



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS Á:

Parks Canada Agency
1300 - 635 8 Ave SW
Calgary, AB T2P3M3
Bid Fax: (403) 292-4475

INVITATION TO TENDER

APPEL D'OFFRES

AMENDMENT / MODIFICATION

002

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.

Soumission aux: l'Agence Parcs Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du Chef du Canada, aux conditions énoncées ou incluses par référence dans la présente at aux annexes ci-jointes, les biens, services et construction énumérés ici et sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaries

Issuing Office - Bureau de distribution

Parks Canada Agency
Suite 1300
635 - 8 Ave SW
Calgary, AB T2P3M3

| | | |
|---|---|--|
| Title-Sujet Trans-Canada Highway Twinning – km 82-88 Yoho National Park | | |
| Solicitation No. - No. de l'invitation 5P420-16-5123/A | | Date: August 12, 2016 |
| GETS Reference No. – No de reference de SEAG PW-16-00739080 | | Amendment No. - N° de la modif. 002 |
| Solicitation Closes: | | |
| at – á 02:00 PM | on – le August 23, 2016 | Time Zone - Fuseau horaire MDT - HAR |
| 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 : Nathaniel Harrison - nathaniel.harrison@pc.gc.ca | | |
| Telephone No. - No de téléphone (403) 292-4572 | | Fax No. – No de FAX: (403) 292-4475 |
| Destination of Goods, Services, and Construction: Destinations des biens, services et construction: See Herein – Voir ici | | |

TO BE COMPLETED BY THE BIDDER (type or print)

| | |
|--|-------------|
| Vendor/Firm Name | |
| Address - Adresse | |
| Name of person authorized to sign on behalf of the Vendor/Firm Nom de la personne autorisée a signer au nom du fournisseur/ de l'entrepreneur | |
| Titale - Titre | |
| Telephone No. - N° de telephone: _____ | |
| Facsimile No. - N° de télécopieur: _____ | |
| Signature | Date |

Amendment 2

This amendment has been issued to answer questions from bidders and revise the tender package.

This tender now closes on **August 23, 2016 at 2:00 PM MDT.**

A. Questions

- Q29.** Just wanted to confirm whether the gates at the gravel pits listed in the tender open we would like to access the pits.
- A29.** Mannix, 69, and Niblock gravel pits will be made available for viewing during the tender period. Please contact Alvin Hemmingson (250-809-9205) to coordinate access to the various pits.
- Q30.** Concrete specification for Reinforced Soil Retaining Wall precast facing panels: Are we to use the concrete specification from 03 30 00 cl. 2.4.4? or something else?
- A30.** Refer to Amendment 2 Tender Package Revisions - Specifications.
- Q31.** Concrete reinforcing for Reinforced Soil Retaining Wall precast facing panels: Is all reinforcement to be galvanized as per 03 20 00 cl. 2.1.4? or something else?
- A31.** Refer to Amendment 1 Q8 response.
- Q32.** Our concern is the specified completion date of August 25, 2017. Addendum No. 1 has added a great amount of work over the original tender quantities. In our opinion, the above noted completion date is not achievable. The tender closes on August 16, 2016. If the award comes on the 30th day after the tender closes, we are now at September 16, 2016. Then there are numerous submittals to be provided to Parks Canada and work cannot start until all approvals of the submittals are in place. If the submittal and approval process takes 30 days then there will be very little work done prior to the 2016 winter shutdown date of October 28, 2016. This date is referenced under section 01 32 16.07, 1.6 Project Milestones. Can the contract completed date be extended to October 15, 2018?
- A32.** Refer to Amendment 2 Tender Package Revisions - Specifications.
- Q33.** Please provide the locations for the crushing plant set up along the TCH as noted in the summary of work #5.
- A33.** Contractor will be permitted to setup a crushing plant at km 82.5 or other locations along the TCH ROW as approved by the Departmental Representative.
- Q34.** Please provide details on winter maintenance requirements. Will winter maintenance of highway be by others?
- A34.** Contractor to leave the site in a condition that winter maintenance can be efficiently and safely conducted by others. Winter maintenance required by the Contractor to access the site will be the responsibility of the Contractor.
- Q35.** Item 3 Prime Cost Sum a) Bituminous Materials and b) Items other than Bituminous Materials Lump Sum amounts listed on Price Forms do not match amounts listed in Section 01 21 00 Allowances – Please clarify.
- A35.** Refer to Amendment 2 Section C - Bid Price Form Revisions
- Q36.** Under section 01.35.00.06 Protection of Public Traffic 1.7.4 it lists a minimum of 3.7m+1.3m lane in each direction must be maintained. Under the same section 1.10.4 it states a 4.0m wide travel lane, please clarify if a 5.0m wide or a 4.0 m wide travel lane is required.
- A36.** Refer to Amendment 2 Tender Package Revisions - Specifications
- Q37.** Addendum No.1 increased the quantity of Unsuitable Material from 31,800m³ to Unsuitable/Surplus material to 550,000m³, with this increase in quantities we request an extension to the completion date of the contract.

