Public Works and Government Services Canada

Travaux publics et Services gouvernementaux Canada

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government Services Canada/Réception des soumissions Travaux publics et Services gouvernmentaux Canada
800 Burrard Street, 2nd floor
800,rue Burrard, 2e étage
Vancouver
British Columbia
V6Z 0B9
Bid Fax: (604) 775-9381

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
Public Works and Government Services Canada - Pacific Region
800 Burrard Street, 12th floor
800, rue Burrard, 12e étage
Vancouver
British C
V6Z 0B9

Title - Sujet HVAC and EMCS Work	
Solicitation No. - N° de l'invitation 21C82-120411/A	**Amendment No. - N° modif.** 003
Client Reference No. - N° de référence du client	**Date** 2013-07-26
GETS Reference No. - N° de référence de SEAG PW-$PWY-005-7034	
File No. - N° de dossier PWY-3-36028 (005)	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2013-07-31**	**Time Zone** **Fuseau horaire** Pacific Daylight Saving Time PDT
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Pillay, Sal (PWY)	**Buyer Id - Id de l'acheteur** pwy005
Telephone No. - N° de téléphone (604) 775-9386 ( )	**FAX No. - N° de FAX** (604) 775-6633
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:** CSC - Fraser Valley Institution - Abbotsford, BC	

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**

Canada

Les documents français seront disponibles sur demande

THE FOLLOWING CHANGES IN THE TENDER DOCUMENTS ARE EFFECTIVE IMMEDIATELY. THIS ADDENDUM WILL FORM PART OF THE CONTRACT DOCUMENTS.

MECHANICAL ADDENDUM #M3

1. Refer to Tender Drawing M-3:

1. Room 150:
   (1) Add 1@ fire damper to exhaust grille (served by EF-3).
   (2) Add 20ø condensate drain for HRV-1 and HRV-2, piped to floor drain.
   (3) Add condensate drain for AHU-2 c/w trap, piped to floor drain. Size to match equipment condensate drain connection but not less than 20ø.
2. Room 113: Add door grille DG-1, 20”x12”.
3. Specific Note 26, revise as follows: 2@ 125ø dryer vent c/w wall caps. Provide transition from 125ø rigid to 100ø semi-rigid duct at dryers. Maximum duct ength (includes 1@ 100ø elbow plus 1@ 125ø elbow): 600mm (2 ft) of 100ø semi-rigid plus 6,000mm (20 ft) of 125ø rigid metal. Enclose dryer vents into fire rated enclosure (by General Contractor; coordinate with Corcan).
4. Specific Note 34, revise DG-1 to DG-2 (fire rated).
5. Room 112:
   (1) Furnace FU-1; install condensate trap (furnished with furnace) and provide 20ø condensate drain (PVC) to in-line acid neutralizer (furnished by Contractor) and pipe to floor drain.
   (2) Provide 25mm duct liner for return air plenum upstream of furnace.
   (3) Provide hard-wired CO sensor conforming to CAN/CSA-6.19. Install per manufacturer’s recommendations. Coordinate with Division 26 for power.
   (4) Add 20ø condensate drain for HRV-3 c/w trap, piped to floor drain.

2. Refer to Tender Drawing M-6:

1. Room 211: Add door grille DG-2, 20”x12”.
2. Specific Note 7, revise as follows: 2@ 125ø dryer vent c/w wall caps. Provide transition from 125ø rigid to 100ø semi-rigid duct at dryers. Maximum duct length (includes 1@ 100ø elbow plus 1@ 125ø elbow): 600mm (2 ft) of 100ø semi-rigid plus 6,000mm (20 ft) of 125ø rigid metal. Enclose dryer vents into fire rated enclosure (by General Contractor; coordinate with Corcan).
3. Room 212:
   (1) Furnace FU-2; install condensate trap (furnished with furnace) and provide 20ø condensate drain (PVC) to in-line acid neutralizer (furnished by Contractor) and pipe to floor drain.
   (2) Provide 25mm duct liner for return air plenum upstream of furnace.
   (3) Provide hard-wired CO sensor conforming to CAN/CSA-6.19. Install per manufacturer’s recommendations. Coordinate with Division 26 for power.
   (4) Add 20ø condensate drain for HRV-4 c/w trap, piped to floor drain.
4. Delete 2@ 600x450 R/A duct in ceiling space. Add 600x1000 sidewall R/A grille type R-2 at shaft wall (south-facing). Extend R/A plenum into duct shaft and connect R/A duct

riser to bottom of R/A plenum. Provide 25mm duct liner at R/A plenum. Bottom of grille @ 600 above finished floor. Blades to be parallel to short dimension of grille.
5. Room 233A: Relocate transfer air boot to the wall between Room 231/249.
6. Add Note 16 as follows: "All transfer air boots on 2/F shall be complete with grilles (type R-2) at both ends. Grilles to match duct size."

3. Refer to Tender Specifications Section 23 73 11 "Air Handling Unit - Packaged":

1. 2.2.1.3: Revise as follows: "Finish unit outside with rust resistant enamel coating."
2. 2.2.2: Delete word "solid".
3. Delete 2.8.3.1.
4. 2.8.3.2: Add the following: "Filter shall be 100mm thick pleated type."
5. 2.10.3.1: Revise "1.5mm" to "1.6mm".
6. 2.10.3.2.2: Revise "copper" to "aluminum".
7. 2.10.3.3.3: Revise "copper" to "aluminum".

4. Refer to Tender Specifications Section 23 90 00 – Equipment Schedule, Pg. 6, 7:

1. 4.0 Heat Recovery Ventilator Schedule:

   (1) HRV-1, HRV-2: Revise "MCA = 20 amp" to "Total FLA = 15.5 amp". Revise supply and exhaust fans to 1/2 HP each.
   (2) HRV-3, HRV-4: Revise "MCA = 4.5 amp" to "Total FLA = 4.5 amp".
   (3) Delete Note 2.

