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**Halifax, N.S./Halifax,(N.E.)**  
**B3J 1T3**  
**Halifax**  
**Bid Fax: (902) 496-5016**

## **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**  
Atlantic Region Acquisitions/Région de l'Atlantique  
Acquisitions  
1713 Bedford Row  
Halifax, N.S./Halifax, (N.E.)  
B3J 3C9  
Halifax  
Nova Scot

<b>Title - Sujet</b> HVAC Controls & System Upgrade	
<b>Solicitation No. - N° de l'invitation</b> EB144-161601/A	<b>Amendment No. - N° modif.</b> 009
<b>Client Reference No. - N° de référence du client</b> EB144-16-1601	<b>Date</b> 2015-12-07
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$PWA-110-5314	
<b>File No. - N° de dossier</b> PWA-5-74121 (110)	<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 2015-12-15</b>	
<b>Time Zone</b> Fuseau horaire Atlantic Standard Time AST	
<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> Collier (PWA), Susan	<b>Buyer Id - Id de l'acheteur</b> pwa110
<b>Telephone No. - N° de téléphone</b> (902) 496-5350 ( )	<b>FAX No. - N° de FAX</b> (902) 496-5016
<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 009 is being issued to answer questions from potential bidders as follows:

**Question 1:**

· All exhaust air valves are ask to be build in stainless. Can we provide galvanized for air valves on General exhaust and on the air valves on the return existing system (RF-5A)

**Answer 1:**

**(Clarification: All exhaust air valves and dampers are to be stainless steel or phenolic coated as per Specification Section 23 44 00 2.3.4 Class B and Dwg. H503)**

**Question 2:**

· We need confirmation that room C308, C306 and C313 are associated with the existing EF8 on the roof and we don't need a VAV box on the exhaust. It means that we have control only on supply VAV box without any input from the exhaust for each room. (CV only?)

**Answer 2:**

**(Clarification: As shown on Dwg. H306, Rooms C306, C308, and C313 do not require VAV dampers in the General Exhaust ducts. Dual-Duct Boxes in these rooms to be set for constant volume flow.)**

**Question 3:**

· Room 3035/3036, the general exhaust VAV box does not appear on the H503 drawing. Can he confirm if we really need a VAV box on the general exhaust of these rooms.

**Answer 3:**

**(Yes, the General Exhaust VAV damper for Rooms 3035/3036 is shown on Dwg. H503. See Exhaust Riser #G24.)**

**Question 4:**

· ROOM 3044a WHY WE ARE NOT CONTROLLING THE SUPPLY VAV BOX IF WE NEED TO INSTALL A NEW VAV BOX ON THE GEX. (CV only?)

**Answer 4:**

**(Clarification: Yes, GE VAV damper is required for Rm. 3044a, as shown on Dwg. H503, Exhaust Riser #G7.)**

**Question 5:**

· Please confirm that we can re-use the pneumatic actuators for the wing coils as no electric actuators will fit the actual setup to move the dampers (4 damper actuators for the face and bypass damper).

**Answer 5:**

**(Amendment Item: Reference drawings H302 and H502. Add the following note to both drawings: "Existing Pneumatic actuators for Steam Face & Bypass Coils on AHU-5A and**

**AHU-5B may be reused if suitable electronic actuators are not available. Existing actuators to be controlled by new DDC System utilizing appropriate EP Transducers.")**

**Question 6:**

· To be able to do a diameter selection for VAV boxes on canopy hoods, we need information on the required air flow for: EC15, EC2, EC14, EC3, EC1, the autoclave and the canopy called HH in the room 3042.

**Answer 6:**

**(Clarification: See Dwg. H503 for EC-2 and EC-3 air flows. For any canopies that do not indicate air flows, size exhaust damper to match duct size.)**

**Question 7:**

· For all labs with fume hoods, can we take control on the supply dual duct VAV box by taking only the total flow sensor measurements? One flow sensor in the total air flow, same as other non-lab rooms where we are having only one flow sensor. Siemens have a lot of lab installations in Canada and US that's working great with this control strategy!!!

