



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

**Bid Receiving - PWGSC / Réception des soumissions
- TPSGC**

11 LaurierSt./ 11, rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau

Québec

K1A 0S5

Bid Fax: (819) 997-9776

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

Maintenance & Professional Consulting Services

Division (FK)

11 Laurier St./ 11, rue Laurier

3C2, Place du Portage, Phase III

Gatineau

Québec

K1A 0S5

Title - Sujet HVAC Maintenance Esplanade Laurier	
Solicitation No. - N° de l'invitation EJ196-162586/A	Amendment No. - N° modif. 001
Client Reference No. - N° de référence du client 20162586	Date 2016-08-24
GETS Reference No. - N° de référence de SEAG PW-\$\$FK-280-71298	
File No. - N° de dossier fk280.EJ196-162586	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-08-30	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Grogan, Lynn	Buyer Id - Id de l'acheteur fk280
Telephone No. - N° de téléphone (873) 469-4903 ()	FAX No. - N° de FAX (819) 956-3600
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

Amendment 001

1) Questions and Answers

Question 1: Please verify that all 5 years of this Contract are preventive maintenance only, no total coverage?

Answer 1: This is an inspection and maintenance Contract not all-inclusive, as per Scope of Work.

Question 2: Can we carry a G2 certified person on this RFP, so long as he/she meets all the other requirements?

Answer 2: We will stay with the G1 certification.

2) Delete in it's entirety 4.1.1.1 Mandatory Employee Experience and Past Performance, and Replace with

4.1.1.1 Mandatory Employee Experience and Past Performance

To carry out the work on this requirement, the contractor must provide three (3) qualified personnel.

The bidder must provide evidence to demonstrate that the service personnel proposed to perform maintenance of the equipment identified in SW5 Equipment Inventory have **three (3) recent years experience** and past performance in maintenance/service by referencing **three (3) similar projects/contracts** within the last **eight (8) years** whereby the service personnel have performed satisfactorily.

- Recent experience is defined as experience gained from January 2010 up to and including the solicitation closing date.
- Similar is defined as maintenance service of HVAC Systems comparable in size, scope and complexity to the equipment listed in Annex A, Statement of Work, Equipment Inventory.

In cases where experience is acquired concurrently, the time period will be considered only once for the purpose of calculating the minimum requirement of 3 years recent experience.

Example:

- Project 1: started on January 1, 2009 and ended on May 31, 2009 = 5 months
- Project 2: started on January 1, 2009 and ended on December 31, 2009 = 12 months
- Project 3: started on January 1, 2008 and ended on December 31, 2009 = 24 months

Total period for these 3 projects will count as 24 months and not 41 months because the period Jan. 2009 to Dec. 2009 has already been counted in Project 3. This employee does not meet the required minimum of 3 years recent experience.

3) Delete in it's entirety Pricing Schedule 1 – Firm Price (Table 1), and Replace with:

SW 5 Equipment Inventory

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details	Year 1	Year 2	Year 3	Year 4	Year 5
1	3rd Flr East Rm#03046	McQuay	WCMS51		3E(1)	BoardRoom	\$	\$	\$	\$	\$
1	3rd Flr East Rm #03100	McQuay	WCMS5		3E(2)	Solution Center	\$	\$	\$	\$	\$
2	5th Flr (E) Rm Rm#050 56	McQuay	15E200AC12		5E(1) 5E(2)	Exh. Fan Included 1) Meeting Room 2) Office Area	\$	\$	\$	\$	\$
1	6th Flr East Rm #06164	McQuay	CCH-MWH019C M05		6E(1)	Exh. Fan Included Meeting Room B	\$	\$	\$	\$	\$
1	7th Flr East Rm# 07078	McQuay	CC140F5		7E(1)	Exh. Fan Included Meeting Room C	\$	\$	\$	\$	\$
2	7th Flr East Rm #07084 Rm#07156	McQuay	CC550G5		7E(2) 7E(3)	1)Computer Rm 2)Conference Rm	\$	\$	\$	\$	\$
1	8th Flr East Rm#08029	McQuay	550	1987	8E(1)	Exh. Fan Included Departmental	\$	\$	\$	\$	\$
1	9th Flr East Rm#09168	McQuay	330	1987	9E(2)	Exh. Fan Included Conference Rm	\$	\$	\$	\$	\$
1	10th Flr East Rm#10012	McQuay	140	1987	10E(3)	Exh. Fan Included BoardR	\$	\$	\$	\$	\$
1	11th Flr East Printing Area	McQuay	550	1987	11E(1)	Exh. Fan Included	\$	\$	\$	\$	\$
1	12th Flr East Rm #12008	McQuay	140	1987	12E(1)	Exh. Fan Included Photocopy	\$	\$	\$	\$	\$
1	12th Flr East Rm #12006	McQuay	90	1987	12E(2)	Exh. Fan Included Conference Rm	\$	\$	\$	\$	\$
1	12th Flr East Rm#12150	McQuay	90	1987	12E(3)	BoardRmC	\$	\$	\$	\$	\$
1	12th Flr East Rm#12100	McQuay	90	1987	12E(4)		\$	\$	\$	\$	\$
1	12th Flr East Rm #12060	McQuay	90	1987	12E(5)	Exh. Fan Included Security Conference Rm	\$	\$	\$	\$	\$
Total per Year							\$	\$	\$	\$	\$
TOTAL for 5 Years							\$				

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details	Year 1	Year 2	Year 3	Year 4	Year 5
1	14th Fir East Rm#14160	McQuay	200	1987	14E(09)	Exhaust Fan Included Utility Room	\$	\$	\$	\$	\$
1	14th Fir East Rm#14010	McQuay	140		14E(11)	Conference Rm A	\$	\$	\$	\$	\$
1	14th Fir East Rm #14084	McQuay	90		14E(12)		\$	\$	\$	\$	\$
1	14th Fir East Rm#14082	McQuay	70		14E(13)	MeetingRmC	\$	\$	\$	\$	\$
1	14th Fir East Rm #14082	McQuay	140		14E(15)		\$	\$	\$	\$	\$
1	15th Fh· East Rm #15150	McQuay	70	1987	15E(2)	MeetingRmD	\$	\$	\$	\$	\$
1	15th Fh· East Rm#15172	McQuay	90	1987	15E(3)	Exh. Fan Included Conference	\$	\$	\$	\$	\$
1	15th Fir East Rm#15042	McQuay	90	1987	15E(4)	MeetingRm	\$	\$	\$	\$	\$
1	16th Fir East Rm#16019	McQuay	70	1987	16E(5)	Exh. Fan Included MeetingRm	\$	\$	\$	\$	\$
1	16th Fir East Rm #16062	McQuay	90	1987	16E(9)	MeetingRmB	\$	\$	\$	\$	\$
1	17th Fir East Rm#17163	McQuay	90	1987	17E(10)	Exh. Fan Included	\$	\$	\$	\$	\$
1	17th Fir East Rm 17046	McQuay	140	1987	17E(II)	Exh. Fan Included Conference Rm A	\$	\$	\$	\$	\$
1	17th Fir East Rm# 17108	McQuay	90	1987	17E(12)	ComputerRm	\$	\$	\$	\$	\$
1	17th Fir East Rm#17016	McQuay	70	1987	17E(13)	Exh. Fan Included MeetingRm A	\$	\$	\$	\$	\$
1	17th Fir East Rm# 17080	McQuay	140		17E(14)	MeetingRmC	\$	\$	\$	\$	\$
Total per Year							\$	\$	\$	\$	\$
TOTAL for 5 Years							\$				

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details	Year 1	Year 2	Year 3	Year 4	Year 5
1	18th Flr East Rm #18158	McQuay	70	1987	18E(1)	Exh. Fan Included Meeting Rm	\$	\$	\$	\$	\$
1	18th Flr East Rm#18012	McQuay	140	1987	18E(2)	Exh. Fan Included Conference Rm A	\$	\$	\$	\$	\$
1	18th Flr East Rm#18014	McQuay	140	1987	18E(3)	BoardroomF	\$	\$	\$	\$	\$
1	18th Flr East Rm #18092	McQuay	260	1987	18E(4)	Meeting Room D	\$	\$	\$	\$	\$
1	18th Flr East	McQuay	70	1987	18E(5)	Exh. Fan Included	\$	\$	\$	\$	\$
1	18th Flr East	McQuay	70	1987	18E(6)	Exh. Fan Included Meeting Room C	\$	\$	\$	\$	\$
1	20th Flr East	McQuay	70	1987	20E(1)	Exh. Fan Included Meeting Rm A	\$	\$	\$	\$	\$
1	20th Flr East Rm#20144	McQuay	70	1987	20E(2)	Exh. Fan Included Meeting Room B	\$	\$	\$	\$	\$
1	20th Flr East Rm#20042	McQuay	70	1987	20E(3)	Exh. Fan Included Computer Rm	\$	\$	\$	\$	\$
1	20th Flr East Rm #20074	McQuay	70	1987	20E(4)	Exh. Fan Included Meeting Room E	\$	\$	\$	\$	\$
1	20th Flr East Rm#20058	McQuay	70	1987	20E(5)	Exh. Fan Included Meeting Room D	\$	\$	\$	\$	\$
1	20th Flr East Rm#20007	McQuay	330	1987	20E(6)	Exh. Fan Included Meeting Room C	\$	\$	\$	\$	\$
1	20th Flr East Rm#20074	McQuay	140		20E(7)	Meeting Room E	\$	\$	\$	\$	\$
Total per Year							\$	\$	\$	\$	\$
TOTAL for 5 Years							\$				

Notes: Contract includes but is not limited to; all related piping for unit isolation, gauges, thermometers ,associated electrical and controls, flow switches, electric control valves and connecting duct work. Also includes motor starters and condensing drainage systems. Evaporators and condensers are to be cleaned with soap and water no less than annually or more often if deemed necessary.

