing 17 are measured in unit price item no. 6 Concrete in Abutments or included the lump sum price?

Answer: All costs associated with both the approach slabs and the sleeper slabs are to be included in the contract lump sum price. The dimensions are defined. The abutment concrete is covered under a unit price as the depth of removal may increase or less likely decrease except at the water level.

- 27)** On drawing 5 it is states that the approx. area of the full depth roadway reconstruction is 86m² The unit price table 12 quantity is 300m². Please clarify.

Answer: The Quantity in the tender form should be changed to 86 m².

- 28)** Based on the water levels shown on drawing 6, there is under water concrete repair at both abutments and the center pier. We assume unit price table item 1 and 2 is for concrete removal above water? In which item is under water concrete removal at the abutments and centre pier priced?

Answer: Water elevations are variable and are generally lower in the time period where construction is scheduled. The bulk of the anticipated work is above the water line and items below the waterline associated with diving include the cost of removals which will generally be limited to removing loose concrete and preparing the edges of the patch below water. At and immediately below the waterline which can be accessed from the above. The condition of the concrete will be assessed by the Departmental Representative and if solid it will be left. At the pier there are spalls that extend below the waterline from above the waterline. The intent is to dowel the area below water, extend bars down into the dowelled area tied into the steel above the waterline. Tremie to just above the waterline and finish the pour above the water.

29) Should we assume that the Fast Curing Concrete Material as per part 2.2.3 of spec section 03 37 26 is to be used for item 9 Under Water Formed and Pumped Patches?

Answer: The fast curing concrete material of part 2.2.3 is extremely rapid setting products similar to the example product. These would be unsuitable for the form and pumped patches. A proprietary patching product or grout suitable for pumping with similar properties to the Tremie concrete mixes specified in part 2.3.1 and capable of being placed and cured in the underwater forms would be acceptable.

30) Is the 100 x 100 x 10 nosing angle as shown on drawing 17 at the approach slab as per detail TD4/7? Is this approach slab nosing angle stainless steel or galvanized?

Answer: The angle was intended to be galvanized. Attention will have to be paid to not de-pacify the stainless-steel reinforcing steel.

31) Question from Wood supplier: Will you be looking for FSC or SFI certified material here to get your LEED credits? LEED is mentioned in the spec but does not ask for FSC or FSI material. If priced in FSC, will have to use fir coming in at higher pricing than SPF. Please advise.

Answer: SPF Lumber as per the specification is required for the nail laminated deck and LEED credits will not be sought. The quality, durability and strength of the wood is the primary concern.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.