- A37.** Refer to Amendment 2 Tender Package Revisions - Specifications
- Q38.** Mannix Pit Plan – July 19, 2016 shows various piles of Asphalt aggregate please confirm these piles are not available to any contractor for this project.
- A38.** Refer to Section 01 11 00 – Summary of Work, Article 1.4.15.2.
- Q39.** Request an update of the pit plans for KM69, and Niblock pits to show the areas for both where the portable asphalt plant can be located and where for Niblock the 15,000m³ of Unsuitable/Surplus material can be stockpiled and for KM69 pit the 200,000m³ of material can be stockpiled.
- A39.** Refer to Amendment 2 Tender Package Revisions – Reference Documents
- Q40.** Request an update of the pit plan for Mannix Pit to show where the 300,000m³ of Unsuitable/Surplus material can be stockpiled
- A40.** Refer to Amendment 2 Tender Package Revisions – Reference Documents
- Q41.** Item 1a) Partial Depth Asphalt Removal – Section 02 41 13.14 Part 1.1.1.1 Indicates that measurement for payment will be in square meters to a depth of 100mm. However, the typical Sections shown on drawings C301 and C302 indicate a minimum 50mm Asphalt Overlay on the existing profile. Are we to assume that we will be replacing the milled out areas with 100mm ACP to match existing then apply a 50mm overlay? Please clarify?
- A41.** Milling and tie-in depths will vary by location as per the design cross sections.
- Q42.** Item 1b) Full Depth Reclamation – Section 32 .1 16.8 Part 3.3.7 Construction Procedures: Please clarify this section as to what thickness of asphalt is required to be placed as the bottom lift. Will this bottom lift match the existing profile and then be overlaid with 50mm ACP? If this is not the case, please provide detail as to what total ACP thickness is to be applied to meet the existing profile.
- A42.** The design asphalt structure will have a total thickness of 180mm with 50mm future overlay (by others)
- Q43.** For the FDR can the liquid additive be either an emulsion stabilizing agent or foamed asphalt stabilizing agent?
- A43.** The use of FDR liquid additives is not anticipated for this project.
- Q44.** The specification currently requires bottom lift paving to be completed the same day as the FDR. Please confirm as most FDR specifications require a cure time prior to paving.
- A44.** Refer to Section 32 01 16.8 – FULL DEPTH RECLAMATION Article 3.3.7. Curing periods are not anticipated for the FDR surface preparation works required for this project.
- Q45.** Bid item 17 03 50 00 Waterproofing reads: 874m². This is the value obtained as if the deck and the entire approach slabs were to received waterproofing. However, according to drawing S102, Detail 1-S101, only 1 meter of the approaches gets waterproofing. If this is the case, the square meters of waterproofing are 593m². Please clarify.
- A45.** Refer to Amendment 2 Section C - Bid Price Form Revisions
- Q46.** Under the Summary of Work section, it lists October 28, 2016 as the “winter shutdown” date. Does this mean there can be no work on the site between October 28th, 2016 and spring 2017?
- A46.** Bulk excavation and hauling of unsuitable / surplus material from the road cut between km 87+200 to 88+000 will be permitted during the winter of 2016/17 so long as works are not completed during inclement weather or during high avalanche risk conditions. The Contractor will be required to maintain all site access and traffic control in accordance with the Contract documents.
- Q47.** Section 32 12 16 Asphalt Concrete Pavement (EPS) Part 2: Products, Item 2.1 – Materials .3 indicates “RAP material is available to Contractor in stockpiles at Mannix Pit”. On the Mannix Pit schematic drawing provided it indicates 2 RAP piles:
- 1) RAP Aug 31/2015 – 589m³
 - 2) RAP OAL Nov 12/2015 – 4,086m³

