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d'une soumission

NA

Ontario

**Revision to a Request for a Standing Offer**

**Révision à une demande d'offre à commandes**

Departmental Individual Standing Offer (DISO)

Offre à commandes individuelle du département(OCID)

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Offer remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'offre demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

Public Works and Government Services Canada  
Ontario Region  
10th Floor, 4900 Yonge Street  
Toronto  
Ontario  
M2N 6A6

<b>Title - Sujet</b> Geotechnical Eng/ Materials Testing	
<b>Solicitation No. - N° de l'invitation</b> EQ754-201826/B	<b>Date</b> 2020-08-10
<b>Client Reference No. - N° de référence du client</b> EQ754-201826	<b>Amendment No. - N° modif.</b> 001
<b>File No. - N° de dossier</b> PWL-9-42073 (048)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$PWL-048-2525	
<b>Date of Original Request for Standing Offer</b> Date de la demande de l'offre à commandes originale	
2020-07-21	
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2020-08-25</b>	
<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Marshall, Cindy	<b>Buyer Id - Id de l'acheteur</b> pwl048
<b>Telephone No. - N° de téléphone</b> (647) 405-4245 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Delivery Required - Livraison exigée</b>	
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>  Ontario Region	
<b>Security - Sécurité</b> This revision does not change the security requirements of the Offer. Cette révision ne change pas les besoins en matière de sécurité de la présente offre.	

Instructions: See Herein

Instructions: Voir aux présentes

<b>Acknowledgement copy required</b>	<b>Yes - Oui</b>	<b>No - Non</b>
<b>Accusé de réception requis</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>The Offeror hereby acknowledges this revision to its Offer.</b> <b>Le proposant constate, par la présente, cette révision à son offre.</b>		
<b>Signature</b>	<b>Date</b>	
Name and title of person authorized to sign on behalf of offeror. (type or print) Nom et titre de la personne autorisée à signer au nom du proposant. (taper ou écrire en caractères d'imprimerie)		
<b>For the Minister - Pour le Ministre</b>		

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### **Amendment No. 001**

This amendment is being raised to incorporate changes to the following sections of the Request for Standing Offer: 1) Submission Requirements and Evaluation (SRE) 3, 3.2.6 Hypothetical Projects – Project and 2) Appendix B – Price Offer Form; and 3) to provide responses to Requests for Clarification.

#### **1) Revisions to the Submission Requirements and Evaluation (SRE)**

**Reference: Submission Requirements and Evaluation (SRE) 3, 3.2.6 Hypothetical Projects, Project.**

**Proponents are hereby instructed to:**

**Delete:** Delete Project in its entirety.

**Insert:**

#### **PROJECT (REVISION 1)**

##### **1. Situation**

A new four lane roadway connection needs a bridge to cross over a railway track and a narrow stream with surrounding marsh land. The marsh land is present on one side of the Riverbank up to a distance of 500 m from the top of the bank. The other side of river bank does not have marsh land. The rail line runs parallel to the river on the good side of the river that does not have marsh land. The marsh land is connected with the river ecosystem and does have environmental sensitivities in the form of flora, fauna, fish etc. that need attention during design and construction. The railway track runs at grade parallel to the stream with a 10 m offset from its banks. The stream width at the top of the bank is about 10 metres. The new four lane roadway link running east to west is expected to provide a bypass connection between two busy roads (running north south) about 2 kilometres apart, to relieve some congestion and provide exit for residential communities on either side of the stream, which flows north to south. There are numerous utility connections feeding both communities that run underground and there is a powerline running along the train tracks to feed the electric operated train. A single span prestressed concrete NU-Girder-or Steel Plate Girder bridge is being contemplated by the bridge engineers to avoid disturbance in the stream; and they need advice from the geotechnical engineers and other disciplines as to what would be the best alternative for the abutments considering the height that needs to be achieved to provide clearance to the train line, as well as the presence of a marsh land and environmentally sensitive area. Any missing data/information may be appropriately assumed by the proponent and clearly stated.

The structural engineers are debating between integral abutment bridge and a regular bridge with expansion joints at approaches, and need advice from the geotechnical engineer to arrive at a decision. The bridge engineers are also concerned with the presence of the marshland and how the high approach embankments would hold and perform in the long term. They also need advice on the type of foundation for the abutments whether a shallow spread footing, or a deeper driven pile, or a caisson foundation would be suitable.

A geotechnical investigation program needs to be developed and executed to answer the questions and provide support to the bridge/structural engineers. What would be your approach and methodology in developing the geotechnical investigation program and how do you envisage it to provide answer to each of the questions posed? What measures would you incorporate into geotechnical design for the foundation, approach embankments and the roadway to achieve long term sustainability and durability? What precautions would you take during the investigation, preparation of the report and design of each

element? How would you ensure that the bridge design and the soil structure interaction is providing the desired performance assumed during design of the structure?

