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800 Burrard Street, Room 219
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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, Room 219
800, rue Burrard, pièce 219
Vancouver
British C
V6Z 0B9

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|---|--|
| Title - Sujet IOS Guardhouse | |
| Solicitation No. - N° de l'invitation F1700-204430/A | Amendment No. - N° modif. 004 |
| Client Reference No. - N° de référence du client F1700-204430 | Date 2020-07-23 |
| GETS Reference No. - N° de référence de SEAG PW-\$PWY-041-8790 | |
| File No. - N° de dossier PWY-0-43025 (041) | CCC No./N° CCC - FMS No./N° VME |
| Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2020-07-31 | |
| Time Zone Fuseau horaire Pacific Daylight Saving Time PDT | |
| 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: Sezginalp (PWY), Kipp | Buyer Id - Id de l'acheteur pwy041 |
| Telephone No. - N° de téléphone (604) 367-5341 () | FAX No. - N° de FAX (604) 775-6633 |
| Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DFO - Institute of Ocean Science - Sidney, 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 |

Solicitation No. - N° de l'invitation
F1700-204430

Amd. No. - N° de la modif.
004

Buyer ID - Id de l'acheteur
pwy041

Client Ref. No. - N° de réf. du client

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

Solicitation Amendment 004 is raised to issue Addendum 003 and Addendum 004.

1. Please find Addendum 003 and Addendum 004 herein.

All other terms and conditions remain unchanged.

The following Addendum supersedes information contained in drawings and Specifications issued for the project to the extent referenced. The following changes in the tender documents are effective immediately. This Addendum will form part of the contract documents.

1.0 DRAWINGS:

Refer to attached Mechanical Addendum 01, part 1.

2.0 SPECIFICATIONS:

Refer to attached Mechanical Addendum 01, part 2.

3.0 BIDDER QUESTIONS:

3.1 Section 25 05 02 – Integrated Automation, part 1.1.1.1 – Section Scope:

Q1: What is the base building standard?

Q2: What brand/protocol/standards does the base building currently use and required in the new guard house?

Q3: Is the Guard house automation system required to integrate to a current system?

A1-3: refer to attached Mechanical Addendum 01, part 2

3.2 Section 25 05 02 – Integrated Automation, part 2.1.2 – Thermostats:

Q4: What is the building standard type?

Q5: What brands are acceptable?

A4-5: Refer to attached Mechanical Addendum 01, part 2

End of Addendum 03

The following addendum supersedes information contained in drawings and specifications issued for the project to the extent referenced. This Addendum forms part of the Tender Documents and is subject to all of the conditions set out in the contract conditions.

1. DRAWINGS – MECHANICAL

1.1 Drawing No.: 0.20

- .1 MOTORLIST:
 - .1 Revise CU-1 Electrical load – MCA=15.8
 - .2 Add: Cu-2 Electrical load – MCA=15.8 all other information identical to CU-1
 - .3 Revise FC-1 – Powered by Outdoor unit CU-1
 - .4 Revise FC-2 – Powered by Outdoor unit CU-1
 - .5 Revise FC-3 – Powered by Outdoor unit CU-2
 - .6 Revise FC-4 – Powered by Outdoor unit CU-2
 - .7 Add: MISC: DDC temperature sensors – location – one in data room, electrical room, meeting room, guard room
 - .8 Add Note 2 All DDC integration and controls to be compatible with Delta Controls
- .2 VRF CONDENSING OUTDOOR UNIT Schedule:
 - .1 Add :CU-1 Heat Pump – Wall Mounted – MFG Daikin model 2MXS18NMVJU dim-735x869x320 weight 55.9kg Pwr-208-230/60/1 cooling 5.2kw heating 5.5kw
 - .2 ADD: CU-2 Heat Pump – Wall Mounted – MFG Daikin model 2MXS18NMVJU dim-735x869x320 weight 55.9kg Pwr-208-230/60/1 cooling 5.2kw heating 5.5kw
 - .3 Clarification: CU-1 to connect to FC-1 (Meeting room 104) and FC-2 (Security Control Room 106)
 - .4 Clarification: CU-2 to connect to FC-3 (Elex 101) and FC-4 (Data Room 102)
- .3 FAN COIL UNIT SCHEDULE
 - .1 Revise: FC-1 Model No CDXS07LVJU weight 21.3kg air flow (H/L)143/111 l/s heating cap 2kw cooling cap 2.0kw
 - .2 Revise: FC-2 Model No FFQ09Q2VJU weight 16kg air flow (H/L)188/127 l/s heating cap 2.9kw cooling cap 2.6kw
 - .3 Revise: FC-3 Model No CDXS07LVJU weight 21.3kg air flow (H/L)143/111 l/s heating cap 2kw cooling cap 2.0kw
 - .4 Revise: FC-4 Model No FDMQ12RVJU weight 29 kg air flow (H/L)185/129.8 l/s heating cap 3.9kw cooling cap 3.1kw
 - .5 ADD: note 5 (All units): units to have DDC interface compatibility with Delta Controls (Provide Daikin Group Control Adapter KRP4A71/72/73/74 for indoor units specified)
 - .6 ADD: Note 6 (Unit 2 only)– cassette to be provided with decoration panel BYFQ60B3W1
 - .7 Add note 7 (FC2 and 4 only) To be supplied with controller model # BRC1E73
 - .8 Add note 1 (FC1 and 3 only) To be supplied with controller model # BRC944B2-A08
- .4 FAN SCHEDULE

