

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
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- PWGSC
1550 Avenue d'Estimauville
1550 D'Estimauville Avenue
Québec
Québec
G1J 0C7

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

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

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

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
TPSGC - PWGSC
601 - 1550 Avenue d'Estimauville
Québec
Québec
G1J 0C7

Title - Sujet Traffic Management Cap-aux-Meules	
Solicitation No. - N° de l'invitation EE519-151363/A	Amendment No. - N° modif. 001
Client Reference No. - N° de référence du client EE519-151363	Date 2014-11-26
GETS Reference No. - N° de référence de SEAG PW-\$QCW-026-16191	
File No. - N° de dossier QCW-4-37230 (026)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2014-12-08	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Perron, Jonathan	Buyer Id - Id de l'acheteur qcw026
Telephone No. - N° de téléphone (418) 649-2838 ()	FAX No. - N° de FAX (418) 648-2209
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

Solicitation No. - N° de l'invitation

EE519-151363/A

Client Ref. No. - N° de réf. du client

EE519-151363

Amd. No. - N° de la modif.

001

File No. - N° du dossier

QCW-4-37230

Buyer ID - Id de l'acheteur

qcw026

CCC No./N° CCC - FMS No/ N° VME

See next pages

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QCW-4-37230

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qcw026
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Projet : R.064669.001
Traffic Management Cap-aux-Meules

Objet : Amendment 001

Included in the present amendment:

- 1. Questions and answers 1 and 2**
- 2. Specifications : Concrete Reinforcing and Cast-in-Place Concrete**

Questions et réponses (1-2) – Questions and Answers (1-2)

Question 1: Pourriez-vous me donner le MPA du béton du trottoir ainsi que des bases des poteaux?

Réponse 1: 35 MPA, voir la section de devis jointe.

Question 1: Could you give me the MPA of the sidewalk and the posts concrete bases?

Answer 1: 35 MPA, see the attached specification.

Question 2: A1-A2-B1-B2 est-ce que l'on doit ajouter ou non de la fumée de silice ?

Réponse 2: Oui, voir la section de devis jointe.

Question 2: A1-A2-B1-B2 do we have to add or not fumed silica?

Answer 2: Yes, see the attached specification.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 03 30 00.01 - Cast-in-place Concrete (Short Form).

1.2 REFERENCES

- .1 American Concrete Institute (ACI)
 - .1 SP-66-04, ACI Detailing Manual 2004.
 - .1 ACI 315-99, Details and Detailing of Concrete Reinforcement.
 - .2 ACI 315R-04, Manual of Engineering and Placing Drawings for Reinforced Concrete Structures.
 - .2 Canadian Standards Association (CSA International)
 - .1 CSA-A23.1-04/A23.2-04, Concrete Materials and Methods of Concrete Construction/Methods of Test and Standard Practices for Concrete.
 - .2 CSA-A23.3-04, Design of Concrete Structures.
 - .3 CAN/CSA-G30.18-M92(R2007)], Billet-Steel Bars for Concrete Reinforcement, A National Standard of Canada.
 - .4 CSA-G40.20/G40.21-04, General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.
 - .5 CSA W186-M1990(R2007), Welding of Reinforcing Bars in Reinforced Concrete Construction.
 - .3 Institut d'acier d'armature du Québec (IAAQ)
 - .1 IAAC 2006, acier d'armature, manuel de normes recommandées.

Part 2 Products

2.1 MATERIALS

- .1 Substitute different size bars only if permitted in writing by Departmental Representative.
- .2 Reinforcing steel: billet steel, grade 400, deformed bars to CAN/CSA-G30.18, unless indicated otherwise.
- .3 Cold-drawn annealed steel wire ties: to ASTM A497/A497M.
- .4 Chairs, bolsters, bar supports, spacers: to CSA-A23.1/A23.2.

2.2 FABRICATION

- .1 Fabricate reinforcing steel in accordance with CSA-A23.1/A23.2 and "Institut d'acier d'armature, manuel de normes recommandées", by l'Institut d'acier d'armature du Québec (IAAQ).
 - .1 ACI 315R unless indicated otherwise.

- .2 Obtain Departmental Representative's approval for locations of reinforcement splices other than those shown on placing drawings.
- .3 Ship bundles of bar reinforcement, clearly identified in accordance with bar bending details and lists.

Part 3 Execution

3.1 FIELD BENDING

- .1 Do not field bend or field weld reinforcement except where indicated or authorized by Departmental Representative.
- .2 When field bending is authorized, bend without heat, applying slow and steady pressure.
- .3 Replace bars, which develop cracks or splits.

3.2 PLACING REINFORCEMENT

- .1 Place reinforcing steel as indicated on placing drawings and in accordance with CSA-A23.1/A23.2.
- .2 Prior to placing concrete, obtain Departmental Representative's approval of reinforcing material and placement.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 American Society for Testing and Materials International (ASTM)
 - .1 ASTM A185/A185M-07, Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete.
 - .2 ASTM C260-06, Standard Specification for Air-Entraining Admixtures for Concrete
 - .3 ASTM C490/C490M-08, Standard Practice for Use of Apparatus for the Determination of Length Change of Hardened Cement Paste, Mortar, and Concrete.
 - .4 ASTM C494/C494M-08a, Standard Specification for Chemical Admixtures for Concrete.
 - .5 ASTM D1751-04(2008) Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Non extruding and Resilient Bituminous Types).
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-19.24-M90, Multicomponent, Chemical-Curing Sealing Compound.
- .3 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-A3000-08, Cementitious Materials Compendium (Consists of A3001, A3002, A3003, A3004 and A3005).
 - .1 CAN/CSA-A5, Portland Cement.
 - .2 CAN/CSA-A23.5, Supplementary Cementing Materials.
 - .2 CAN/CSA-A23.1-09/A23.2-09, Concrete Materials and Methods of Concrete Construction/Methods of Test for Concrete.
 - .3 CAN/CSA-A23.3-04, Design of Concrete Structures.
 - .4 CAN/CSA-A23.4/A251-09, Precast Concrete - Materials and Construction/Qualification Code for Architectural and Structural Precast Concrete Products.
 - .5 CAN/CSA-G30.18-09, Billet-Steel Bars for Concrete Reinforcement.

1.2 SUBMITTALS

- .1 Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit testing, inspection results and reports for review by Departmental Representative and do not proceed without written approval when deviations from mix design or parameters are found.

1.3 DELIVERY, STORAGE AND HANDLING

- .1 Concrete hauling time: maximum allowable time limit for concrete to be delivered to site of Work and discharged not to exceed 120 minutes after batching.
 - .1 Modifications to maximum time limit must be agreed to by the Departmental Representative and concrete producer as described in CSA A23.1/A23.2.
 - .2 Deviations to be submitted for review by the Departmental Representative.

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Divert unused concrete materials from landfill to local facility as reviewed by Departmental Representative.
- .2 Divert admixtures and additive materials from landfill to approved official hazardous material collections site as reviewed by Departmental Representative.
- .3 Unused admixtures and additive materials must not be disposed of into sewer systems, into lakes, streams, onto ground or in other location where it will pose health or environmental hazard.

Part 2 Products

2.1 FORMWORK

- .1 Formwork materials
 - .1 For concrete without special architectural features, use wood and wood product formwork materials to CSA-O121, CAN/CSA-O86, CSA O437 Serie F93 (R2006) and CSA-O153.
 - .2 For concrete with special architectural features, use formwork materials to CSA-A23.1/A23.2.
- .2 Form ties:
 - .1 For concrete not designated 'Architectural', use removable or snap-off metal ties, fixed or adjustable length, free of devices leaving holes larger than 25 mm diameter in concrete surface.
 - .2 For Architectural concrete, use snap ties complete with plastic cones and light grey concrete plugs.
- .3 Form release agent: non-toxic, biodegradable, low VOC.
- .4 Falsework materials: to CSA-S269.1.
- .5 Fabrication and erection :
 - .1 Verify lines, levels and centres before proceeding with formwork/falsework and ensure dimensions agree with drawings.
 - .2 Obtain Departmental Representative's approval for use of earth forms framing openings not indicated on drawings.
 - .3 Hand trim sides and bottoms and remove loose earth from earth forms before placing concrete.
 - .4 Fabricate and erect falsework in accordance with CSA S269.1.
 - .5 Fabricate and erect formwork in accordance with CAN/CSA-S269.3 to produce finished concrete conforming to shape, dimensions, locations and levels indicated within tolerances required by CSA-A23.1/A23.2.
 - .6 Align form joints and make watertight.
 - .7 Keep form joints to minimum.
 - .8 Use 25 mm chamfer strips on external corners and/or 25 mm fillets at interior corners, joints, unless specified otherwise.
 - .9 Form chases, slots, openings, drips, recesses, expansion and control joints as indicated.

- .10 Build in anchors, sleeves, and other inserts required to accommodate Work specified in other sections.
- .11 Ensure that anchors and inserts will not protrude beyond surfaces designated to receive applied finishes, including painting.
- .12 Clean formwork in accordance with CSA-A23.1/A23.2, before placing concrete.
- .6 Form removal
 - .1 Leave formwork in place for a minimum period of 24 hours after placing concrete.