## 2. General Requirements

- The new bridge needs to meet the railway overhead clearance requirement and powerline clearance requirement to determine the height of the bridge abutments.
- The bridge abutments and approaches need to satisfy the bridge design philosophy as well as the roadway design requirements.
- No instream work is allowed.
- No disruption to railway operation is allowed.
- The roadway, bridge approaches and abutments need to be built over a marsh land.
- The geotechnical engineer needs to provide a geotechnical investigation program, design recommendations for the abutments, bridge foundation, roadway, and bridge approaches.

## 3. Scope of Work

A proposal is sought from the Geotechnical Consultant to conduct investigations and provide design recommendations to the bridge/structural engineers outlining the methodology and approach behind the plan. The proposal needs to provide a detailed scope of work, work breakdown structure with resources and level of effort assigned. A detailed time schedule for the project investigation, design, construction and service of the roadway needs to be recommended by the geotechnical consultant based on their investigation and design philosophy for sustainability and durability.

A summary report detailing the investigation plan, expected results, a few conceptual design options with their benefits and limitations needs to be presented. One design option must be recommended to the structural engineer for best performance and economy in design. Design options and recommendations need to be presented for the bridge abutments, foundations, approaches and the roadway to mitigate the challenges posed by the stream, railway, marshland, environmental and utility constraints. Highlight the problems and constraints you would expect on this project during investigation, design and construction; and how you plan to resolve them.

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## **2. Revisions to Appendix B – Price Offer Form**

**Reference: Appendix B – Price Offer Form**

**Proponents are hereby instructed to:**

**Delete:** In its entirety.

**Insert: Appendix B – Price Offer Form (Revision 1)**

N° de l'invitation - Solicitation No.  
EQ754-201826/B

N° de la modif - Amd. No.  
001

Id de l'acheteur - Buyer ID  
pwl048

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N° CCC / CCC No. / N° VME - FMS

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## **APPENDIX B**

Price Offer Form

(Revision 1)

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## APPENDIX B - PRICE OFFER

### (REVISION 1)

### INSTRUCTIONS

1. Complete price offer form and submit in accordance with the instructions in this solicitation.
2. Price offers are not to include Applicable Taxes and will be evaluated in Canadian Dollars.
3. Offerors are not to alter or add information to the form.
4. In order to ensure that fair and competitive hourly rates are received for each of the positions listed, the following requirement must be strictly adhered to: offerors must provide an hourly rate for each listed position. In the event that the firm consists of fewer personnel than listed, provide an hourly rate that corresponds with each position listed.

**For Table 1 – Civil, Geotechnical Engineer, Table 2 – Hydrologist/Hydrogeologist, and Table 3 - Technologist, the hourly rate provided for a given category of personnel must be equal to or greater than the hourly rate provided for the position listed below it.** For example, for Table 1, Civil/Geotechnical Engineer, the Fixed Hourly Rate for the Partner or Principals of the Firm cannot be lower than the rates for the Administrative Support, Junior Engineer, Intermediate Engineer, or Senior Engineer. This rule applies to each table separately. Rates in Table 1 do not need to compare with rates in Table 2 or Table 3. For example, for Tables 1, 2 and 3 (Civil/Geotechnical Engineer, Hydrologist/Hydrogeologist and Technologist, respectively), the Fixed Hourly Rates for the Senior Engineer or Personnel cannot be lower than the rates for the Intermediate Engineer or Personnel, or Junior Engineer or Personnel within their respective tables and the rates for the Intermediate Engineer or Personnel cannot be lower than the rates for the Junior Engineer or Personnel of the Firm within their respective tables. Failure to adhere to the above will render your offer non-responsive.

5. In order to ensure that fair and competitive unit prices are received, the following requirements must be strictly adhered to: Offerors must provide a Fixed Hourly Rate for each Unit Price for each Category of Service and must provide a Unit Price for each Laboratory Service. **There must be neither \$0 value nor NIL value. Failure to insert an hourly rate and unit price for each category of personnel/service will render your offer non-responsive.**
6. The Fixed Hourly Rates and Unit Prices shall govern in establishing the Total Extended Amounts and/or Subtotals. Any arithmetical errors in this Appendix will be corrected by Canada
7. The hourly rates identified for all disciplines, including sub-consultants and specialists and unit prices for all laboratory services will be for the duration of the Standing Offer.
8. Fixed hourly rates for each Category of Personnel are to be provided in columns B and multiplied by the weight factor shown in column A (the sum of the total amount of (A x B) will be used to calculate the total for evaluation purpose only).
9. Firm unit prices for each service in Table 4 – Laboratory Services are to be provided in column M and will be multiplied by the estimated quantity for evaluation purposes in column N to calculate the extended total price (M x N = extended total price). The total evaluated price in Table 4 will be used in Table 5 to calculate the overall Total Evaluated Price.

**APPENDIX B - PRICE OFFER (REVISION 1)**

**ONTARIO REGION**

Name of Offeror: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

**1. CIVIL/GEOTECHNICAL ENGINEER**

Category of Personnel	Weight Factor (A)	Fixed Hourly Rate (B)	Total (A X B)
1.1 Partner or Principals of the Firm	10	\$	\$
1.2 Senior Engineer	30	\$	\$
1.3 Intermediate Engineer	40	\$	\$
1.4 Junior Engineer	15	\$	\$
1.5 Administrative Support	5	\$	\$
<b>Total</b>	<b>100</b>		\$

**2. HYDROLOGIST / HYDROGEOLOGIST**

Category of Personnel	Weight Factor (A)	Fixed Hourly Rate (B)	Total (A X B)
2.1 Senior Personnel	40	\$	\$
2.2 Intermediate Personnel	40	\$	\$
2.3 Junior Personnel	20	\$	\$
<b>Total</b>	<b>100</b>		\$

**3. TECHNOLOGIST**

Category of Personnel	Weight Factor (A)	Fixed Hourly Rate (B)	Total (A X B)
3.1 Senior Personnel	50	\$	\$
3.2 Intermediate Personnel	30	\$	\$
3.3 Junior Personnel	20	\$	\$
<b>Total</b>	<b>100</b>		\$

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#### 4. LABORATORY SERVICES

Category of Service	Firm Unit Price (M)	Estimated Quantity for Evaluation Purposes (N)	Extended Price for Evaluation Purposes (M x N)
<b>A. Soils and Aggregates</b>			
2.1 Standard Proctor (Unit price for batch of 6 tests)	\$	1	\$
2.2 Sieve Analysis (Per Test)	\$	10	\$
2.3 Hydrometer Analysis (Per Test)	\$	10	\$
2.4 Water Content (Per Test)	\$	10	\$
2.5 Percentage (%) of Organics - for topsoil sample (Per Test)	\$	10	\$
2.6 pH testing – for topsoil sample (Per Test)	\$	10	\$
<b>B. Concrete and Mortar</b>			
2.7 Compressive Strength Tests and Reports (set of 3 cast cylinders per test)	\$	10	\$
2.8 Compressive Strength Tests and Reports (sets of 9 cast cubes per test)	\$	5	\$
<b>C. Asphalt</b>			
2.9 Asphalt Content (Per Test)	\$	10	\$
2.10 Aggregate Gradation (Per Test)	\$	10	\$
2.11 Full Marshal Compaction and Bulk Density (Per Test)	\$	10	\$
2.12 Asphalt Air Voids (Per Test)	\$	10	\$
<b>D. Steel</b>			
2.13 Coupons for both tensile and chemical testing (3 coupons per test)	\$	10	\$
<b>E. Equipment Rental – Field Testing</b>			
3.0 Drilling (Rig) Mobilization per km (For any place in Ontario)	\$	500 km	\$
3.1 Drilling (Rig) Daily Rental Charges, for two (2) eight (8) hour days (16 hours total) per rental	\$	1	\$
<b>Subtotal for 4. Laboratory Services (A+B+C+D+E)</b>			\$

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## 5. TOTAL EVALUATED PRICE

	Sub-total (A)	Weight Factor (B)	Total (A x B)
1. Civil/Geotechnical Engineer	\$	40	\$
2. Hydrologists/Hydrogeologist	\$	20	\$
3. Technologist	\$	20	\$
4. Laboratory Services	\$	20	\$
<b>Total Evaluated Price (Price Offer)</b>			\$

### Signature of Consultant or Joint Venture Consultants.

.....  
Signature signature

.....  
Capacity capacity

.....  
Signature signature

.....  
Capacity capacity

**END OF PRICE OFFER FORM**

### **3) REQUEST FOR CLARIFICATION**

Q1. **APPENDIX B - PRICE OFFER – INSTRUCTIONS** at Instruction #4. The instructions state how the hourly rates are to be assigned. Which is, the hourly rates are to be equal to or greater than the hourly rates provided for the position listed below it, is this correct and can you elaborate?

R1. Yes. At instruction 4. In order to ensure that fair and competitive hourly rates are received for each of the positions listed, the following requirement must be strictly adhered to: offerors must provide an hourly rate for each listed position. In the event that the firm consists of fewer personnel than listed, provide an hourly rate that corresponds with each position listed. **The hourly rate provided must be equal to or greater than the hourly rate provided for the position listed below it.** For example, if the firm does not have an Intermediate Personnel, the hourly rate provided must be equal to or greater than the hourly rate provided for the Junior Personnel. **The hourly rate for any given category of personnel cannot be \$0 or nil value. Failure to insert an hourly rate for each position listed will render your offer non-responsive.**

For example, for Table 1, Civil/Geotechnical Engineer, the Fixed Hourly Rate for the Partner or Principals of the Firm cannot be lower than the rates for the Administrative Support, Junior Engineer, Intermediate Engineer, or Senior Engineer. This rule applies to each table separately. Rates in Table 1 do not need to compare with rates in Table 2 or Table 3.

For Tables 1, 2 and 3 (Civil/Geotechnical Engineer, Hydrologist/Hydrogeologist and Technologist, respectively), the Fixed Hourly Rates for the Senior Engineer or Personnel cannot be lower than the rates for the Intermediate Engineer or Personnel, or Junior Engineer or Personnel within their respective tables and the rates for the Intermediate Engineer or Personnel cannot be lower than the rates for the Junior Engineer or Personnel of the Firm within their respective tables. Doing so (in other words, inserting a rate that is lower than the rate for the positions below it within their respective tables) will render your offer non-responsive.

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Q2. Under Section 3.2.6 Hypothetical Project, Situation states: "A new four lane roadway connection needs a bridge to cross over a railway track and a narrow stream with surrounding marsh land."  
a. Can you please provide the extent of the "surrounding marsh land?"  
b. Does the existing rail line traverse this marsh land?

R2.  
a. The marsh land is present on one side of the Riverbank for up to a distance of 500 m from the top of the bank. The other side of river bank does not have marsh land.  
b. The rail line runs parallel to the river on the good side of the river that does not have marsh land.

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Q3. Under Section 3.2.6 Hypothetical Project, Situation further states: "The new four lane roadway link running east to west is expected to provide a bypass connection between two busy roads (running north south) to relieve some congestion and provide exit for residential communities on either side of the stream, which flows north to south."  
a. Can you please indicate how far away these "two busy roads" are from the stream banks?

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b. Will the construction of intersections for these roads be part of the geotechnical study?

R3.

- a. The distance between the two busy roads running north south can be assumed as 2 kilometres. So, the length of the new proposed link is 2 km.
- b. In the real world, the construction of the intersection would also be part of the geotechnical investigation. However, for the purpose of this RFSO evaluation, solution may be proposed only for what has been asked. The intersection/interchange may be omitted for the sake of this submission.

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Q4. Under Section 3.2.6 Hypothetical Project, Situation further states: "to provide clearance to the train line, as well as the presence of a marsh land and environmentally sensitive area." Is the marsh land considered to be an "environmentally sensitive area?"

R4. The marsh land is connected with the river ecosystem and does have environmental sensitivities in the form of flora, fauna, fish etc. that need attention during design and construction.

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Q5. Under 4. Laboratory Services in Appendix B, Item 2.5 Percentage (%) of Organics - for topsoil sample (Per Test), can you please advise what test procedure should be used?

R5. ASTM D 2974 – Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Organic Soils, may be used for Percentage Organic Content of topsoil sample. Any other equivalent and appropriate method suggested by the proponent commonly used in Canada such as Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Accredited Methods like Walkley-Black Method or Combustion Method would be acceptable.

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Q6. Under 4. Laboratory Services in Appendix B, Item 2.6 pH testing – for topsoil sample (Per Test), can you please advise what test procedure should be used?

R6. Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Accredited Method for pH testing of topsoil would be acceptable.

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Q7. Under 4. Laboratory Services in Appendix B, Item 2.13, coupon testing is normally done on samples from existing structural steel to determine physical and metallurgical properties. Can you please provide ASTM procedure(s)?

R7. Chemical Analysis and Mechanical Strength Tests as required by CSA S16 and CSA G40.2 in accordance with ASTM Standards A 6M, A 370, and A 751.

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Q8. Under 5. Total Evaluated price in Appendix B, should the Sub-total value be multiplied by the Weight Factor or the Weight Factor proportion (i.e., each divided by 100)?

R8. The Sub-total values under 5. Total Evaluated Price will be multiplied by the respective Weight Factor shown.

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- Q9. Please clarify if Weight Factor must be in percentage for Table 1, 2 and 3 calculations in Appendix B.
- R9. The Weight Factor shown in Table 1, 2, and 3 of Appendix B - Price Offer will be multiplied by the unit price to calculation the total for each. It will not be converted into a percentage. Please see the revised paragraph 8 in - APPENDIX B – (Revision 1 ) PRICE OFFER above.
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- Q10. Please clarify if Weight Factor for Table 5 must be in percentage in Appendix B.
- R10. The Weight Factor shown in Table 5 will be multiplied by the sub-total to calculate the overall total of each service/category. The Total Evaluated Price will be calculated by using the sum of all the aggregated totals. Please see the revised paragraph 8 in - APPENDIX B – (Revision 1) PRICE OFFER above.

**All other terms and conditions of the solicitation remain the same.**