**Answer 7:**

**(Clarification: No. DDC supply air flow sensors for VAV Dual Duct Boxes as per control details on Dwg. H502.)**

**Question 8:**

· Can we install standard speed actuator for rooms without fume hoods? (example: Work rooms or Laboratories without fume hoods) on drawing H502)

**Answer 8:**

**(Clarification: No. See Control Details on Dwg. H502)**

**Question 9:**

· On the main system 5A and 5B, if the recovery coil will not be used, did we need to change the valve and the actuator?

**Answer 9:**

**(Clarification: Yes. Install Valve and Actuator as per Detail 4/H501)**

**Question 10:**

· We need valve schedule or line size to do our valve selection.

**Answer 10:**

**(Clarification: Valve sizing to match existing.)**

### **Question 11**

We need information about the operation pressure of steam to do our control valve selection.

### **Answer 11:**

**(Clarification: Operating pressure of the steam heating coils on AHU-5A & 5B is 25 psi)**

### **Question 12:**

Will All the work be done during normal working hours from 8am to 4:30 pm Monday to Friday.

### **Answer 12:**

**(Clarification: See Specification Sections including, but not limited to, sections 01 10 10, 1.1.2 and 1.20, and Section 01 14 10, 1.4)**

**01 10 10, 1.1.2.7 states:**

"Once fans FF-1, FF-2, and GE-1 are commissioned, commence the process of renovating individual laboratory ventilation, exhaust, and control systems. Only two (2) Laboratories may be taken out of service at a time. Each individual lab cannot be out of service for more than three (3) weeks. Individual Lab controls, ventilation, general exhaust, fume hood exhaust retrofits, commissioning, testing and balancing must be completed in three (3) weeks, so that the Laboratory can be fully operational at the end of the three (3) week period. Scheduling of all Laboratory down-time must be coordinated with and approved by the Departmental Representative."

**01 10 10, 1.20 states:**

"Where Owners normal operations at the site are negatively impacted by the operations of the Contractor, the Contractor shall modify, reschedule or otherwise change such construction operations so the Owner's operations can be maintained. No additional compensation under the contract will be paid to the Contractor as a result of the adjustment of construction operations."

**01 14 10, 1.4.3 states:**

"To assure that construction work may proceed productively without risk to safety of building occupants and the public, and due to the nature of the tenant's operation be aware that certain work of this contract must be carried out during "Off-Hours". AAFC will endeavor to accommodate contractor when possible to avoid excessive off-hours work."

**Facility Management will make reasonable efforts to accommodate work during normal business hours. Due to the nature and extent of the work however, it is expected that certain work will have to be performed during off hours in order to minimize the down time of each laboratory, and to facilitate ongoing building operations. "Off Hours" are defined further in section 01 14 10, 1.4.4.**

### **Question 13:**

In the pipe shaft for wiring 24 volts AC and lower are we required to use EMT conduit or can we use FT6 Plenum Cable?

**Answer 13:**

**(Clarification: See Amendment #5, dated Nov. 24/15)** This amendment addresses a change to Specification Section 01 10 10, 1.1.2.18 with the following wording:

"Control Wiring to be run in conduit in all exposed areas, including the Mechanical Penthouse, the Mechanical Chase, and the 1st Floor Mechanical Room. Control Wiring in ceiling plenums may be run in free air on J-hooks. Control wiring drops in walls to sensors and devices to be run in conduit."

**Question 14:**

In suspended ceilings for wiring 24 volts AC and lower are we required to use EMT conduit or can we use FT6 Plenum Cable?

**Answer 14:**

**(Clarification: See Amendment #5, dated Nov. 24/15)** This amendment addresses a change to Specification Section 01 10 10, 1.1.2.18 with the following wording:

"Control Wiring to be run in conduit in all exposed areas, including the Mechanical Penthouse, the Mechanical Chase, and the 1st Floor Mechanical Room. Control Wiring in ceiling plenums may be run in free air on J-hooks. Control wiring drops in walls to sensors and devices to be run in conduit."

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME