



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

Bid Receiving - PWGSC / Réception des soumissions -  
TPSGC

11 Laurier St./11 rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau, Québec K1A 0S5

**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**

This document contains a security requirement

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**

Construction Services Division/Division des services de  
construction

11 Laurier St./11 Rue Laurier

Portage III 6B1

Gatineau

Québec

K1A 0S5

<b>Title - Sujet</b> Replacement of HVAC Control System	
<b>Solicitation No. - N° de l'invitation</b> EP916-190433/A	<b>Amendment No. - N° modif.</b> 002
<b>Client Reference No. - N° de référence du client</b> 20190433	<b>Date</b> 2018-10-02
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$\$FG-366-75473	
<b>File No. - N° de dossier</b> fg366.EP916-190433	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2018-10-17</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Boussougou, Arnel	<b>Buyer Id - Id de l'acheteur</b> fg366
<b>Telephone No. - N° de téléphone</b> (819) 420-6022 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

Instructions: See Herein

Instructions: Voir aux présentes

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

## Amendment 002 is issued for the following reason:

- Respond to potential Bidders Questions
- Publish ADDENDUM N°: 01
- To change the closing date of the Invitation to Tender from 10 October 2018 to 17 October 2018

Potential Bidders Questions are hereby answered as per the following:

<p>1</p>	<p>Drawing M15 shows three new immersion temperature sensors. Who is responsible for the installation of the wells?</p> <p>Le dessin M15 montre trois nouvelles sondes de température à immersion. Qui est responsable pour l'installation des puits?</p>	<p>Bid as per plans and specifications: Drawing M15 shows two new immersion temperature sensor to measure the temperature in the tanks. Those sensors are to replace existing electrical thermostats (refer to drawing note 3), therefore, the wells are existing.</p> <p>Soumissionner selon les plans et devis : Le dessin M15 montre deux nouvelles sondes de température pour mesurer la température dans les réservoirs. Ces sondes viennent remplacer des thermostats électriques existants (voir note particulière 3), les puits sont donc existants.</p>
<p>2</p>	<p>Drawing M12 shows three new damper motors for the Firing Range Points FP-1, -2 &amp; -3. Is it only the damper motors that are being replaced, or are new dampers to be installed also? If yes for new dampers, who is to install the dampers, and what are the dimensions?</p> <p>Le dessin M12 montre trois nouveaux actionneurs des volets du retour des points de tir FP-1, -2 &amp; -3. Le remplacement concerne-t-il seulement les actionneurs, ou bien de nouveaux volets doivent aussi être installés ? S'il s'agit de nouveaux volets, qui doit les installer, et quelles sont les dimensions ?</p>	<p>Bid as per plans and specifications: The dampers actuators are existing to remain. The end switches integrated to the damper actuators were never connected to the current EMCS, so new control points (digital inputs) and wires are required to connect the existing end switches to the new EMCS (refer to drawing note 3 on drawing M12).</p> <p>Soumissionner selon les plans et devis : Les actionneurs des volets sont existants et réutilisés. Les interrupteurs de fin de courses intégrés aux actionneurs n'ont jamais été raccordés au SGE actuel, donc de nouveaux points de contrôles (entrées binaires) avec le câblage sont nécessaires pour raccorder les interrupteurs de fin de courses existants au nouveau SGE (voir la note particulière 3 sur le dessin M12).</p>

**ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED**

**The following changes in the tender documents are effective immediately.  
This addendum will form part of the contract documents.**

**DRAWINGS**

**Drawing M1 - Drawings List & Legend**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M4 - Controls - Network Architecture**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M5 - Controls - Ventilation Schematics**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M6 - Controls - Ventilation Schematics**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M7 - Controls - Ventilation Schematics**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M8 - Controls - Ventilation Schematics**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M9 - Controls - Ventilation Schematics**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M10 - Controls - Ventilation Schematics**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M11 - Controls - Ventilation Schematics**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**Drawing M15 - Controls - Hydronic Schematics**

1. Revision 5: Issued for Addendum M01, the 2018-09-27.

**SPECIFICATIONS**

**Section 01 00 10 - GENERAL INSTRUCTIONS**

**1. ADD article 1.12: "BID SUBMISSION BREAKDOWN"**

- .1 Provide the following cost breakdown during the bid submission:

- .1 Demolition:

- .1 Demolition and removal of existing controls.

- .2 New EMCS Installation:
  - .1 Replacement of controllers.
  - .2 Field Devices (new and replaced) including the installation.
  - .3 Centralized Management System (software, graphics, OWS etc.).
  - .4 UPS.
  - .5 Labor.
- .3 Network Installation:
  - .1 Ethernet Network Switches.
  - .2 Network cabling and certification.
- .4 Training.
- .5 Commissioning.
- .6 (1) year warranty.
  - Electrical Installation.

#### **Section 01 14 00 - WORK RESTRICTIONS**

1. **ADD paragraph 1.6.5 as follows:** "All electro-mechanical systems must remain functional during normal operating hours. Accordingly, conduct all control panel switchovers outside of normal operation hours."