5. Refer to Tender Specifications Section 23 90 00 – Equipment Schedule, Pg. 8, 9:

1. 5.0 Air Handling Unit Schedule:

   (1) Delete Note 6.

6. Refer to Tender Specifications Section 23 90 00 – Equipment Schedule, Pg. 12:

1. 8.0 Grilles and Diffusers:

   (1) Add DG-2: fire rated door grille, 18"x14" (unless otherwise noted), Z-blade louvers, mitered and welded corners, mineral bronze colour.

7. Refer to Tender Specifications Section 25 05 01 "EMCS General Requirements":

1. Add 3.2.5 as follows: "Controls Contractor shall include in tender price a one (1) day meeting with Departmental Representative to review the controls system and sequence of operations prior to submitting controls shop drawings."

8. Refer to Tender Specifications Section 25 90 01 "EMCS Site Requirements, Applications and Systems Sequence of Operation":

2. Boiler Control; Add 3.2.1.7 as follows: "Provide speed feedback for VFD's."

9. Refer to Tender Specifications Section 25 90 01 "EMCS Site Requirements, Applications and Systems Sequence of Operation":

1. Boiler Control; Add 3.2.1.7 as follows: "Provide speed feedback for VFD's."

2. AHU-1/2 Control:
   (1) Add 3.2.3.3.4 as follows: "Provide duct static pressure transmitter in main duct (location to be field determined by Controls Contractor). High pressure limit switch at supply air duct shall be hard-wired to shut down unit. Provide speed feedback for VFD's."
   (2) Revise 3.2.3.5.3 as follows: "BAS is used to modulate heating control valve to maintain the set discharge air temperature."
   (3) Revise 3.2.3.7.1 as follows: "BAS is used to sequence the radiation control valve, air terminal unit damper and reheat control upon a demand for heating with the radiation being first on and last off, to maintain the set space temperature. Dual output signals or variable start points will be acceptable for sequencing valves."

3. FU-1/FU-2 Control:
   (1) Delete 3.2.5.3 "Low Temperature Thermostats" and sub-clause 3.2.5.3.1.
   (2) Revise 3.2.5.4.3 as follows: "When there is a call for heat (average space temperature), enable the first stage of heating. When there is additional call for heat, enable the second stage of heating. The furnace controller will modulate the heating output by 10% every 5 minutes in conjunction with fan speed in response to demand on second stage of heat. Upon demand for cooling the heating shall be disabled".

4. Revise 3.2.7 as follows:

   .7 Exhaust Fans:

      .1 EF-1, EF-3, EF-4 and EF-5 shall be started, stopped and monitored at the BAS system and shall operate as follows:
         .1 EF-1: Provide room temperature sensor and motorized air intake damper. Cycle fan and maintain space temperature set point. Interlock damper with fan.
         .2 EF-3: Provide room temperature sensor to cycle fan and maintain space temperature set point.
         .3 EF-4 and EF-5: Provide space temperature sensors in attic and motorized air intake dampers (see drawing M-6). Cycle fan and maintain space temperature set point. Interlock damper with fan.
      .2 EF-2 shall be started manually at wall switch (by Division 26). Provide motorized damper at transfer air duct, and close motorized damper when fan is enabled.

5. Building Energy Metering:
   (1) Add 3.2.9.3 as follows: "One (1) electrical power meter (w/ Modbus points) will be furnished by Division 26. Controls Contractor shall monitor provide wiring and monitor power consumption at DDC. Coordinate with Division 26 for details.

Review with Departmental Representative the points to be mapped (including but not limited to amperage and voltages for the three phases, power consumption, power factor, max/min values)."

6. Mechanical Room Ventilation System: Delete 3.2.12.2.

7. Add 3.2.14 as follows:

.1 Boiler Room (Room 150A) Ventilation:

.1 A hot water unit heater is controlled by the BAS to maintain the room set temperature.
.2 Provide 2@ motorized dampers. When space temperature exceed set point, open the motorized dampers for cross ventilation cooling.

10. Refer to Tender Specifications Section 25 90 02 "EMCS Point List/Schedules:

1. AHU-1, AHU-2:
   (1) Delete points: Final Filter P.D, Duct Smoke Detector
   (2) Add AI point: Supply Fan Speed Feedback
   (3) Add AI point: Return Fan Speed Feedback
   (4) Add AI point: Duct Static Pressure
   (5) Add DI point: High Limit Pressure Switch. Provide alarm at DDC.

2. FU-1, FU-2:
   (1) Delete points: Pre-Filter P.D., Final Filter P.D., Duct Smoke Detector, Low Temperature Thermostat, Gas Heating Valve, Gas Valve Status.
   (2) Add AI points: Space temperature (typical of 4). Locate temperature sensors (w/ blank cover plate) in Room 103, 107, 109, 117, 203, 207, 209, 217.
   (3) Add DO points: Heating Stage 1, Heating Stage 2.

3. Pg. 10, Electrical Measurement & Monitoring in Main Elect. Room:
   (1) Delete "Lighting" (2 AI points) and "Mechanical Equipment" (2 AI points)
   (2) Add "1x Power Meter, Modbus points":

Mechanical Questions Submitted to PWGSC

Question #1
Please consider adding Leonard model 210-TB or 270 as an Approved Equal to the Lawler 310SC1 specified. For product information, please see attachments above.

Answer to Question #1
The proposed thermostatic mixing valve is a plumbing item and it is not part of the HVAC / Controls tender. Therefore it will not be reviewed as part of this Addendum.

END OF MECHANICAL ADDENDUM #M3