



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works & Government Services
Canada/Réception des soumissions Travaux publics et
Services gouvernementaux Canada

1713 Bedford Row
Halifax, N.S./Halifax, (N.E.)

Halifax
Nova Scotia
B3J 1T3

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.)
Halifax
Nova Scot
B3J 1T3

| | |
|---|--|
| Title - Sujet CCGC Mechanical and Sprinklers | |
| Solicitation No. - N° de l'invitation EB144-190543/A | Amendment No. - N° modif. 007 |
| Client Reference No. - N° de référence du client EB144-19-0543 | Date 2018-08-09 |
| GETS Reference No. - N° de référence de SEAG PW-\$PWA-121-5750 | |
| File No. - N° de dossier PWA-8-80020 (121) | CCC No./N° CCC - FMS No./N° VME |
| Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-08-21 | Time Zone Fuseau horaire Atlantic Daylight Saving Time ADT |
| 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: Russell (PWA), Alex | Buyer Id - Id de l'acheteur pwa121 |
| Telephone No. - N° de téléphone (902) 401-8180 () | FAX No. - N° de FAX (902) 496-5016 |
| 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 Amendment 007 is being issued to provide missing information for Addendum #4 and #5.

All other terms and conditions remain unchanged.

This Addendum and all Addenda amends and forms an integral part of the Bidding and Contract documents and shall be read in conjunction with the same.

PART 1 **SPECIFICATION REFERENCE**

Item 1.1 **SECTION 25 05 01 – EMCS GENERAL REQUIREMENTS**

.1 Add the following:

.13 **EMCS CONTROLS OF MECHANICAL SYSTEMS IN BUILDING
AND D’IBERVILLE POOL AREAS**

.1 A retrofit of the mechanical systems serving the pool areas is currently being installed under a separate project (PSPC Project No.: R.065476.707). The work of PSPC Project No.: R.065476.707 will be completed before commencement of this project. This contract shall remove and/or modify existing controls as required and provide interfacing and programming of this equipment with the new EMCS system being provided to the campus under this contract. Refer to Sketch 08 MC-SK001: Control Schematics for Existing Pool Area Systems dated 2018-07-26; for system control schematics for these systems (This Addendum). Refer to Sketch 08 MC-SK002: Existing Equipment Locations – Pool Area Systems dated 2018-07-26; for equipment locations (This Addendum).

.14 **EMCS CONTROLS OF MECHANICAL SYSTEMS IN BUILDING 12**

.1 A retrofit of the mechanical systems serving the pool areas is currently being installed under a separate project (PSPC Project No.: R.065476.707). The work of PSPC Project No.: R.065476.707 will be completed before commencement of this project. This contract shall remove and/or modify existing controls as required and provide interfacing and programming of this equipment with the new EMCS system being provided to the campus under this contract.

Item 1.2 **SECTION 25 90 01 - SITE REQUIREMENTS, APPLICATIONS AND
SYSTEM SEQUENCES OF OPERATIONS**

.1 Add the following:

2.5 **BLDG 08 D’BERVILLE CENTRE POOL AREA SYSTEMS**

.1 **AHU 8-1: Pool Ventilation and Dehumidification System**

.1 Air handling unit AHU8-1 serves the pool area and is a packaged pool dehumidification/ventilation/space heating/water heating system. The unit is fitted with a factory mounted control package to operate the dehumidification, heating coil, pool heating and D/X heating rejection.

- .2 The EMCS system shall provide connections to the Natatorium Dehumidification (AHU8-1) as required for point data transfer for monitoring and use of these points as required in the EMCS system. The control points shall be as follows:
 - .1 Monitoring Points:
 - .1 Alarm - indicates there has been a failure requiring service.
 - .2 Dehumidification - indicates that the system is dehumidifying the space.
 - .3 Cooling - indicates that the air-conditioning mode.
 - .4 Pool Heating - indicates that the system is heating the pool water with recycled energy.
 - .5 Space Heat - indicates that the space heating is operating.
 - .6 Maintenance - indicates whether or not maintenance is required.
 - .7 Manual - indicates that the system has been set to manual operation.
 - .8 Space temperature.
 - .9 Space relative humidity.
 - .10 Pool water temperature.
 - .2 AHU8-1 Setpoints available at EMCS:
 - .1 Space temperature.
 - .2 Space relative humidity.
 - .3 Pool water temperature.
 - .4 AHU8-1 Stop/Start.
 - .5 AHU8-1 Exhaust fan purge mode.
- .2 ERV8-1
 - .1 The EMCS system shall provide the following control points for this unit:
 - .1 DO: Stop/Start
 - .2 DI: Status
 - .3 Time Schedule
- .3 Mechanical Room P002 (EF8-1)
 - .1 When exhaust fan is off
 - .1 Exhaust air damper is closed.
 - .2 Fresh air dampers is closed.
 - .3 Return air damper is open,
 - .2 Start up
 - .1 Fresh air and exhaust dampers shall open to minimum positions. Setting to be determined by TAB.
 - .2 Exhaust fan shall start.

- .3 Normal Modes
 - .1 This system shall run continuously.
 - .2 Fresh air, return air and exhaust air dampers shall modulate to provide cooling as required to maintain space setpoint temperature conditions as sensed by space sensor.
 - .3 Oncall for heating, the dampers shall go to minimum position and the EMCS shall start the unit heater UH-1.
- .4 Chlorine Gas Leakage
 - .1 Should chlorine gas measured above acceptable levels as sensed by chlorine sensor, EMCS shall modulate dampers to 100% exhaust mode and generate an alarm at EMCS.
 - .2 Fan shall operate in this mode until conditions return to normal levels.
- .4 Tunnel Circulation Fan (EF8-3A & 3B)
 - .1 Fan shall operate by EMCS time schedule.
- .5 Fire Alarm:
 - .1 Tie into Fire Alarm system for starters and action (for shut down, report to OWS and as indicated as instructed during commission).
- .6 Glycol Heating System (PHX8-3)
 - .1 Glycol pump P8-8 shall operate continuously when outside air temperatures are below 18°C (adjustable) or when call upon by AHU8-1.
 - .2 EMCS shall modulate control valve CV-2 as required to maintain glycol supply temperature.
- .7 Heating System Monitoring
 - .1 EMCS shall monitor hydronic systems equipment / conditions via points as indicated on drawings.
- .8 Panel Radiator Heating Control
 - .1 On drop in room temperature as sensed by space sensor, EMCS shall modulate the heating control valve open. On rise in room temperature, the reverse sequence shall follow.
 - .2 At night time, the room temperature will be set back.
- .9 Unit Heater Control
 - .1 On call for heating as sensed by space temperature sensor, EMCS shall open control valve and start heater fan. When set point temperature is reached, the reverse sequence shall occur.
- .10 Domestic Water Heating Control (PHT8-1, HW8-1, HWT8-2)
 - .1 Preheat Tank PHT8-1 shall receive heat from Solar panel heating at all times when solar panel systems are operating. The temperature sensor, PH8-1 T1 provide temperature indication in the preheat tank PHT8-1.

- .2 The domestic hot water setpoint temperature of the electric storage tanks, HWT8-1 & HWT8-2, is 60°C (user adjustable). The electric heaters within these tanks will maintain the water temperature at the setpoint.
- .3 The domestic hot water recirculation pump, P8-4, is started and stopped by the building EMCS. The pump will run continuously during the occupied hours. The current sensor provides status indication to the EMCS.
- .4 Temperature sensors, HWT8-1 T & HWT8-2 T, provide temperature indication of the electric hot water tank, HWT8-1 and HWT8-2 supplies. Temperature sensor, DHW-T provides temperature indication of the mixed hot water temperature downstream of the three-way mixing valve. Temperature sensor, DCW T, provides temperature indication of the domestic cold water make-up.
- .5 The domestic hot water usage meter, WM2, provides indication of water consumption.
- .11 Pool Water Heat Exchanger (PHX8-1)
 - .1 When pool water temperatures at sensor T-2 drop below set point conditions (adjustable), and Solar Panel heating is operating, the EMCS system shall activate start of Pump P8-2 as required and recover heat via Plate Heat Exchanger PHX8-1 as required to maintain temperature setpoint.
 - .2 In the event solar panel glycol systems temperatures increase to high temperature conditions of 93°C (adjustable), EMCS shall activate start of Pool Pump P8-2 to reject heat into the pool, even when pool water temperature at sensor T-2 is satisfied.
- .12 Pool Water Heat Exchanger (PHX8-4)
 - .1 A portion of the pool water shall flow continuously thru heat exchanger PX8-4. When pool water temperatures at sensor T-4 drop below set point conditions (adjustable), the EMCS system shall modulate control valve CV-1 serving PHX8-4 as required to maintain temperature setpoint conditions.
- .13 Pool Monitoring
 - .1 EMCS shall monitor pool equipment/condition via points as indicated on drawings.

PART 2
Item 2.1

DRAWING REFERENCE

DRAWING 01-MH-110 HVAC PIPING CABOT EAST LEVEL 400 NEW WORK

- .1 Revise HVAC equipment and piping services in Mechanical Room 4132 per Sketch 01 MH-SK001 Mechanical Room 4132 HVAC Piping Revisions dated 2018-07-26 (This Addendum).

Item 2.2 DRAWING 01-MV-110 VENTILATIOIN CABOT EAST LEVEL 400 NEW WORK

- .1 Revise ventilation equipment and services in Mechanical Room 4132 per Sketch 01 MV-SK001: Mechanical Rooms 4132 Ventilation Revisions dated 2018-07-26 (This Addendum).

Item 2.3 DRAWING 07-MH-601 HVAC PIPING ST. LAURENT SCHEDULES

- .1 Revise wall mounted chilled A/C unit Schedule per attached Sketch 07-MH-SK001 (This Addendum)

Item 2.4 ADD THE FOLLOWING NEW DRAWINGS

| BLDG | SKETCH | SKETCH TITLE | DATE |
|-----------------------|--------------------|---|-------------|
| 01 CABOT | 01 MV-SK001 | Mechanical Room 4132 Ventilation Revisions | 2018-07-26 |
| 01 CABOT | 01 MH-SK001 | Mechanical Room 4132 HVAC Piping Revisions | 2018-07-26 |
| 07 ST. LAURENT | 07 MH-SK001 | Wall Mounted A/C Unit Schedule Revisions | 2018-07-27 |
| 08 D'IBERVILLE | 08 MC-SK001 | Control Schematics for Existing Pool Area Systems | 2018-07-26 |
| 08 D'IBERVILLE | 08 MC-SK002 | Existing Equipment Locations - Pool Area Systems | 2018-07-26 |

ATTACHMENTS

- .1 Drawings:
 - .1 01 MV-SK001
 - .2 01 MH-SK001
 - .3 07 MH-SK001
 - .4 08 MC-SK001
 - .5 08 MC-SK002

END

This Addendum and all Addenda amends and forms an integral part of the Bidding and Contract documents and shall be read in conjunction with the same.

PART 1 **SPECIFICATION REFERENCE**

Item 1.1 **SECTION 22 05 00 – COMMON WORK RESULTS FOR PLUMBING**

- .1 Revise 1.5.2.1.1 from “...fire protection drawings...” to read “...plumbing drawings...”.
- .2 Revise 1.24.6 from “...operation of the fire protection system prior to...” to read “...operation of the plumbing system prior to...”.
- .3 Revise 1.33.1 from “The Fire Protection Trade Contractor shall comply...” to read “The Plumbing Trade Contractor shall comply...”.
- .4 Revise 2.2.1, Items .3, .7, .8, and .9 from “Water Heaters” to read “ Hot Water Storage Tanks”.

Item 1.2 **SECTION 25 05 01 – EMCS GENERAL REQUIREMENTS**

- .1 Add the following:
 - .1 MISCELLANEOUS CONTROL WIRING
 - .1 Division 25 contractor shall provide field wiring of equipment supplied controls for the following equipment:
 - .1 Electrical Steam Humidifiers (All buildings): Control wiring of air proofing flow switch and humidity high level sensor mounted in ventilation system unit or ductwork.
 - .2 Kitchen hood damper controls (Bldg 01 Cabot): All field control wiring between kitchen hood control panels, exhaust air dampers, exhaust fans (VSDs), temperature and pressure sensors and local override switches.
 - .3 Vacuum Pump System (Bldg 12 Seawater Pumphouse: Wiring to vacuum pump proof of prime switches shall be by Div 25 contractor. EMCS shall used as interlocks to confirm pumps are flooded and safe to activate start of respective seawater pump.

- .2 INTERFACING WITH VACUUM PUMP SYSTEM (Bldg 12 Seawater Pumphouse)
 - .1 The EMCS system shall provide connections to the Vacuum Pump System as required for point data transfer for monitoring and use of these points as required in the EMCS system. Point transfer shall be via ethernet adaptor provided with Vacuum Pump System. The control points shall be as follows:
 - .1 Monitoring Points:
 - .1 Alarm - indicates there has been a failure requiring service.
 - .2 Maintenance - indicates whether or not maintenance is required.
 - .3 Manual - indicates that the system has been set to manual operation.
 - .4 Proof of prime confirmation for each seawater pump.
 - .2 Setpoints available at EMCS:
 - .1 Vacuum Pump Stop/Start.
- .3 EXISTING BUILDING CONTROL SYSTEMS (ALL BUILDING)
 - .1 The existing facility has several control systems in operation. These are pneumatic, electrical and digital controls. These systems must remain in operation in all areas until these areas become construction zones. Control services located in a construction zone and serving other areas shall remain in operation at all times until they become redundant. At which time they shall be removed. Any shut down or damage to these services as a result of construction activities shall be investigated and repaired by Division 25 contractor at no additional costs to the owner.
 - .2 Division 25 shall provide removal of all existing controls made redundant by this project.
 - .3 Removal of existing pneumatic system shall include all pneumatic tubing, air compressors, air dryers, control panels etc.
- .18 EMCS CONTROLS IN COMPLETED CONSTRUCTION PHASES
 - .1 Upon completion of work in a construction phase, Interfacing of EMCS controls in completed construction phases shall be available at operators work station located in Bldg 01 Cabot - Office 1301.

Item 1.3 SECTION 25 05 54 – EMCS: IDENTIFICATION

- .1 Revise item 2.6.3, delete the word Orange and replace with Green.

Item 1.4 SECTION 25 90 01 - SITE REQUIREMENTS, APPLICATIONS AND SYSTEM SEQUENCES OF OPERATIONS

- .1 Add the following:
 - .1 Nitrogen Dioxide Monitoring
 - .1 Exhaust fans in the engine bay shall also be interlocked to the nitrogen dioxide detection system.
 - .2 On a riser to 0.5 PPM, outside air and exhaust air dampers shall open.
 - .3 On a further rise to 1.5 PPM, the engine bay exhaust fan on respective level shall energize.
 - .4 At 3 PPM local alarm at the nitrogen dioxide controller alarm shall sound and provide indication at BMS.

Item 1.5 ADD THE FOLLOWING NEW SPECIFICATION SECTION

- .1 Section 23 52 00 Packaged Cast Iron Sectional Boiler Oil Fired (This Addendum).

PART 2 DRAWING REFERENCE

Item 2.1 DRAWING 01-AD-100 CABOT WEST LEVEL 100 & LEVEL 200 DEMO FLOOR PLAN

- .1 Add demolition per attached Sketch 01-A-SK001 (This Addendum).

Item 2.2 DRAWING 01-A-100 CABOT WEST LEVEL 100 & LEVEL 200 NEW FLOOR PLAN

- .1 Add new work per attached Sketch 01-A-SK002 (This Addendum).

Item 2.3 DRAWING 01-A-110 CABOT EAST LEVEL 400

- .1 Delete: Existing Louver on Level 400 at grid 31x-25y to be removed and opening repaired and reinstated to match adjoining assembly type. Add: Existing Louver L1-13 on Level 400 at grid 31x-25y to be removed and replaced with a new louver L1-13. Architectural Section detail reference at the louver to be as 2/A 504. Existing opening to be repaired and/or modified as required.

- .2 Mech Room 4131A: Delete reference to vent stack up through roof at grid 20x-31y. Add: Vent for new fume hood up through roof at grid 20x-31y c/w 3 guy wires for support. Provide anchors for guy wires. New openings in the roof for ductwork and guy wire anchors to be repaired and/or modified as required, provide flashing.

Item 2.4 DRAWING 01-MDV-107 VENTILATION CABOT EAST LEVEL 100 DEMO

- .1 Remove boiler breeching per Sketch 01 MDV-SK001 (This Addendum).

Item 2.5 DRAWING 01-MP-101 - PLUMBING - CABOT WEST - LEVEL 100 NEW WORK

- .1 Humidifier, HU1-1, has been added in Mech Room 1101A along gridline 6x at gridline 19y. Contractor to make changes to the contract documents in accordance with the attached Sketch, 01-MP-SK001 (This Addendum).

Item 2.6 DRAWING 01-MP-102 - PLUMBING - CABOT WEST - LEVEL 300 NEW WORK

- .1 A standpipe has been added to Level 200. Contractor to make changes to the contract documents in accordance with the attached Sketch, 01-MP-SK002 (This Addendum).
- .2 Humidifier, HU1-7, has been added in Mech Mezz 3110C along gridline 7y between gridlines 3x and 4x. Contractor to make changes to the contract documents in accordance with the attached Sketch, 01-MP-SK003(This Addendum).

Item 2.7 DRAWING 01-MP-105 - PLUMBING – CABOT CENTAL - LEVEL 300 NEW WORK

- .1 Humidifier, HU1-8, has been added Mech Room 3116 along gridline 7y between gridlines 10x and 12x. Contractor to make changes to the contract documents in accordance with the attached Sketch, 01-MP-SK004 (This Addendum).

Item 2.8 DRAWING 01-MP-107 - PLUMBING - CABOT EAST - LEVEL 100 NEW WORK

- .1 Along gridline 22x between gridlines 6y and 10y change note that reads “New 25 dia. condensate line dn from level above” revise to read “New 32 dia. condensate line dn from level above”.

Item 2.9 DRAWING 01-MP-109 - PLUMBING - CABOT EAST - LEVEL 300 NEW WORK

- .1 Humidifier, HU1-9, has been added in Mech Room 3152 along gridline 15y between gridlines 22x and 23x. Contractor to make changes to the contract documents in accordance with the attached Sketch, 01-MP-SK005 (This Addendum).

Item 2.10 DRAWING 02-MP-102 - PLUMBING – ARTIC - LEVEL 300 & ATTIC NEW WORK

- .1 On layout “Plumbing – Arctic – Level 300 New Work” to the left of gridline 9 in Hotel E307, change note that reads “New 19 dia CW line up to level above” to read “New 12 dia CW line up to level above”.

Item 2.11 DRAWING 01-MV-101 - VENTILATION - CABOT WEST LEVEL 100 & 200 NEW WORK

- .1 Revise ducting in Fan coil FC1-1.01 for dispersion manifold for humidifier HU1-1 in Mech Room 1101A per Sketch 01-MV-SK002 (This Addendum).

Item 2.12 DRAWING 01-MV-107 - VENTILATION - CABOT EAST LEVEL 100 NEW

- .1 Provide new boiler breeching per Sketch 01 MV-SK003 (This Addendum).
- .2 In Garbage Room: 1403A, relocate chilled water wall-mount unit to wall shared with corridor and renumber unit from WM1.02 to WM1-1.01.