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification#	Details	Year 1	Year 2	Year 3	Year 4	Year 5
1	21st Fir East Rm 21104	McQuay	260	1987	21E(8)	Exh. Fan Included Photocopier	\$	\$	\$	\$	\$
1	21st Fir East Rm #21014	McQuay	90	1987	21E(9)	Exh. Fan Included	\$	\$	\$	\$	\$
1	21st Flr East Rm#21067	McQuay	70	1987	21E(10)	Exh. Fan Included Meeting Room D	\$	\$	\$	\$	\$
1	21st Flr East Rm #21048	McQuay	90	1987	21E(11)	Exh. Fan Included	\$	\$	\$	\$	\$
1	21st Flr East Rm#21104	Carrier	50RhR024ZCC311 30		21E(12)	Photocopier Rm	\$	\$	\$	\$	\$
1	Penthouse mech Room 22nd Fl.	Pure Humidifier	GX-12	2010	Serial# 16474 H-1	03 burner unit; 1,200,000 btu c/w Intac control system	\$	\$	\$	\$	\$
1	Penthouse mech Room 22nd Fl.	Pure Humidifier	GX-12	2010	Serial# 16474 H-2	03 burner unit; 1,200,000 btu c/w Intac control system	\$	\$	\$	\$	\$
3	Mechanical Room	Ea.02-Leitch Ea.01-Almstrong	3 HP			Circulating Pumps for East Tower Heat Pumps	\$	\$	\$	\$	\$
9	Roof	Keeprite	n/a	2005		East Tower Drycoolers Installed Dec. 2005	\$	\$	\$	\$	\$
3	Roof	Liebert	DDNT310	1990		Drycooler for 19th floor computer room ale units. Utilizes Propylene glycol	\$	\$	\$	\$	\$
2	Mechanical Room	B&G	SN 7.5 HP	1990		East Tower Pump, included are all inline filters. 7.5 HP for Computer rm.	\$	\$	\$	\$	\$
2	Mechanical Room	Pumps for make-up tank	n/a	n/a		Includes inline filters	\$	\$	\$	\$	\$
2	Mechanical Room	1-Clemmer 1-Alntrol	n/a	n/a		Expansion Tanks	\$	\$	\$	\$	\$
Total per Year							\$	\$	\$	\$	\$
TOTAL for 5 Years							\$				

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details	Year 1	Year 2	Year 3	Year 4	Year 5
1	Basement Level P1- Print shop	McQuay	030A	1987	P1(1)		\$	\$	\$	\$	\$
1	Basement Level P1-Print shop	McQuay	030A	1987	P1(2)		\$	\$	\$	\$	\$
1	3rd Flr West Rm#03141	McQuay	260	1987	3W(1)	Exh. Fan Included Negotiation Rm	\$	\$	\$	\$	\$
1	3rd Flr West Rm #03144	McQuay	140	1987	3W(2)	Exh. Fan Included CaucusRm	\$	\$	\$	\$	\$
1	3rd Flr West Rm # 03136	McQuay	90	1987	3W(3)	Exh. Fan Included Caucus Rm	\$	\$	\$	\$	\$
1	3rd Flr West Rm # 03130	McQuay	90	1987	3W(6)	Exh. Fan Included Caucus Rm	\$	\$	\$	\$	\$
1	3rd Flr West Rm # 03121	McQuay	200	1987	3W(7)	Exh. Fan Included Negotiation Rm	\$	\$	\$	\$	\$
1	3rd Fir West Rm#03050	McQuay	90	1987	3W(9)	Exh. Fan Included Lunch/Meeting Rm.	\$	\$	\$	\$	\$
1	3rd Fir West Rm #03131	McQuay	90	1987	3W(10)	Exh. Fan Included Translation Rm	\$	\$	\$	\$	\$
1	3rd Fir West Rm#03174	McQuay	70	1987	3W(11)	Exh. Fan Included	\$	\$	\$	\$	\$
1	3rdFh-West Rm #03074	McQuay	230	1987	3W(15)	FilingRm	\$	\$	\$	\$	\$
1	3rd Flr West Rm#03052	McQuay	70	1987	3W(16)	Testing Rm	\$	\$	\$	\$	\$
Total per Year							\$	\$	\$	\$	\$
TOTAL for 5 Years							\$				

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details	Year 1	Year 2	Year 3	Year 4	Year 5
1	7th Fir West Rm#07100	McQuay	200	1987	7W(37)	Exh. Fan Included TerminalRm	\$	\$	\$	\$	\$
1	7thFlr West Rm#07122	McQuay	90	1987	7W(38)		\$	\$	\$	\$	\$
1	7th Fir West Rm #07130	McQuay	90	1987	7W(39)		\$	\$	\$	\$	\$
1	7th Fir West Rm #07086	McQuay	550	1987	7W(40)		\$	\$	\$	\$	\$
1	8thFlrWest Rm#08164	McQuay	140	1987	8W(2)	Exh. Fan Included MeetingRmD	\$	\$	\$	\$	\$
1	8thFlr West Rm#08166	McQuay	90	1987	8W(3)	Kitchenette	\$	\$	\$	\$	\$
1	8thFlr West Rm#08060	McQuay	70	1987	8W(5)	Exh. Fan Included MeetingRmA	\$	\$	\$	\$	\$
1	8thFlr West Rm#08080	McQuay	90	1987	8W(6)	MeetingRm B	\$	\$	\$	\$	\$
1	8th Fir West Rm#08076	McQuay	70	1987	8W(7)	Exh. Fan Included Storage/Copy room	\$	\$	\$	\$	\$
1	9th Fir West Rm#09161	McQuay	200	1987	9W(8)	Exh. Fan Included MeetingRmB	\$	\$	\$	\$	\$
1	9th Fir West Rm#09020	McQuay	70	1987	9W(9)	Exh. Fan Included MeetingRmA	\$	\$	\$	\$	\$
Total per Year							\$	\$	\$	\$	\$
TOTAL for 5 Years							\$				

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details	Year 1	Year 2	Year 3	Year 4	Year 5
1	10th Flr West Rm #10150	McQuay	140	1987	10W(11)	Exh. Fan Included Auditor General	\$	\$	\$	\$	\$
1	10th Flr West Rm # 10098	McQuay	70		10W(14)	Storage Rm	\$	\$	\$	\$	\$
1	10th Flr West Rm# 10096	McQuay	140		10W(15)	MeetingRmC	\$	\$	\$	\$	\$
1	10th Flr West Rm# 10070	McQuay	140		10W(16)		\$	\$	\$	\$	\$
1	14th Flr West Rm#A1410	McQuay	200	1987	14W(1)		\$	\$	\$	\$	\$
1	14th Flr West Rm #B1435	McQuay	200		14W(2)		\$	\$	\$	\$	\$
1	Penthouse Mech. Room	Pure Humidifier	GX-12	2010	Serial# 16474 H-3	03 burner unit; 1,200,000 btu c/w Intac Control	\$	\$	\$	\$	\$
1	Penthouse Mech. Room	Pure Humidifier	GX-12	2010	Serial# 16474 H-4	03 burner unit; 1,200,000 btu c/w Intac Control System	\$	\$	\$	\$	\$
2	Mechanical Room Penthouse	Leitch	3 HP	1987		Circ. Pumps for West Tower Heat Pumps; includes inline filters	\$	\$	\$	\$	\$
3	Roof	Keeprite	2100	1987		West Tower Dry Coolers	\$	\$	\$	\$	\$
1	Mechanical Room	Make-up tank c/wpump	n/a	n/a		Includes all controls	\$	\$	\$	\$	\$
1	Mechanical Room	Clemmer Industries	n/a	n/a		Expansion Tank	\$	\$	\$	\$	\$
Total per Year							\$	\$	\$	\$	\$
TOTAL for 5 Years							\$				

No. of units	Location Room No.	Make	Model#	Year Installed	Serial#	Details	Year 1	Year 2	Year 3	Year 4	Year 5
1	P-100 rm.P030	Canatal	9FD20YXXHGX	2010	10-0110/CO1/02A	New ale unit ; Includes Cancoil Drycooler on lower roof serial #	\$	\$	\$	\$	\$
1	P-100 rm.P030	Canatal	9FD20YXXHGX	2010	10-0110/CO1/02A	New ale unit; Includes Cancoil Drycooler on lower	\$	\$	\$	\$	\$
1	Electrical Room	Greenheck	BCF-106-4-TH-X	2010	12008557-1003	Make-up air unit	\$	\$	\$	\$	\$
1	P-100 rm.P050	ThermoPlus	KAC-048-V-8-B		n /	Unit# 5	\$	\$	\$	\$	\$
1	Level P-2 Parking Garage	CREO Tech Industries	2106-PP-01	2010	S02106	Pumping Station Package; includes 02 pumps, 01 expansion tank, 01 make-up tank, 01	\$	\$	\$	\$	\$
1	Level M2; PWGSCmain office	Blanchard-Ness	WCHS-0050-H28	N/A	2001021213	Main a/c unit for the PWGSC office on M2	\$	\$	\$	\$	\$
1	Basement mech room	American Chillers	PWC0505AH		Serial# 706463	Chiller for domestic drinking water; includes all eire pumps, controls, water regulators	\$	\$	\$	\$	\$
Total per Year							\$	\$	\$	\$	\$
TOTAL for 5 Years							\$				

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

SW 1. General

- .1 The Contractor must furnish all necessary tools, services and labor to execute the work required for the maintenance of the equipment contained herein and must execute such work in a careful and workmanlike manner and in accordance with all related Codes, Standards and Regulations from all levels of Government (Provincial/Territorial, Municipal and Federal).
- .2 To carry out the work on this requirement, Service personnel employed by the Contractor must be in possession of:
 - .1 ***HVAC / Commercial Refrigeration equipment - Three (3) service personnel:***
 - A valid **Journeyman (JP)** Refrigeration and Air Conditioning Certification License (or approved interprovincial equivalent) with a minimum 3 years' experience and
 - A valid Ozone Depletion Prevention Card for the Province of Ontario (or approved interprovincial equivalent); and
 - A valid Fall Protection Certificate; and
 - A valid Confined Space Entry Certificate; and
 - A valid Aerial Man-lift Certificate.
 - .2 ***Gas Fired Appliances – Three (3) service personnel:*** with a minimum 3 years' experience and
 - A valid permanent Province of Ontario Certificate G1 (Gas Technician 1)
 - A valid Fall Protection Certificate
 - A valid Confined Space Entry Certificate; and
 - A valid Aerial Man-lift Certificate.

The personnel named in 'HVAC / Commercial Refrigeration equipment' above may also be named in 'Gas Fired Appliances' Provided they hold the required certifications of each category.

- .3 Apprentices employed by the Contractor must be fully registered in a Tradesman Program and work under the direction of a Journeyman Mechanic. Canada reserves the right to request proof of registration in a Tradesman Program at any time during the term of the contract.
- .4 The Contractor must, before replacing any specific person named in the contract, provide notice in writing to the Technical Authority containing proof that the person has the required certification.

SW 2.1 Scope of Work - preventive maintenance / inspection

.1 General

The Contractor must provide all required maintenance as per SW 3 and the manufacturer's recommendations, including but not limited to the items listed below, to maintain the equipment listed in SW 5, Equipment Inventory.

.2 Included in Contract

- a) Labor for all maintenance inspections, leak testing, cleaning, lubrication; all labor and costs associated with the replacement of drive belts, filters and fuses.
- b) Labor for all inspections, leak testing, calibration, cleaning, lubrication and maintenance.
- c) All consumable items, including greases, oils, lubricants, cleaning materials, filters and belts required to perform the maintenance of the equipment listed in SWS.
- d) All materials used in the performance of the work, whether included in the contract or repair or replacement pmts, shall match original supplier's specifications to ensure system integrity. Repair or replacement parts shall be new or manufacturer warranted "as new" rebuilt (with Departmental Representative approval). For the period of this contract, the Contractor must have access, at all times, to sufficient direct replacement parts to ensure immediate repair of any component which would render the system out of service or inaccessible to operator interaction. Failure to comply with these requirements will be assessed by the Departmental Representative and may result in reduction of contract payments relative to the duration and consequences of the "out of service" condition.

.3 Performance

The Contractor must maintain the equipment at its original performance level to provide conditions within the range required by the equipment being served by this system or as otherwise specified by the Technical Authority.

.4 Exclusions

The Contractor is not required as part of this contract to make renewals or repairs necessitated by reason of the negligent operation or misuse of the equipment by others or by reason of any other cause beyond his control except ordinary wear and tear of the equipment.

1. The contractor must provide clear and concise rational of the events leading up to the failure.

SW 2.2 Scope of Work (cont'd)

.5 Extra Work

- .1 The Contractor must immediately inform the Technical Authority in writing *within 24 hours* of necessary repairs not included herein as being part of the work to be performed under the Contract. The Contractor may be called upon to effect these repairs.
- .2 The Contractor must identify modifications or improvements to the equipment or system(s) that will enhance equipment serviceability, life expectancy and/or efficiency.
- .3 The Contractor will calculate the cost of the repairs (SW2.2.5.1), modifications or improvements (SW2.2.5.2) based on Basis of Pricing "Pricing Schedule 2". The Contractor may be called upon to effect this work.
- .6 Prove to the satisfaction of the Departmental Representative when requested, possession of complete schematic wiring diagrams, detailed adjustment procedures and detailed operational descriptions of all equipment included in this Contract.

Operational Descriptions

Prove to the satisfaction of the Technical Authority when requested, possession of complete schematic wiring diagrams, detailed adjustment procedures and detailed operational descriptions of all equipment included in this Contract.

.7 Environmental Protection

The Contractor must conform to all applicable environmental laws and regulations in effect including the Federal Halocarbon Regulations.

- .1 During repair or replacements the Contractor must use closed-loop refrigerant recovery equipment to minimize refrigerant emissions. A complete leak test on all refrigeration systems must be performed quarterly, and repairs made as required. Units must then be tagged as **leak free**.
- .2 The Contractor must ensure against oil spills or damage to surfaces and roofing system by providing protection such as plywood or plastic under the equipment during service operations. In the event of an accidental spill, the Contractor must notify the Technical Authority immediately so that remedial action can be taken.
- .3 The Contractor must not leave waste materials on site unless approved by the Technical Authority.
- .4 The Contractor must not dispose of waste or volatile materials, such as mineral spirits or paints and oil thinner into waterways, storm or sanitary sewers.
- .5 The Contractor must control the disposal of the runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

.8 Codes and Standards

Contractor shall follow all codes, regulations and standards in force applicable to the performance of the work. SW 3 Service

SW 3. Service

.1 All equipment must be inspected monthly or more frequently if found necessary, to provide trouble free operation.

.2 Scheduling

Unless otherwise directed, preventive maintenance must be performed during regular working hours, Monday through Friday, 8:00 to 16:00 hours excluding statutory holidays. Within thirty (30) days after contract award the Contractor must provide a detailed schedule of maintenance to be applied for the term of this contract. The proposed schedule must be reviewed by the Technical Authority and may require revision by the Contractor to meet Technical Authority's requirements. Any such changes must be considered as part of this agreement.

.3 Gas fired appliances and equipment and Boilers

Must be inspected monthly during the operating season or more frequently if found necessary, to provide trouble free operation of the equipment. Seasonal start-up and shutdown of the equipment must be coordinated with the Technical Authority. The performance of the work required must provide for operation of the complete system(s) based on original design or subsequent approved design modifications, and must be as recommended by the manufacturer(s).

- a) A thorough inspection and cleaning of the appliance(s) waterside and fireside must be performed on an annual basis and must be coordinated with the Technical Authority;
- b) An annual combustion test is to be performed on each appliance during the operating season. A copy of the combustion test report(s) must be submitted to the Technical Authority upon completion.

.4 Additional Notes:

Contract includes but is not limited to; all related piping for unit isolation, gauges, thermometers associated electrical and controls, Flow-switches, electric control valves and connecting duct work. Also includes motor starters and condensing drainage systems. Evaporators and condensers are to be cleaned as per Manufacturers recommendations and no less than annually or more often if deemed necessary.

SW 3. Service (cont'd)

.3 Maintenance Plan

Contractor must produce a detailed comprehensive maintenance service plan specific to the equipment inventory which must outline all tasks, procedures, all maintenance routines and frequencies to meet or exceed manufacturers' recommendations identifying the maintenance that will be performed annually, semiannually, quarterly and monthly. This maintenance plan must contain and reflect the manufacturer's recommended maintenance and all requirements of this agreement. The proposed maintenance plan must be reviewed by the Technical Authority and may require revision by the Contractor to meet Technical Authority's requirements. Any such changes must be considered as part of this agreement. This plan must fully list all operating inspections, maintenance schedules and tests necessary to maximize equipment longevity and ensure the optimum level of performance over the full operating range of the equipment. The comprehensive maintenance service plan must be submitted to the Technical Authority in the Microsoft Office Suite format (including sample inspections sheets for all routines), within 60 calendar days after award of the Contract.

This plan must fully list all operating inspections, maintenance schedules and tests necessary to maximize equipment longevity and ensure the optimum level of performance over the full operating range of the equipment. The comprehensive maintenance service plan must be submitted to the Technical Authority in the Microsoft Office Suite format (including sample inspections sheets for all routines), within sixty (60) calendar days after award of the Contract.

The Maintenance Plan must be viewed and approved by the Technical Authority prior to acceptance and implementation.

.4 Control Systems:

Conduct periodic tests of the Control Systems where applicable, to ensure all circuits and settings are properly adjusted to suit requirements of the design capabilities of the system as originally furnished by the manufacturer. The frequency of testing controls will be according to manufacturer's specifications.

.5 Air Filter Service

The Contractor must replace filters as required to fit the filter sections provided by the manufacturer. Filter size and efficiency to match original as supplied by the manufacturer and as indicated in SW5 Equipment Inventory. For general purpose air handling, use filters as described in (a) below. For computer room or other areas requiring higher than standard filter efficiency, use filters as described in (b) below.

(a) General Purpose Filter Specification

The media shall be contained in a fiberboard casing and supported between a metal or fiberboard grid. Filter to be listed with U.L.C. as Class II. The filter media is to be formed of continuous interlaced glass filament held in place with a thermo plastic bond and coated with a fire retarding adhesive film. This adhesive must be nontoxic, non-hygroscopic and have a flash point in excess of 260°C.

Filters shall have an initial resistance rating of 35-55 Pa at 2.54 m/s and 236 l/s per .093 meter² face area for a 50 mm thick filter; and a rated average arestance of 80%-85% based on A.S.H.R.A.E. 52.1-1992 and section 7.4 of ARI Standard 850-93.

(b) Computer Rm / Special Areas Filter Specification

Pleated type, cotton or synthetic fiber media supported by metal grid, and secured with odorless waterproof cement in a rigid double wall beverage board frame. Filter to be listed U.L.C. Class II. Filters shall have an initial resistance rating of 55-62 Pa at 2.54 m/s and 236 l/s per .093 m² face area for a 100 mm thick filter; and a rated average efficiency of 25%-30% based on A.S.H.R.A.E. 52.1-1992 and section 7.4 of ARI Standard 850-93.

.6 Emergency calls

All emergency calls between regular inspections must be answered by a qualified mechanic within one (1) hour of receiving the

Call on a 24 hour, 7 day basis. All named Service personnel must be able to report on site ready to service the system within one (1) hour of receiving the request for emergency service and such work must proceed continuously until the system is returned to safe operating condition.

.7 Inspections (refrigerant monitoring system)

System to be calibrated and certified annually and a certificate provided. Certification to itemize calibration gas used, lot number, adjusted reading, flow rate and date of calibration along with signature of Contractor.

.8 Non-working Service Manager

The non-working Service Manager must be in full charge of the operations of the contractor in the performance of the services and must be authorized to accept any notice, consent, order, direction, decision or other communication on behalf of the contractor that may be given under the contract. The manager must liaise as required with the Technical Authority and must be capable of communicating in English or French.

In the event that there is an emergency the Contractor's non-working Service Manager must be available to respond on-site within two (2) hours of receiving the call on a 24 hour, 7 day basis.

SW 4. Reporting

- .1 The Contractor must report to the Technical Authority verbally **and** by EMAIL, within twenty-four (24) hours, every visit required other than regular maintenance. The report must detail all work completed, work outstanding and the reasons therefore and an estimated time frame for completion.

The Contractor must call to the attention of operating staff verbally followed by a written report to the Technical Authority any improper procedures that may be noted by him and provide written instruction to guide the Technical Authority's staff.

The Contractor must notify the Technical Authority in writing of any malfunction of equipment or systems related to, but not part of, the contract equipment which could adversely affect the reliability or cause damage to the system components under the maintenance contract

- .2 Equipment report cards:

A completed service report card outlining any and all service performed on the equipment must be enclosed in a clear vinyl envelope and affixed safely to the equipment. These report cards are to remain with the equipment for the duration of the contract and are to be turned over to the Technical Authority upon contract completion or termination.

- .3 Service Reports:

A signed, written service report must be completed at each regular maintenance visit, attesting that maintenance was performed as per the Maintenance Plan (SW3.3) and must be left on site in a suitable protective binder.

Copies of regular maintenance reports and monthly check lists must be forwarded, with the quarterly invoice to the

attention of: Public Works and Government Services Canada
Maintenance & Operational Assurance
400 Cooper, 6th Floor
Ottawa, Ontario
K1A 0S5
Attention of: Technical Authority

Invoices **must** include:

- (a) PWGSC reference (8M3-3113-1) & contract number (EJ196-160460)
- (b) Period covered by invoice
- (c) Building name & address

NOTE: *Invoices will be returned unpaid if attestation of maintenance has not been received for the invoiced period.*

SW 5 Equipment Inventory

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details
1	3rd Flr East Rm#03046	McQuay	WCMS51		3E(1)	BoardRoom
1	3rd Fir East Rm #03100	McQuay	WCMS5		3E(2)	Solution Center
2	5th Flr (E) Rm Rm#05056 Rm#05090	McQuay	15E200AC12		5E(1) 5E(2)	Exh. Fan Included 1) Meeting Room 2) Office Area
1	6th Flr East Rm #06164	McQuay	CCH-MWH019C M05		6E(1)	Exh. Fan Included Meeting Room B
1	7th Flr East Rm# 07078	McQuay	CC140F5		7E(1)	Exh. Fan Included Meeting Room C
2	7th Fir East Rm #07084 Rm#07156	McQuay	CC550G5		7E(2) 7E(3)	1)Computer Rm 2)Conference Rm
1	8th Fir East Rm#08029	McQuay	550	1987	8E(1)	Exh. Fan Included Departmental Board Rm
1	9th Fir East Rm#09168	McQuay	330	1987	9E(2)	Exh. Fan Included Conference Rm
1	10th Fir East Rm#10012	McQuay	140	1987	10E(3)	Exh. Fan Included BoardRm
1	11th Flr East Printing Area	McQuay	550	1987	11E(1)	Exh. Fan Included
1	12th Flr East Rm #12008	McQuay	140	1987	12E(1)	Exh. Fan Included Photocopy Rm
1	12th Flr East Rm #12006	McQuay	90	1987	12E(2)	Exh. Fan Included Conference Rm
1	12th Flr East Rm#12150	McQuay	90	1987	12E(3)	BoardRmC
1	12th Flr East Rm#12100	McQuay	90	1987	12E(4)	
1	12th Flr East Rm #12060	McQuay	90	1987	12E(5)	Exh. Fan Included Security Conference Rm

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details
1	14th Fir East Rm#14160	McQuay	200	1987	14E(09)	Exhaust Fan Included Utility Room
1	14th Fir East Rm#14010	McQuay	140		14E(11)	Conference Rm A
1	14th Fir East Rm #14084	McQuay	90		14E(12)	
1	14th Fir East Rm#14082	McQuay	70		14E(13)	MeetingRmC
1	14th Fir East Rm #14082	McQuay	140		14E(15)	
1	15th Fh East Rm #15150	McQuay	70	1987	15E(2)	MeetingRmD
1	15th Fh East Rm#15172	McQuay	90	1987	15E(3)	Exh. Fan Included Conference Rm
1	15th Fir East Rm#15042	McQuay	90	1987	15E(4)	MeetingRm
1	16th Fir East Rm#16019	McQuay	70	1987	16E(5)	Exh. Fan Included MeetingRm
1	16th Fir East Rm #16062	McQuay	90	1987	16E(9)	MeetingRmB
1	17th Fir East Rm#17163	McQuay	90	1987	17E(10)	Exh. Fan Included
1	17th Fir East Rm 17046	McQuay	140	1987	17E(11)	Exh. Fan Included Conference Rm A
1	17th Fir East Rm# 17108	McQuay	90	1987	17E(12)	ComputerRm
1	17th Fir East Rm#17016	McQuay	70	1987	17E(13)	Exh. Fan Included MeetingRmA
1	17th Fir East Rm# 17080	McQuay	140		17E(14)	MeetingRmC

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details
1	18th Flr East Rm #18158	McQuay	70	1987	18E(1)	Exh. Fan Included Meeting Rm
1	18th Flr East Rm#18012	McQuay	140	1987	18E(2)	Exh. Fan Included Conference Rm A
1	18th Fir East Rm#18014	McQuay	140	1987	18E(3)	BoardroomF
1	18th Fh East Rm #18092	McQuay	260	1987	18E(4)	Meeting Room D
1	18th Flr East	McQuay	70	1987	18E(5)	Exh. Fan Included
1	18th Fir East	McQuay	70	1987	18E(6)	Exh. Fan Included Meeting Room C
1	20th Flr East	McQuay	70	1987	20E(1)	Exh. Fan Included MeetingRmA
1	20th Flr East Rm#20144	McQuay	70	1987	20E(2)	Exh. Fan Included Meeting Room B
1	20th Fh East Rm#20042	McQuay	70	1987	20E(3)	Exh. Fan Included ComputerRm
1	20th Flr East Rm #20074	McQay	70	1987	20E(4)	Exh. Fan Included Meeting Room E
1	20th Fh East Rm#20058	McQuay	70	1987	20E(5)	Exh. Fan Included Meeting Room D
1	20th Flr East Rm#20007	McQuay	330	1987	20E(6)	Exh. Fan Included Meeting Room C
1	20th Flr East Rm#20074	McQuay	140		20E(7)	Meeting Room E

Notes: Contract includes but is not limited to; all related piping for unit isolation, gauges, thermometers ,associated electrical and controls, flow switches, electric control valves and connecting duct work. Also includes motor starters and condensing drainage systems. Evaporators and condensers are to be cleaned with soap and water no less than annually or more often if deemed necessary.

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification#	Details
1	21st Flr East Rm 21104	McQuay	260	1987	21E(8)	Exh. Fan Included Photocopier
1	21st Flr East Rm #21014	McQuay	90	1987	21E(9)	Exh. Fan Included
1	21st Flr East Rm#21067	McQuay	70	1987	21E(10)	Exh. Fan Included Meeting Room D
1	21st Flr East Rm #21048	McQuay	90	1987	21E(11)	Exh. Fan Included
1	21st Flr East Rm#21104	Carrier	50RhR024ZCC31130		21E(12)	Photocopier Rm
1	Penthouse mech Room 22nd Fl.	Pure Humidifier	GX-12	2010	Serial# 16474 H-1	03 burner unit; 1,200,000 btu c/w Intac control system
1	Penthouse mech Room 22nd Fl.	Pure Humidifier	GX-12	2010	Serial# 16474 H-2	03 burner unit;1,200,000 btu c/w Intac control system
3	Mechanical Room	Ea.02-Leitch Ea.01-Almstrong	3 HP			Circulating Pumps for East Tower Heat Pumps
9	Roof	Keeprite	n/a	2005		East Tower Drycoolers Installed Dec. 2005
3	Roof	Liebert	DDNT310	1990		Drycooler for 19th floor computer room air units. Utilizes Propylene glycol
2	Mechanical Room	B&G	SN 7.5 HP	1990		East Tower Pump, included are all inline filters. 7.5 HP for Computer rm.
2	Mechanical Room	Pumps for make-up tank	n/a	n/a		Includes inline filters
2	Mechanical Room	1-Clemmer 1-Alntrol	n/a	n/a		Expansion Tanks