Please confirm the quantity of RAP available to use for this project.

A47. 5,440 cubic meters of unprocessed RAP material is available for the Contractors use for this project in stockpiles at Mannix Pit.

Q48. Section 01 11 00 Section 1.7: Work Sequence item .4.1 states “The Contractor Shall Prepare the whole of the site for safe, efficient winter operations and the travelling public, through relocation of barriers, re-instatement of damaged pavement, line painting, and traffic signage for 2016 winter shutdown prior to October 28, 2016”. Due to the required contract completion date of August 25th, 2017 and the amendment 1 addition of an additional 500,000m³ of material required to be excavated and hauled to stockpile, it seems necessary to work through the winter. Please indicate which operations are not permitted during the winter of 2016/17, and if traffic stoppages will be permitted during this time. Likely, at minimum to complete the contract in the allotted duration truck in/truck out stoppages will be required though the winter. Additionally is there a certain date when full operations are permitted to resume, or is this to be mutually agreed upon by the contractor and the Departmental Representative?

A48. Bulk excavation and hauling of unsuitable / surplus material from the road cut between km 87+200 to 88+000 will be permitted during the winter of 2016/17 so long as works are not completed during inclement weather or during high avalanche risk conditions. The Contractor will be required to maintain all site access and traffic control in accordance with the Contract documents.

Full operations are permitted in the spring when the avalanche risks have subsided. If the Contractor wishes to work during periods of higher avalanche risk they must provide a mitigation strategy (prepared by avalanche specialist) for acceptance by the Departmental at their own cost.

Q49. Section 01 14 00 Section 1.3: Working Times states “Work in BNP and YNP is permitted during daylight hours from 07:00 to 19:00, Monday to Saturday unless stipulated otherwise by the Contract documents.” Section 01 35.00.00 Section 1.10: Operational Requirements .5.3 states “One 60min work zone closure per shift between 19:00 and 7:00 hrs. Please confirm that this indicates that night shift work is permitted (with the exception of blasting operations from km 85.5 – km 85.1), and one 60min closure is permitted during night shift operations.

A49. Night work will be permitted for blasting operations. Blasting operations for grade construction from km 85.5 – km 85.1 to be completed during daylight hours only.

Q50. Is the contractor allowed to use the native material from Mannix Pit, or any other pit specified in the documents, and set up a crusher at that location to process the required granular aggregates for the project?

A50. Refer to Section 01 11 00 – Summary of Work, Article 1.4.15.2

Q51. Is there any material already processed at the pits that is available to the contractor to use on the project?

A51. Refer to Section 01 11 00 – Summary of Work, Article 1.4.15.2

Q52. Is the contractor permitted to set up a crushing operation in any of the pits (or km 81 Bedrock Reserve area) mentioned in the contract documents and crush material hauled from the roadway excavations at said location?

A52. The Contractor will be permitted to setup a crushing plant at 69 Pit and crush material hauled from the roadway excavations at said location.