Item 2.13 DRAWING 01-MV-108 - VENTILATION - CABOT CENTRAL LEVEL 200 NEW WORK

- .1 Cabot Louvre Schedule: Revise louvre tag of louvre between gridlines 33x, 14y – 21y to be L1-27, 47 L/s.

Item 2.14 DRAWING 01-MV-603 - VENTILATION - CABOT SCHEDULES

- .1 Switch schedule information of louvres L1-26 and L1-27.
- .2 VAV Box Schedule: Add existing VAV bypass boxes VAV-1.13 through VAV-1.20 per Sketch 01-MV-SK005 (This Addendum).

Item 2.15 DRAWING 01-MDH-103 - HVAC PIPING - CABOT CENTRAL LEVEL 100 DEMOLITION

- .1 Disconnect and remove existing space thermostats & control wiring from existing VAV bypass boxes serving Level 100 Simulator Rooms per Sketch 01-MDH-SK001: Level 100 Simulator Rooms HVAC Piping Demolition Revisions dated 2018-08-03 (This Addendum).

Item 2.16 DRAWING 01-MH-101 - HVAC PIPING - CABOT WEST LEVEL 100 & 200 NEW WORK

- .1 Provide humidifier HU1-1 in Mech Room 1101A per Sketch 01-MH-SK002 (This Addendum).
- .2 Revise all temperature sensors (S) to space thermostats (T).
- .3 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.

Item 2.17 DRAWING 01-MH-102 - HVAC PIPING - CABOT WEST LEVEL 300 NEW WORK

- .1 Provide humidifier HU1-7 in Mech Mezz 3110C per Sketch 01-MH-SK003 (This Addendum).
- .2 Revise all temperature sensors (S) to space thermostats (T).
- .3 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.

Item 2.18 DRAWING 01-MH-103 - HVAC PIPING - CABOT CENTRAL LEVEL 100 NEW WORK

- .1 Revise all temperature sensors (S) to space thermostats (T).

- .2 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.
- .3 Provide control of existing VAV bypass boxes serving level 100 simulator rooms with new space thermostats and control wiring per Sketch 01-MH-SK006: Level 100 Simulator Rooms HVAC Piping New Work Revisions dated 2018-08-03 (This Addendum).

Item 2.19 DRAWING 01-MH-104 - HVAC PIPING - CABOT CENTRAL LEVEL 200 NEW WORK

- .1 Revise all temperature sensors (S) to space thermostats (T).
- .2 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.
- .3 Revise control wiring from temperature sensor in room 2202 Multi-Purpose Room to run to control valves on HWS side of radiant heating panels only. Delete control wiring shown running to HWR side of radiant heating panels.

Item 2.20 DRAWING 01-MH-105 - HVAC PIPING - CABOT CENTRAL LEVEL 300 NEW WORK

- .1 Provide humidifier HU1-8 in Mech Room 3116 per Sketch 01-MH-SK004 (This Addendum).
- .2 Revise all temperature sensors (S) to space thermostats (T).
- .3 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.
- .4 Revise GLR pipe size between grid lines 9y – 11y and 10x – 11x from 75mm to 63mm.

Item 2.21 DRAWING 01-MH-106 - HVAC PIPING - CABOT CENTRAL LEVEL 400 NEW WORK

- .1 Revise all temperature sensors (S) to space thermostats (T).

- .2 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.

Item 2.22 DRAWING 01-MH-107 - HVAC PIPING - CABOT EAST LEVEL 100 NEW WORK

- .1 Revise all temperature sensors (S) to space thermostats (T).
- .2 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.
- .3 In garbage room 1403A, relocate chilled water wall-mount unit to wall shared with corridor and renumber unit from WM1-1.02 to WM1-1.01. Provide 19mm chilled water supply and return lines to unit. Connect CHWS to new 38mm CHWS line above Receiving 1403, and CHWR line to new 25mm CHWR line above ceiling of Production 1504C.

Item 2.23 DRAWING 01-MH-108 - HVAC PIPING - CABOT EAST LEVEL 200 NEW WORK

- .1 Revise all temperature sensors (S) to space thermostats (T).
- .2 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.

Item 2.24 DRAWING 01-MH-109 - HVAC PIPING - CABOT EAST LEVEL 300 NEW WORK

- .1 Provide humidifier HU1-9 in Mech Room 3152 per Sketch 01-MH-SK005 (This Addendum).
- .2 Revise all temperature sensors (S) to space thermostats (T).
- .3 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.

Item 2.25 DRAWING 01-MH-110 - HVAC PIPING - CABOT EAST LEVEL 400 NEW WORK

- .1 Revise all temperature sensors (S) to space thermostats (T).
- .2 Provide control of fan coils from space thermostats in room being served. Refer to fan coil schedules for space thermostat location controlling each fan coil.