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details
1	Basement Level P1- Print shop	McQuay	030A	1987	P1(1)	
1	Basement Level P1-Print shop	McQuay	030A	1987	P1(2)	
1	3rd Flr West Rm#03141	McQuay	260	1987	3W(1)	Exh. Fan Included Negotiation Rm
1	3rd Flr West Rm #03144	McQuay	140	1987	3W(2)	Exh. Fan Included CaucusRm
1	3rd Flr West Rm # 03136	McQuay	90	1987	3W(3)	Exh. Fan Included Caucus Rm
1	3rd Flr West Rm # 03130	McQuay	90	1987	3W(6)	Exh. Fan Included Caucus Rm
1	3rd Flr West Rm # 03121	McQuay	200	1987	3W(7)	Exh. Fan Included Negotiation Rm
1	3rd Fir West Rm#03050	McQuay	90	1987	3W(9)	Exh. Fan Included Lunch/Meeting Rm.
1	3rd Fir West Rm #03131	McQuay	90	1987	3W(10)	Exh. Fan Included Translation Rm
1	3rd Fir West Rm#03174	McQuay	70	1987	3W(11)	Exh. Fan Included
1	3rdFh West Rm #03074	McQuay	230	1987	3W(15)	FilingRm
1	3rd Flr West Rm#03052	McQuay	70	1987	3W(16)	Testing Rm

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details
1	7th Fir West Rm#07100	McQuay	200	1987	7W(37)	Exh. Fan Included TerminalRm
1	7thFlr West Rm#07122	McQuay	90	1987	7W(38)	
1	7th Fir West Rm #07130	McQuay	90	1987	7W(39)	
1	7th Fir West Rm #07086	McQuay	550	1987	7W(40)	
1	8thFlrWest Rm#08164	McQuay	140	1987	8W(2)	Exh. Fan Included MeetingRmD
1	8thFlr West Rm#08166	McQuay	90	1987	8W(3)	Kitchenette
1	8thFlr West Rm#08060	McQuay	70	1987	8W(5)	Exh. Fan Included MeetingRmA
1	8thFlr West Rm#08080	McQuay	90	1987	8W(6)	MeetingRm B
1	8th Fir West Rm#08076	McQuay	70	1987	8W(7)	Exh. Fan Included Storage/Copy room
1	9th Flr West Rm#09161	McQuay	200	1987	9W(8)	Exh. Fan Included MeetingRmB
1	9th Fir West Rm#09020	McQuay	70	1987	9W(9)	Exh. Fan Included MeetingRmA

No. of units	Location Room No.	Make	Model	Year Installed	Unit Identification #	Details
1	10th Flr West Rm #10150	McQuay	140	1987	10W(11)	Exh. Fan Included Auditor General
1	10th Flr West Rm # 10098	McQuay	70		10W(14)	Storage Rm
1	10th Flr West Rm# 10096	McQuay	140		10W(15)	MeetingRmC
1	10th Flr West Rm# 10070	McQuay	140		10W(16)	
1	14th Flr West Rm#A1410	McQuay	200	1987	14W(1)	
1	14th Fir West Rm #B1435	McQuay	200		14W(2)	
1	Penthouse Mech. Room	Pure Humidifier	GX-12	2010	Serial# 16474 H-3	03 burner unit; 1,200,000 btu c/w Intac Control System
1	Penthouse Mech. Room	Pure Humidifier	GX-12	2010	Serial# 16474 H-4	03 burner unit; 1,200,000 btu c/w Intac Control System
2	Mechanical Room Penthouse	Leitch	3 HP	1987		Circ. Pumps for West Tower Heat Pumps; includes inline filters
3	Roof	Keeprite	2100	1987		West Tower Dry Coolers
1	Mechanical Room	Make-up tank c/wpump	n/a	n/a		Includes all controls
1	Mechanical Room	Clemmer Industries	n/a	n/a		Expansion Tank

No. of units	Location Room No.	Make	Model#	Year Installed	Serial#	Details
1	P-100 rm.P030	Canatal	9FD20YXXHGX	2010	10-0110/CO1/02A	New ale unit ; Includes Cancoil Drycooler on lower roof serial # 0371002
1	P-100 rm.P030	Canatal	9FD20YXXHGX	2010	10-0110/CO1/02A	New ale unit; Includes Cancoil Drycooler on lower roof serial# 0361002
1	Electrical Room	Greenheck	BCF-106-4-TH-X	2010	12008557-1003	Make-up air unit
1	P-100 rm.P050	ThermoPlus	KAC-048-V-8-B		n/a	Unit# 5
1	Level P-2 Parking Garage	CREO Tech Industries	2106-PP-01	2010	S02106	Pumping Station Package; includes 02 pumps, 01 expansion tank, 01 make-up tank, 01 pumping control panel, 01 pot feeder
1	Level M2; PWGSCmain office	Blanchard-Ness	WCHS-0050-H28	N/A	2001021213	Main a/c unit for the PWGSC office on M2
1	Basement mech room	American Chillers	PWC0505AH		Serial# 706463	Chiller for domestic drinking water; includes all eire pumps, controls, water regulators and condenser