Q53. In order to properly assess the ability to crush the surplus material located within the roadway cuts material samples (gradations) are required. Have any samples been taken from the areas of excavation along the alignment, and if so can they be made available to the proponents?

A53. Refer to Amendment 2 Tender Package Revisions – Reference Documents

Q54. At which location within Yoho National Park or the Banff National Park can the contractor set up an asphalt plant to produce the required asphalt Concrete Pavement (EPS)

A54. Refer to Section 32 12 16 – Asphalt Concrete Pavement (EPS), Article 3.2.2.

- Q55.** Can the contractor set up and operate an aggregate crushing plant within this project R.O.W.?
A55. Refer to Q33 response.
- Q56.** Can the contractor set up and operate an aggregate crushing plant at Niblock Pit, 69 Pit or the Mannix Pit?
A56. Refer to Q52 response.
- Q57.** Is there a geotechnical report available that could provide the required information to determine if the surplus material onsite meets the specifications for the required base and subbase materials and the asphalt aggregate?
A57. Refer to Q53 response.
- Q58.** The drawings indicate an existing telus u/g line with an unknown location. The protection and/or relocation of this line is at the Contractors expense, reference 1.7 Utilities. Does Parks have a contact at Telus that contractors may discuss coordination of protection and/or relocation of this line?
A58. Park's does not have a contact for Telus. The contractor is responsible for coordinating all works with the utility owners. The cost associated with utility locates, protection and temporary relocations will be incidental to the Contract. Any costs associated with permanent relocation of utilities (if required) shall be compensated through the project's Prime Cost Sum.
- Q59.** The rock excavation as shown will require coordination with CP Rail as blasting can not occur when rail traffic is in the vicinity. Has Parks Canada had any discussion with CP regarding this project and the potential for the supply of railway flagging to alert construction of rail traffic?
A59. The Contractor shall be responsible for coordination with CP Rail and all related schedule impacts. The direct costs associated with track flagging (if required) shall be paid to the Contractor through the project's Prime Cost Sum.
- Q60.** Portions of the project are within Avalanche areas. Will Parks Canada as part of ongoing road maintenance provide mitigation and monitoring of these areas particularly for spring 2017 start up operations?
A60. Parks Canada will provide avalanche forecasting information and snow removal for the TCH roadway only. If the Contractor wishes to work during periods of higher avalanche risk they must provide a mitigation strategy (prepared by avalanche specialist) for acceptance by the Departmental at their own cost.
- Q61.** Parks Canada are providing asphalt aggregates which were processed under previous contracts. Will quality records of this material be made available during the tender period?
A61. Asphalt aggregates are to be supplied by the Contractor from outside the Park or produced, in whole or in part, from suitable material excavated from within the roadway cuts and structure excavations. The cost for supply of asphalt aggregates required for this project shall be considered incidental to "**Unit Price Item 9a – Asphalt Concrete Pavement (EPS) – BC MoTI Class 1 – 19mm Medium Mix Asphalt Concrete**".
- Q62.** If full detours are constructed at both wildlife crossing locations in the fall of 2016, will parks Canada maintain these roadway sections over the winter period?
A62. The Contractor will be responsible for all detour maintenance if operational detours are left in-place over the winter period.
- Q63.** What permits will contractors require to facilitate construction?
A63. Yoho National Park Building Permit and various Restricted Activity Permits as described in the Contract documents.
- Q64.** In Section 01 21 00, the PC sum for Bituminous Materials is 2,050,000; on the tender form the amount is 1,800,000. In Section 01 21 00, the PC sum for Item Other than Bituminous Materials is 2,600,000; on the tender form the amount is 1,500,000; Please clarify.
A64. Refer to Amendment 2 Section C - Bid Price Form Revisions.

Q65. Please clarify if night work from 7pm to 7am will be allowed at any time during the project.

A65. Refer to Q49. Response.

Q66. In Section 31 24 13 Roadway and Drainage Excavation, Item 3.3, it states that removal of half barrels shall be considered incidental to Type A Excavation. Can this work be added to the Tender Form and be payable on a linear meter basis?