#### **Section 01 91 31 - COMMISSIONING (Cx) PLAN**

1. **ADD attached section 01 91 31.**

#### **Section 01 91 33 - COMMISSIONING**

1. **DELETE paragraph 1.7.2.**
2. **REPLACE with paragraph 1.7.2 as follows:** "Witnessing of start-up and testing is at the Departmental Representative discretion."
3. **ADD paragraph 1.8.4 as follows:** "Verify weather-sensitive systems twice: first at near winter design conditions and secondly under summer design conditions."

**4. ADD article 1.12: "INSTALLATION/START-UP CHECK LISTS"**

- .1 Include the following data:
  - .1 Product manufacturer's installation instructions and recommended checks.
  - .2 Special procedures as specified in relevant technical sections.
  - .3 Items considered good installation and engineering industry practices deemed appropriate for proper and efficient operation.
- .2 Equipment manufacturer's installation/start-up check lists are acceptable for use. As deemed necessary by Departmental Representative supplemental additional data lists will be required for specific project conditions.
- .3 Use check lists for equipment installation. Document check list verifying checks have been made, indicate deficiencies and corrective action taken.
- .4 Installer to sign check lists upon completion, certifying stated checks and inspections have been performed. Return completed check lists to Departmental Representative. Check lists will be required during Commissioning and will be included in Building Maintenance Manual (BMM) at completion of project.
- .5 Use of check lists will not be considered part of commissioning process but will be stringently used for equipment pre-start and start-up procedures.

**5. ADD article 1.13: "PRODUCT INFORMATION (PI) REPORT FORMS"**

- .1 Product Information (PI) forms compiles gathered data on items of equipment produced by equipment manufacturer, includes nameplate information, parts list, operating instructions, maintenance guidelines and pertinent technical data and recommended checks that is necessary to prepare for start-up and functional testing and used during operation and maintenance of equipment. This documentation is included in the BMM at completion of work.
- .2 Prior to Performance Verification (PV) of systems complete items on PI forms related to systems and obtain Departmental Representative's.

**Section 25 05 01 - EMCS: GENERAL REQUIREMENTS**

- 1. ADD paragraph 1.1.4:** "The specifications of Division 26 apply to Division 25."
- 2. ADD paragraph 1.2.3:** "Section 26 05 00 - Electrical: General Requirements."

3. **ADD paragraph 1.11.4:** "Both the old and new EMCS systems must be in operation until the entire system switchover is complete. At any time, it should be possible to monitor and control all HVAC systems from either the old or the new EMCS."
4. **DELETE paragraph 3.4.3.**
5. **REPLACE with paragraph 3.4.3 as follows:** "All wiring must comply with the requirements of the local authorities as well as article "ELECTRICAL CONNECTION", and section 26 05 00 - Electrical: General Requirements."

**Section 25 05 11 - EMCS: START-UP, VERIFICATION AND COMMISSIONING**

1. **ADD paragraph 1.1.5:** "Section 01 91 31 – Commissioning (Cx) Plan."

**Section 25 05 12 - EMCS: TRAINING**

1. **ADD paragraph 1.1.4:** "Section 01 91 31 – Commissioning (Cx) Plan."
2. **DELETE paragraph 1.2.2.**
3. **REPLACE with paragraph 1.2.2 as follows:** "Submit training proposal complete with hour-by-hour schedule including brief overview of content of each segment to Departmental Representative, for approval, 30 days prior to anticipated date of beginning of training."
4. **DELETE Article 1.8.2.**
5. **REPLACE with Article 1.8.2 as follows:** "Phase 1: 2 days minimum, 3 if deemed necessary by the Departmental Representative, program to begin before 30 day test period at time mutually agreeable to Contractor, Departmental Representative and Facility Manager."
6. **DELETE paragraph 1.8.3.**
7. **REPLACE with paragraph 1.8.3 as follows:** "Phase 2: 2 days minimum, 3 if deemed necessary by the Departmental Representative, program to begin 8 weeks after acceptance for facility managers, operators and equipment maintenance personnel."

**Section 25 10 01 - EMCS: AUTOMATION NETWORKS**

1. **DELETE article 2.4:** "ACCEPTABLE MANUFACTURERS"

**Section 25 10 03 - EMCS: CENTRALIZED MANAGEMENT SYSTEM**

1. **DELETE the entire section 25 10 03.**
2. **REPLACE with attached section 25 10 03.**

**Section 25 30 01 - EMCS: BUILDING CONTROLLERS**

1. **DELETE** paragraph 1.6.6.
2. **REPLACE with paragraph 1.6.6 as follows:** "For each standalone control units (MCU, LCU), allow for a spare capacity of at least 50% of each point type and a minimum of 50% spare memory capacity for future modifications to the EMCS."

**Section 25 30 02 - EMCS: FIELD CONTROL DEVICES**

1. **DELETE** paragraph 2.12.1.
2. **REPLACE with paragraph 2.12.1 as follows:** "All building controllers, the Centralized Management server OWS and network components are connected to emergency power via an uninterruptible power supply."

**Section 25 90 01 - EMCS: SITE REQUIREMENTS, APPLICATIONS AND SYSTEMS SEQUENCES OF OPERATION**

1. **DELETE** the entire section 25 90 01.
2. **REPLACE with attached section 25 90 01.**

**Section 26 05 00 - ELECTRICAL: GENERAL REQUIREMENTS**

1. **ADD** attached section 26 05 00.

**End, Addendum 1**