2.2 CONCRETE REINFORCING

- .1 Reinforcing bars, steel wire ties, chairs, spacers, bar supports and bolsters : in accordance with Section 03 20 00 – Concrete Reinforcing.

2.3 MATERIALS

- .1 Cement, aggregates, water and admixtures: to CAN/CSA-A23.1 and CAN/CSA-A23.4.
- .2 Pieces of hardware and sundry equipment : to CAN/CSA-A23.1.
- .3 Air-entraining admixture : to ASTM C260-06.
- .4 Chemical admixture: to ASTM C 490/C 490-M08, according to manufacturer's instructions.
- .5 Supplementary cementing materials: to CAN/CSA A3001.
- .6 Cementitious Hydraulic Slag : to CAN/CSA-A363.
- .7 Premoulded joint filler:
 - .1 Bituminous impregnated fibreboard: to ASTM D1751.
- .8 Shear studs : to CSA G40.21.
- .9 Self-adhesive membrane Soprajoint of the company Sopréma or the equivalent.

2.4 MIXES

- .1 Proportion concrete in accordance with CAN/CSA-A23.1/A23.2, to obtain normal density concrete having the following characteristics :
 - .1 Type I concrete :
 - .1 Portland Cement type GU-SF.
 - .2 C₃A (tricalcium aluminate) content included between 4% and 8%.
 - .3 Compressive strength minimum resistance at 28 days: 35 MPa.
 - .4 Cement minimum content : 375 kg/m³
 - .5 Water / cement ratio: less than 0.40.
 - .6 Class of exposure: C-1.
 - .7 Coarse aggregate nominal size :20 mm.
 - .8 Slump at time and point of discharge: from 50 to 100 mm.
 - .9 Air content: from 4 to 7 %.
 - .10 Chemical admixtures: water reducer to improve strength, retarder, set accelerator, strength reinforcing agent, air-entraining, super plasticizing agent, according to manufacturer's indications.

Part 3 Execution

3.1 PREPARATION

- .1 Provide Departmental Representative 24 hours notice before each concrete pour.
- .2 During concreting operations:
 - .1 Development of cold joints not allowed.
 - .2 Ensure concrete delivery and handling facilitates placing with minimum of rehandling, and without damage to existing structure or Work.

3.2 CONSTRUCTION

- .1 Perform cast-in-place concrete work in accordance with CSA-A23.1.
- .2 Build reinforced concrete access to the launching ramp as shown on plan.
- .3 Do not dump unset concrete in waterways.
- .4 Inserts :
 - .1 Cast in sleeves, ties, slots, anchors, reinforcement, frames, conduit, bolts, waterstops, joint fillers and other inserts required to be built-in.
 - .2 Sleeves and openings greater than 100 mm x 100 mm not indicated, must be reviewed by Departmental Representative.
- .5 Finishes :
 - .1 Finish concrete surfaces in accordance with standard CAN/CSA-A23.1.
 - .2 Finish with broom or brush finish with grooved pattern.

3.3 DEFECTIVE CONCRETE

- .1 Concrete not conforming to requirements of drawings and specifications or that visible surface is not accepted by Departmental Representative will be considered as defective.
- .2 Repair works of visible concrete surfaces shall not be undertaken until Departmental Representative has ascertained defect to be corrected.
- .3 Defects not affecting structural capacity, such as concrete not conforming with dimensions, details and elevations indicated on drawings, holes for formwork tying wires, as well as concrete whose surface includes small cavities caused by air bubbles or shallow honeycombs :
 - .1 Defects found could be repaired according to methods and with materials whose durability has been tested under conditions that repair surfaces be identical, at short and long terms, to adjacent ones.
 - .2 Construction parts, including too many defects, shall be demolished and rebuilt at no cost for Departmental Representative.
- .4 Concrete whose defects are affecting structural capacity such as concrete whose resistance is insufficient as well as concrete scattered with honeycombs or imperfections jeopardizing its structural efficiency, will be demolished and rebuilt at no expense to Departmental Representative.
- .5 Surfaces of visible repairs are subject to Departmental Representative's approval. This one could require repair of representative defects to make sure of uniformity and similitude of surfaces and also joint dissimulation. If repairs are refused on account of

their appearance, defective concrete parts will be rebuilt to Departmental Representative's satisfaction.

- .6 Drippings, scratches and other awkward irregularities of exposed surfaces must be eliminated in 24 hours delay after formwork removal.

3.4 CLEANING

- .1 Use trigger operated spray nozzles for water hoses.
- .2 Designate cleaning area for tools to limit water use and runoff.
- .3 Cleaning of concrete equipment to be done in accordance with Section 01 35 43 - Environmental Procedures.

END OF SECTION