A66. No

Q67. Sheet No/ C501 and C502 show a typical section for the wall system backfill and drainage requirements.

The detail for both typical sections states that "150mm dia PERF. DRAIN PIPE C/W FILTER FABRIC SOCK BEDDED IN DRAIN ROCK. DRAIN TO END OF WALL AND DAYLIGHT @ C/W GALV. SCREEN, TYPICAL."

MSE Wall No.1 STA. 185-570.000 is shown as the low point in the wall system @ ELEV = 1590.805. Given that this location is 90m from the end of wall at STA. 185+660.000 and 450m from the end of wall at STA. 185+120.000 it is assumed that a drainage location will need to be added to daylight from the face of the panels at this location.

MSE Wall No.2 STA. 287+840.000 is shown as the low point in the wall system @ ELEV = 1578.300. Given that this location is 100m from the end of wall at STA. 287+940.000 and 100m from the end of wall at STA. 287+740.000 it is assumed that a drainage location will need to be added to daylight from the face of the panels at this location.

Please confirm if the toe drain detailed should daylight through the MSE panel at the low point of each wall, and if so please provide rip rap/apron detail at the outlet of the drain.

A67. Toe drain shall daylight through the MSE panel at the low point for each wall. Rip Rap apron to be installed as directed by the Departmental Representative.

Q68. Item 1 d) of the Unit Price Table: Full depth Asphalt Removal indicates an estimated quantity of 4500m². Specification: 02 41 13.14 - Part 3 item 3.3 REMOVAL states: "Full depth asphalt pavement removal shall be done to the lines shown on the Drawings or as designated by the Departmental Representative". There is no reference to this activity on any of the drawings provided. Please provide locations and/or drawings showing where this activity is to occur.

A68. Full depth asphalt removal required at structure excavations, drainage excavations and other locations as directed by the Departmental Representative.

Q69. Section 01 11 00 - 1.4 WORK COVERED BY CONTRACT DOCUMENTS, Item 4.4 States "Removal, by milling of existing asphalt and stockpile material at Mannix Pit and Niblock Pit, as directed by the Departmental Representative." Please confirm if Niblock Pit has sufficient area available to stockpile milling material with approximate quantity of 2,419 m³, or what percentage should be taken to Mannix Pit.

A69. Refer to Amendment 02 Tender Package Revisions - Specifications.

B. Tender Package Revisions

1. Specifications:

Section 01 11 00 – SUMMARY OF WORK

Remove: Article 1.4.4.4 - Removal, by milling of existing asphalt and stockpile material at Mannix Pit and Niblock Pit, as directed by the Departmental Representative.

Insert: Removal, by milling of existing asphalt and stockpile material at Mannix Pit and 69 Pit, as directed by the Departmental Representative.

Remove: Article 1.7.4.3 - Obtain the Interim Certificate (Substantial Performance) by **August 18, 2017**.

Insert: Obtain the Interim Certificate (Substantial Performance) by **September 16, 2017**.

Remove: Article 1.7.4.4 - Complete all of the Work by **August 25, 2017 (Contract Completion Date)**.

Insert: Complete all of the Work by **September 23, 2017 (Contract Completion Date)**.

Remove: Article 1.10.1 - None.

Insert: Unprocessed Recycled Asphalt Pavement (RAP) material is available to the contractor in stockpiles at Niblock and Mannix Pit. All other PCA pit materials and stockpiles are not available to the Contractor for use on this project.

Section 01 35.00.06 – SPECIAL PROCEDURES FOR TRAFFIC CONTROL

Remove: Article 1.10.4 - A minimum of one unencumbered travelling lane 4m wide in each direction shall be maintained by the Contractor at all times to provide for safe movement of traveling public through work area. The delay due to single lane alternating traffic shall not exceed 20 minutes.