Item 2.26 DRAWING 01-MH-601 HVAC PIPING CABOT SCHEDULES

- .1 Add Wall-Mount Chilled A/C Unit Schedule per Sketch 01-MH-SK007 (This Addendum).

Item 2.27 DRAWING 02-FP-103 – FIRE PROTECTION – ATLANTIC – LEVEL 000, 100, & 200 NEW WORK

- .1 On layout “Fire Protection – Atlantic – Level 200 New Work” along gridline B’ between gridlines 11 and 12; add sprinkler head and associated piping in closet of Hotel E224.
- .2 On layout “Fire Protection – Atlantic – Level 200 New Work” along gridline B’ between gridlines 12 and 13; add sprinkler head and associated piping in closet of Hotel E227 and Hotel 229.

Item 2.28 DRAWING 03-MH-601 - HVAC PIPING - PACIFIC /GREAT LAKES SCHEDULES

- .1 Add expansion tank schedule per Sketch 03-MH-SK001(This Addendum).
- .2 Add pump schedule per Sketch 03-MH-SK002 (This Addendum).
- .3 Add plate heat exchanger schedule per Sketch 03-MH-SK003 (This Addendum).

Item 2.29 DRAWING 03-MP-104- FIRE PROTECTION – GREAT LAKES – LEVEL 300 & ATTIC NEW WORK

- .1 Layout title that reads “Fire Protection – Great Lakes – Level 300 New Work” changed to read “Fire Protection – Great Lakes – Attic New Work”.

Item 2.30 DRAWING 04-MP-101- PLUMBING – SAGUENAY – LEVEL 100 & 200 NEW WORK

- .1 On layout “Plumbing – Saguenay – Level 100 New Work” to the right of gridline 9’ just below gridline Ab in AA103; add Tag “TP2” to the trap primer.

Item 2.31 DRAWING 04-MP-102- PLUMBING – SAGUENAY – LEVEL 300 & ATTIC NEW WORK

- .1 On layout “Plumbing – Saguenay – Level 300 New Work” to the left of gridline 9’ just below gridline Ab in AA103; revise the location of the arrow from note that reads “(e)100 dia. San dn, (e)100 dia. Vent up” to point to riser on gridline 9’ just below gridline Ab.

Item 2.32 DRAWING 04-FP-104- FIRE PROTECTION – ATLANTIC – LEVEL 300 & ATTIC NEW WORK

- .1 On layout “Fire Protection – Miramichi – Level 300 New Work” to the left of gridline 13 between gridlines Bb and Bc just outside door to Hotel BB383 change note that reads “New sprinkler main up from level below” to read “New sprinkler main up to level above”.

Item 2.33 DRAWING 05-MP-501 – PLUMBING – TELC/MCTS – LEVEL 100 & 200 NEW WORK

- .1 On layout “Plumbing – Telc/MCTS – Level 200 New Work” to the right of gridline 1 between gridlines Cb and Cc in IMT Office CC202 change note that reads “12 dia. CW line up/dn” to read “New 19 dia. CW line up/dn”.

Item 2.34 DRAWING 05-MP-102 – PLUMBING – TELC/MCTS – LEVEL 300 & ATTIC NEW WORK

- .1 On layout “Plumbing – Telc/MCTS – Level 300 New Work” to the left of gridline 3 between gridlines Cb and Cc a trap primer is to be added to serve FFD. Contractor to make changes to the contract documents in accordance with the attached sketch, 05-MP-SK001 (This Addendum).
- .2 On layout “Plumbing – Telc/MCTS – Attic New Work” to the right of gridline 3 between gridlines Cb and Cc run trap primer line from trap primer, TP1, to the FFD next to HU5-1.

- .3 On layout “Plumbing – Telc/MCTS – Attic New Work” to the left of gridline 1 just above gridline Cb delete note that reads “Run new 19 dia. Condensate line dn to level below”.

Item 2.35 DRAWING 05-MP-103 PLUMBING – MACKENZIE – LEVEL 100 & 200 NEW WORK

- .1 On layout “Plumbing – MacKenzie – Level 200 New Work” to the left of gridline 6 in Hotel DD250 and Hotel DD251 add Plumbing Construction Note 1 to WM-2.01 and WM5-2.02, respectively.

Item 2.36 DRAWING 05-MP-104 – PLUMBING – MACKENZIE – LEVEL 300 & ATTIC NEW WORK

- .1 On layout “Plumbing – MacKenzie – Level 200 New Work” to the right of gridline 3 between gridlines Db and Dc in Hotel DD364 add Plumbing Construction Note 1 to WM5-3.13.

Item 2.37 DRAWING 05-FP-101 – FIRE PROTECTION – TELC/MCTS – LEVEL 100 & 200 NEW WORK

- .1 On layout “Fire Protection – Telc/MCTS – Level 100 New Work” add drain riser to floor zone control valve located in stairwell to the left of gridline 3 just above gridline Cb. Contractor to make changes to the contract documents in accordance with the attached Sketch, 05-FP-SK001 (This Addendum).
- .2 On layout “Fire Protection – Telc/MCTS – Level 200 New Work” add drain riser to floor zone control valve located in corridor to the left of gridline 3 just above gridline Cb. Contractor to make changes to the contract documents in accordance with the attached Sketch, 05-FP-SK002 (This Addendum).

Item 2.38 DRAWING 05-FP-102 – FIRE PROTECTION- TELC/MCTS – LEVEL 300 & ATTIC NEW WORK

- .1 On layout “Fire Protection – Telc/MCTS – Level 300 New Work” add drain riser to floor zone control valve located in Shower CC340 to the left of gridline 3 just above gridline Cb. Contractor to make changes to the contract documents in accordance with the attached Sketch, 05-FP-SK003 (This Addendum).

Item 2.39 DRAWING 05-FP-103 – FIRE PROTECTION – MACKENZIE – LEVEL 100 & 200 NEW WORK

- .1 On layout “Fire Protection – MacKenzie – Level 100 New Work” change matchline that reads “See Drawing 06-FP-102 For Continuation” on right side of layout to read “See Drawing 06-FP-101 For Continuation”.
- .2 On layout “Fire Protection – MacKenzie – Level 200 New Work” to the right of gridline 5 in Hotel DD254 add a sprinkler head and associated piping in closet.

Item 2.40 DRAWING 06-MH-601 HVAC PIPING ALERT SCHEDULES

- .1 Add revisions to humidifier schedule per Sketch 06-MH-SK001 (This Addendum).
- .2 Add expansion tank schedule per Sketch 06-MH-SK002 (This Addendum).
- .3 Add pump schedule per Sketch 06-MH-SK003 (This Addendum).

Item 2.41 DRAWING 06-MP-101 – PLUMBING – ALERT – LEVEL 100, 200 & 300 NEW WORK

- .1 Add “Plumbing Construction Notes” as per the attached sketch. Contractor to make changes to the contract documents in accordance with the attached sketch, 06-MP-SK001(This Addendum).
- .2 On layout “Plumbing – Alert - Level 200 New Work” to the left of gridline 7 between gridlines Fe and Ff delete note that reads “New 25 dia. condensate line up/dn”.

Item 2.42 DRAWING 07-MP-101 – PLUMBING – LEVEL 100 & 200 NEW WORK

- .1 On layout “Plumbing – St. Laurent - Level 100 New Work” along gridline 11’ between gridlines Eb and Ec in Storage EE116 change note that reads “New 19 dia. condensate line dn from level above” to read “New 25 dia condensate line n from level above”. Revise associated horizontal piping from 19 dia to 25 dia also.

Item 2.43 DRAWING 08-MP-601 – PLUMBING – DETAILS AND SCHEDULES

- .1 Delete detail 1 “Domestic Water Entry Detail”.

Item 2.44 DRAWING 08-MH-601 - HVAC PIPING - D'IBERVILLE CENTRE SCHEDULES

- .1 Revise Pump Schedule as per attached schedule on Sketch 08-MH-SK001 (This Addendum).
- .2 Add Air Separator Schedule and Expansion Tank Schedule and as per Sketch 08-MH-SK001 (This Addendum).

Item 2.45 DRAWING 10-MP-101 - PLUMBING - W.E. FOSTER BOATHOUSE LEVEL 100 & 200 NEW WORK, SCHEDULES, DETAILS, & SCHEMATICS

- .1 Revise the following:
 - .1 Provide a CO and NO2 sensor located in room 102 Maintenance Area on the north wall of the sprinkler room, and provide a second CO and NO2 sensor near the intersection of Grid line 7 and Grid Line G.

Item 2.46 DRAWING 10-MC-102 CONTROLS W. E. FOSTER BOATHOUSE SCHEMATICS

- .1 Revise the following:
 - .1 Detail 6 – Provide an AI point that reports the NOx Level from the sensor to the EMCS.

Item 2.47 ADD THE FOLLOWING NEW DRAWINGS

| BLDG | SKETCH | SKETCH TITLE | DATE |
|----------|--------------|--|------------|
| 01 CABOT | 01-A-SK001 | Cabot West Level 200 Partial Demo Floor Plan | 2018-08-03 |
| 01 CABOT | 01-A-SK002 | Cabot West Level 200 Partial New Floor Plan | 2018-08-03 |
| 01 CABOT | 01-MDH-SK001 | 01 – Cabot Level 100 Simulator Room HVAC Piping Demolition Revisions | 2018-08-03 |
| 01 CABOT | 01-MDV-SK001 | Boiler Breaching Removals Boiler Room 1403C | 2018-08-03 |
| 01 CABOT | 01-MH-SK002 | Humidifier HU1-1 Mech Room 1101A | 2018-08-03 |

| BLDG | SKETCH | SKETCH TITLE | DATE |
|--------------------------------|--------------------|---|-------------|
| 01 CABOT | 01-MH-SK003 | Humidifier HU1-7 Mech Mezz 3110C | 2018-08-03 |
| 01 CABOT | 01-MH-SK004 | Humidifier HU1-8 Mech Rm 3116 | 2018-08-03 |
| 01 CABOT | 01-MH-SK005 | Humidifier HU1-9 Mech Rm 3152 | 2018-08-03 |
| 01 CABOT | 01-MH-SK006 | 01 – Cabot Level 100 Simulator Rooms HVAC Piping New Work Revisions | 2018-08-03 |
| 01 CABOT | 01-MH-SK007 | 01 - Cabot Wall-Mounted Chilled A/C Unit Schedule | 2018-08-03 |
| 01 CABOT | 01-MP-SK001 | Addition of Humidifier HU1-1 In Mech Rm 1101A | 2018-08-03 |
| 01 CABOT | 01-MP-SK002 | Standpipe Addition for HU1-7 | 2018-08-03 |
| 01 CABOT | 01-MP-SK003 | Addition of Humidifier HU1-7 In Mech Rm 3110C | 2018-08-03 |
| 01 CABOT | 01-MP-SK004 | Addition of Humidifier HU1-8 In Mech Rm 3116 | 2018-08-03 |
| 01 CABOT | 01-MP-SK005 | Addition of Humidifier HU1-9 In Mech Rm 3152 | 2018-08-03 |
| 01 CABOT | 01-MV-SK002 | Humidifier HU1-1 Mech Rm 1101A | 2018-08-03 |
| 01 CABOT | 01-MV-SK003 | New Boiler Breeching, Boiler Room 1403C | 2018-08-03 |
| 01 CABOT | 01-MV-SK005 | 01 - Cabot VAV Box Schedule Revisions | 2018-08-03 |
| 03 PACIFIC /GREAT LAKES | 03-MH-SK001 | 03-Pacific/ Great Lakes Expansion Tank Schedule | 2018-08-03 |
| 03 PACIFIC /GREAT LAKES | 03-MH-SK002 | 03-Pacific/ Great Lakes Pump Schedule Revisions | 2018-08-03 |
| 03 PACIFIC /GREAT LAKES | 03-MH-SK003 | 03-Pacific/ Great Lakes Plate Heat Exchanger Schedule | 2018-08-03 |
| 05 TELC/MCTS | 05-FP-SK001 | Addition of Drain Riser to Floor Zone Valve for Level 100 | 2018-08-03 |
| 05 TELC/MCTS | 05-FP-SK002 | Addition of Drain Riser to Floor Zone Valve for Level 200 | 2018-08-03 |
| 05 TELC/MCTS | 05-FP-SK003 | Addition of Drain Riser to Floor Zone Valve for Level 300 | 2018-08-03 |
| 05 TELC/MCTS | 05-MP-SK001 | Addition of Trap Primer to FFD In Corridor | 2018-08-03 |
| 06 ALERT | 06-MH-SK001 | 06 Alert HVAC Piping Humidifier Schedule Revisions | 2018-08-03 |

| BLDG | SKETCH | SKETCH TITLE | DATE |
|---------------------------|--------------------|---|-------------|
| 06 ALERT | 06-MH-SK002 | 06 Alert Expansion Tank Schedule | 2018-08-03 |
| 06 ALERT | 06-MH-SK003 | 06 Alert Pump Schedule Revisions | |
| 06 ALERT | 06-MP-SK001 | Alert New Work Plumbing Construction Notes | 2018-08-03 |
| 08 D'IBERVILLE | 08-MH-SK001 | D'Iberville Schedules | |

ATTACHMENTS

- .1 Specifications:
 - .1 Section 23 52 00 Packaged Cast Iron Sectional Boiler Oil Fired

- .2 Drawings:

- .1 **01-A-SK001**
- .2 **01-A-SK002**
- .3 **01-MDH-SK001**
- .4 **01-MDV-SK001**
- .5 **01-MH-SK002**
- .6 **01-MH-SK003**
- .7 **01-MH-SK004**
- .8 **01-MH-SK005**
- .9 **01-MH-SK006**
- .10 **01-MH-SK007**
- .11 **01-MP-SK001**
- .12 **01-MP-SK002**
- .13 **01-MP-SK003**
- .14 **01-MP-SK004**

- .15 **01-MP-SK005**
- .16 **01-MV-SK002**
- .17 **01-MV-SK003**
- .18 **01-MV-SK005**
- .19 **03-MH-SK001**
- .20 **03-MH-SK002**
- .21 **03-MH-SK003**
- .22 **05-FP-SK001**
- .23 **05-FP-SK002**
- .24 **05-FP-SK003**
- .25 **05-MP-SK001**
- .26 **06-MH-SK001**
- .27 **06-MH-SK002**
- .28 **06-MH-SK003**
- .29 **06-MP-SK001**
- .30 **08-MH-SK001**

END