The following addendum supersedes information contained in drawings and specifications issued for the project to the extent referenced. This Addendum forms part of the Tender Documents and is subject to all of the conditions set out in the contract conditions.

- .1 ADD: Note 5 - Fans to have DDC points to allow for status and remote shut down from main building

1.2 Drawing No.: 4.10

- .1 ADD:
 - .1 CU-2 to be located beside CU-1 near gridline 5/B

2. SPECIFICATIONS – MECHANICAL

2.1 Section: 25 05 02 – integrated automation

- .1 Item No.: 2.1 thermostats
 - .1 revise: 2.1.2 provide new thermostats from same supplier/manufacturer as heat pump , system to be compatible with delta controls to allow for integration with main building DDC system.
 - .2 Provide DDC connection for Heat Pump status and emergency shutdown (Provide Daikin Group Control Adapter KRP4A71/72/73/74 for indoor units specified)

END OF MECHANICAL ADDENDUM NO. 1

The following Addendum supersedes information contained in drawings and Specifications issued for the project to the extent referenced. The following changes in the tender documents are effective immediately. This Addendum will form part of the contract documents.

1.0 DRAWINGS:

- 1.1 Drawing E110: Delete Electrical Drawing E110, Rev. 1. Replace with Electrical Drawing E110, Rev. 2.
 - 1.1.1 Accessible washroom door controls added.
 - 1.1.2 Extent of surface raceway at desk modified.
 - 1.1.3 Keynotes modified.
- 1.2 Drawing E111:
 - 1.2.1 Delete Keynote 3 "Install data cabling and leave coiled in cable tray with 3m of slack, for future connection to patch panel in security data rack"
 - 1.2.2 Insert Keynote 3: "All data cabling installed in tray shall be coiled above data rack location with a minimum of 3m of slack, for connection in rack by others. This contractor shall terminate and test all data cabling installed as part of this contract."
- 1.3 Drawing E515: Delete Electrical Drawing E515, Rev. 0. Replace with Electrical Drawing E515, Rev. 1.
 - 1.3.1 Accessible washroom door control detail added.

2.0 SPECIFICATIONS:

- 2.1 Section 27 05 10 – Testing and Commissioning
 - 2.1.1 Delete article 3.4.2.2 "CCTV"
 - 2.1.2 Delete article 3.4.2.4 "Security"

3.0 BIDDER QUESTIONS:

- 3.1 Q: Page E110 note 16 states all data lines are to be SSC unless noted otherwise. And that they are to be installed by other (rough in only). Is the electrical Contractor to supply anything other than rough in for this project? Racks equipment cables terminations or just conduit, cable tray, and blank covers? I will supply rough in only as per note 16 on E110. Please clarify if otherwise.

A: Provide rough-in only as indicated. Where identified by keynote 19, also provide cables, terminations, and data outlets as required. All other data work shall be completed by Shared Services Canada. Provide data rack, horizontal PDU, UPS and electrical bonding only as indicated in drawings.

- 3.2 Q: Page E110 Note 3 – What do we need to allow for this

A: This note is for information only. All work associated with these two access controllers is by others.

3.3 Q: Security room 107 indicates two ceiling mounted receptacles, but two floor mounted data in the same location, please confirm if this is correct & if not what is required in these locations.

A: All symbols shown on the drawing are for ceiling mount receptacles and data. No floor mount symbols are shown.

3.4 Q: Note 15 – Does not appear on the drawing, please confirm location if needed.

A: Note 15 is shown on Area Enlargement 1 of drawing E110.

3.5 Q: It seems like this is a generic spec for testing as the section is not specific to this project and covers testing of equipment that is not part of this project. Could they clarify what components of electrical they would like tested so I don't overshoot on it?

A: All equipment installed as part of this project shall be tested as per specification section 26 05 10 Testing and Commissioning.

End of Addendum 04

DETAIL 1 FLOOR PLAN
1:50

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NOT FOR CONSTRUCTION**

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UNLESS NOTED OTHERWISE

FISHERIES AND OCEANS CANADA
INSTITUTE OF OCEAN
SCIENCES
NEW GUARDHOUSE
9860 WEST SAANICH ROAD
SIDNEY, BC, V8L 5T5

SCALE
AS NOTED
START DATE
DRAWING NUMBER
E110
5 OF 11
REVISION

2020.07.22
PROFESSIONAL
A.B. SOMMER
#33825

PK
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DWG. NO. DRAWING REFERENCES

NOTES

RATIO PEX ENGINEERING

GUARDHOUSE POWER &
LOW TENSION (PROPOSED)

NOTES:

- POWER DOOR OPERATOR. ALLOW FOR ALL CONDUIT AND INTERLOCK REQUIRED TO CONTROL DOOR OPENING BUTTONS WITH DOOR OPERATOR AS REQUIRED FOR A FULLY OPERATIONAL SCHEDULE. PROVIDE A WALL MOUNTED BACKWARD PANEL CONSIST OF 1.2m X 2.4m SHEETS MOUNTED VERTICALLY WITH THE BOTTOM OF THE PLYWOOD FINISH PLYWOOD WITH TWO (2) COATS OF WHITE FIRE-RETARDANT PAINT.
- TWO (2) HANTECH KT400 ACCESS CONTROLLERS INSTALLED ON PLYWOOD BACKING. CONTROLLERS PROVIDED BY OTHERS.
- EXTERNAL POWER SUPPLIES FOR LONG-RANGE CARD READERS (BY OTHERS).
- PROVIDE ONE (1) HANTECH KT400 ACCESS CONTROLLER INSTALLED ON PLYWOOD BACKING FOR GUARDHOUSE DOORS. PROVIDE CAT6 CABLE FROM THIS LOCATION BACK TO SSC DATA RACK ROOM. PROVIDE TERMINATION ON BOTH ENDS AND CONNECT CABLE TO KT400 AND PATCH PANEL. COORDINATE CONNECTION WITH SSC.
- NOT USED
- REFER TO DRAWING E111 FOR COMMUNICATIONS CABLE TRAY ROUTING.
- REMOVE CONDUIT FOR FUTURE FIRE ALARM CONDUCTORS. STUB UP INTO DATA ROOM AND CAP OFF.
- REMOVE CONDUIT FOR FUTURE FIRE ALARM CONDUCTORS. STUB UP INTO EAST WALL OF DATA ROOM TO CABLE TRAY.
- PROVIDE 103mm CONDUIT SLEAVE THROUGH WALL FOR SHARED SERVICES STRUCTURED WIRING TO GUARDHOUSE. ROUTE CONDUCTORS UP EAST WALL OF DATA ROOM TO CABLE TRAY.
- PROVIDE 103mm CONDUIT SLEAVE THROUGH WALL FOR SHARED SERVICES STRUCTURED WIRING TO GUARDHOUSE. ROUTE CONDUCTORS UP EAST WALL OF DATA ROOM TO CABLE TRAY.
- REMOVE CONDUIT FOR FUTURE STATIONS AND COMMUNICATION DEVICES INCLUDING BACKBONES. PROVIDE 103mm EMT CONDUIT BACK TO CABLE TRAY. PROVIDE BURN COVER PLATE OVER BACK BOX.
- PROVIDE ROUGH-IN FOR FUTURE FIRE ALARM ANNUNCIATOR PANEL INCLUDING 2-35mm CONDUIT BACK TO CABLE TRAY FOR COMMS. WIRING AND 1-27mm EMT CONDUIT UP TO DATA ROOM FOR FUTURE POWER CIRCUIT. PROVIDE BURN COVER PLATE OVER BACK BOX.
- PROVIDE ROUGH-IN FOR SOFT-MOUNTED SECURITY CAMERAS (BY OTHERS) TO BE CONNECTED. CAMERAS SHALL BE POE. PROVIDE 1-27mm EMT CONDUIT FROM JUNCTION BOX LOCATION BACK TO CABLE TRAY FOR ROUTING OF CAT6 CABLE.
- DASH LINES INDICATE THE CLEARANCE REQUIRED FOR WALL-MOUNTED DATA RACK TO SWING OUT FOR REAR ACCESS.
- SPARE CONDUIT FOR FUTURE. STUB UP AND CAP OFF.
- ALL DATA DROPS TO BE CONNECTED TO SHARED SERVICES CANADA (SSC) DATA RACK IN ROOM 102 UNLESS OTHERWISE NOTED. FOR ALL SHARED SERVICES DATA DROPS, WIRING SHALL BE PERFORMED BY SSC.
- CONDUIT FOR CABLES FROM SECURITY DATA RACK, CABLES AND DATA BACK BY OTHERS. STUB UP AND EXTEND UP THE WALL 300mm INTO JUNCTION BOX. JUNCTION BOX SHALL BE 181x108.
- PROVIDE VERTICAL CABLE TRAY DOWN TO 1800 AFF. FOR ROUTING DATA CABLES DOWN TO DATA RACK.
- DATA DROPS TO BE CONNECTED TO SECURITY DATA RACK IN ROOM 101. PROVIDE DATA DROPS TO BE CONNECTED TO SECURITY DATA RACK IN ROOM 101. PROVIDE DATA DROPS AND TERMINATE AT BOTH ENDS. DATA CABLES TO BE ENTERED INTO RACK BY OTHERS.
- NOT USED
- ALLOW FOR COORDINATION WITH US SECURITY UPGRADES PROJECT TRADES AS REQUIRED. REFER TO MECHANICAL SCHEDULE ON E600 FOR CONNECTION DETAILS.

DWG. NO. DRAWING REFERENCES

NOTES

NO. DATE

REVISIONS

REVISION

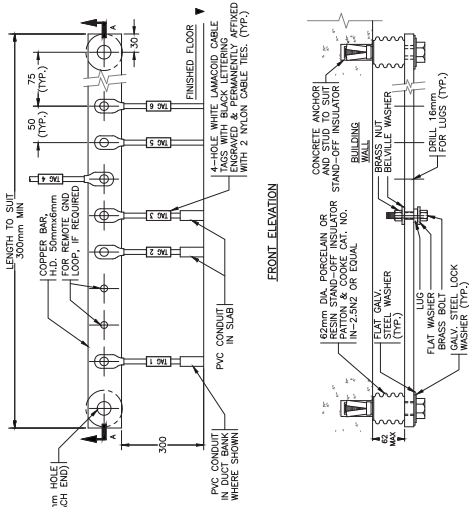
DWG. NO. DRAWING REFERENCES

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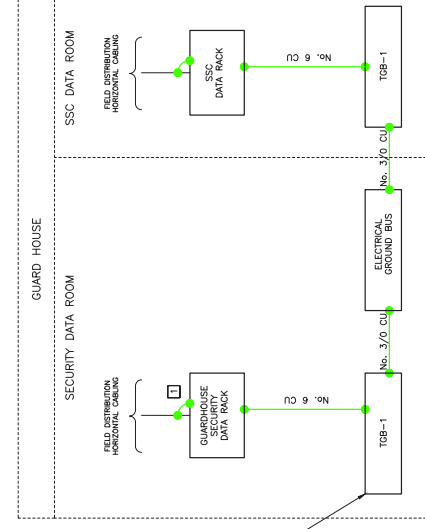
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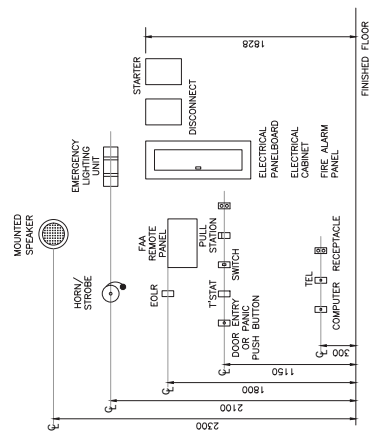
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DETAIL 1 E119 GROUNDING INSTALLATION DETAILS
N.T.S. 1. TYP. COPPER GROUNDING BAR - TYP.

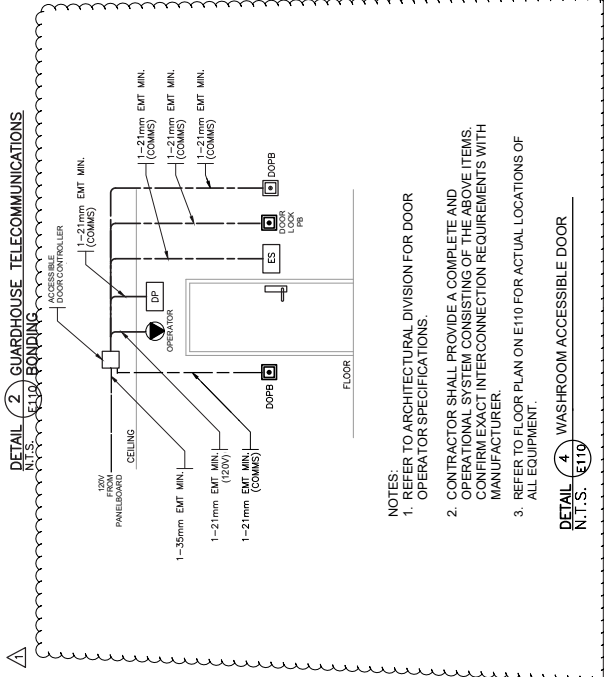


NOTES:
□ DENOTES BONDING JUMPER TO CONDUIT AND CABLE TRAY (TYP.)



NOTES:
1. ALIGN ALL EQUIPMENT VERTICALLY AND HORIZONTALLY.

DETAIL 3 TYPICAL MOUNTING HEIGHTS
N.T.S.



DETAIL 2 GUARDHOUSE TELECOMMUNICATIONS
N.T.S. E119 BONDING

- NOTES:**
- REFER TO ARCHITECTURAL DIVISION FOR DOOR OPERATOR SPECIFICATIONS.
 - CONTRACTOR SHALL PROVIDE A COMPLETE AND CORRECT LIST OF THE CONSTRUCTION ITEMS CONSISTING OF THE CONSTRUCTION ITEMS. CONFIRM EXACT INTERCONNECTION REQUIREMENTS WITH MANUFACTURER.
 - REFER TO FLOOR PLAN ON E110 FOR ACTUAL LOCATIONS OF ALL EQUIPMENT.

DETAIL 4 WASHROOM ACCESSIBLE DOOR
N.T.S. E119

- NOTES:**
- ALL EQUIPMENT TO BE PROVIDED NEW UNLESS NOTED OTHERWISE.
 - ALL GROUNDING AND BONDING CONDUCTORS SHALL BE GREEN-JACKETED UNLESS NOTED OTHERWISE.
 - FOR NEW CABLE TRAY WITHIN ROOMS HOUSING RACK EQUIPMENT, BOND NO. 6 CONDUCTOR TWICE PER MECHANICAL SECTION.



**ISSUED FOR TENDER
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UNLESS NOTED OTHERWISE

FISHERIES AND OCEANS CANADA
INSTITUTE OF OCEAN SCIENCES
NEW GUARDHOUSE
9860 WEST SAANICH ROAD
SIDNEY, BC, V8L 5T5

SCALE AS NOTED
START DATE
DRAWING NUMBER **E515**
10 OF 11
REVISION

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RATIO P&E ENGINEERING

DWG. NO. DRAWING REFERENCES

NO. DATE

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