Insert: A minimum of one travelling lane 3.7 m + 1.3 m shoulder wide in each direction shall be maintained by the Contractor at all times to provide for safe movement of traveling public through work area. The delay due to single lane alternating traffic shall not exceed 20 minutes.

Section 03 30 00 – CAST-IN-PLACE CONCRETE

Remove: Article 2.4.4.3 - Intended application: Substructure.

Insert: Article 2.4.4.3 - Intended application: Substructure, Retaining Wall Panels and Coping.

Section 31 24 13 – ROADWAY AND DRAINAGE EXCAVATION

Add: Article 1.2.4.2.1 – The Contractor shall take care not to contaminate suitable surplus materials with unsuitable materials. Unsuitable materials shall stockpiled separately by type at locations identified in the Pit Plans.

2. Reference Documents

Updated documents are attached is DSP3.

Remove: Mannix Pit Plan July 2016

Insert: Mannix Pit Plan August 2016

Remove: 69 Pit Plan July 2016

Insert: 69 Pit Plan August 2016

Remove: Niblock Pit Plan July 2016

Insert: Niblock Pit Plan August 2016

Add: Wapta Cut Test Pit Sieve Analysis and Site Photos

C. Annex A - Bid Price Form Revisions

If a bidder submits a bid that does not incorporate the changes identified in this amendment, the changes below applied to the bidder's price form to obtain their total bid amount.

Values and quantities revised are in red text below.

1. Lump Sum Price Table

| | | | | | |
|---|----------|--|----------|---|----------------|
| 3 | 01 21 00 | Prime Cost Sum | | | |
| | | a) Bituminous Materials | Lump Sum | 1 | \$2,050,000.00 |
| | | b) Items other than Bituminous Materials | Lump Sum | 1 | \$2,600,000.00 |

2. Unit Price Table

| | | | | | | |
|---|----------|---|----|---------|----------|----------|
| 4 | 31 24 13 | Roadway and Drainage Excavation | | | | |
| | | a) Stripping and Placement in Stockpile | m3 | 54,680 | \$ _____ | \$ _____ |
| | | b) Type D Excavation | m3 | 100,000 | \$ _____ | \$ _____ |
| | | c) Unsuitable / Surplus Material Excavation | | | | |
| | | i) Stockpile in Niblock Pit | m3 | 15,000 | \$ _____ | \$ _____ |
| | | ii) Stockpile in 69 Pit | m3 | 200,000 | \$ _____ | \$ _____ |
| | | iii) Stockpile in Mannix Pit | m3 | 335,000 | \$ _____ | \$ _____ |
| | | d) Type A Rock Excavation | m3 | 27,600 | \$ _____ | \$ _____ |

| | | | | | | |
|----|--|---|----------|--------|----------|----------|
| 17 | Km 83 Wildlife Underpass (Bridge) | | | | | |
| | 03 20 00 | a) Plain Reinforcing - Supply and Place | kg | 35,800 | \$ _____ | \$ _____ |
| | 03 20 00 | b) Galvanized Reinforcing - Supply and Place | kg | 44,600 | \$ _____ | \$ _____ |
| | 03 30 00 | c) Concrete for Abutments - Supply and Place | m3 | 251 | \$ _____ | \$ _____ |
| | 03 30 00 | d) Concrete for Barriers - Supply and Place | m3 | 22 | \$ _____ | \$ _____ |
| | 03 30 51 | e) Concrete for Deck, Diaphragm and Approach Slabs - Supply and Place | m3 | 208 | \$ _____ | \$ _____ |
| | 03 35 00 | f) Precast Structural Concrete Girders - Supply and Place | lump sum | 1 | \$ _____ | \$ _____ |
| | 05 12 33 | g) Bicycle Rail - Supply and Install | lump sum | 1 | \$ _____ | \$ _____ |
| | 03 50 00 | h) Deck Waterproofing | m2 | 874 | \$ _____ | \$ _____ |

All other terms and conditions remain unchanged.