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British Columbia
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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

Title - Sujet SAR Station Building Construction	
Solicitation No. - N° de l'invitation F1700-165107/A	**Amendment No. - N° modif.** 004
Client Reference No. - N° de référence du client F1700-165107	**Date** 2016-11-25
GETS Reference No. - N° de référence de SEAG PW-$PWY-019-7908	
File No. - N° de dossier PWY-6-39208 (019)	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2016-12-02**	**Time Zone** **Fuseau horaire** Pacific Standard Time PST
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Ngan, Ken (PWY)	**Buyer Id - Id de l'acheteur** pwy019
Telephone No. - N° de téléphone (604) 658-2755 ( )	**FAX No. - N° de FAX** (604) 775-6633
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:** DFO - SAR Station - Campbell River, 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.

This Solicitation Amendment 004 is raised to incorporate Addendum #2.

All other terms and conditions remain unchanged.

The following changes in the Tender Documents are effective IMMEDIATELY. This addendum will form part of the Contract Documents

Amend/revise the Standard Contract Documents as follows:

Clarifications & General Instructions

1. Workbench in room 101 not in contract.
2. Shelves in copier room 103 not in contract.
3. Furniture indicated in Gear storage room 112 (at 1955 dimension) not in contract.
4. 10 lockers in total are indicated on the drawings.

ARCHITECTURAL

Refer to architectural Drawings:

A 7.01
Walls between lockers to extend to 2438mm above floor and cap with GWB.

A 7.02 detail 8
Folding doors to be 2134 tall.

A 7.02 detail 7a & 7b
See attached revised elevations indicating the two rod and shelving conditions occurring in the room 112 gear storage. Secure Storage room 113 rod and shelf to match detail 7b.

A 7.02 detail 5
Location of wire mesh shelf indicated in details shown on 6/A7.01 and 2b/ A7.01. Wire shelf is included in contract.

A 7.02 detail 4
Wall seat indicated in detail occurs in 5 locations (locker room and shower rooms)

MECHANICAL

1. See attached Mechanical addendum A-M02. (1 page)

ELECTRICAL

1. See attached revised statement of work issued in addendum NO. 01. With items not applicable to this project deleted. (8 pages)

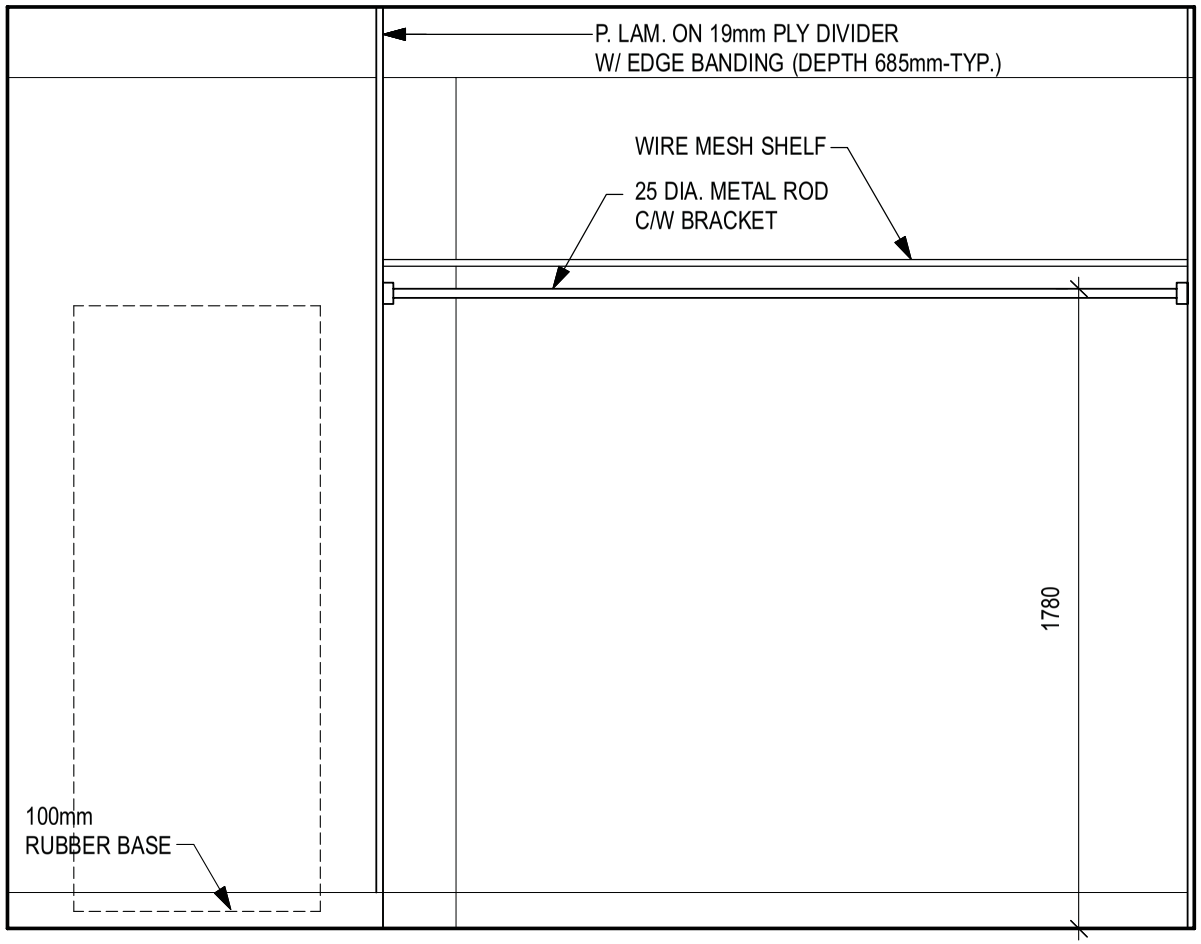
SPECIFICATION

SECTION 06 41 11

2.11 .5

"plant on" backsplash is acceptable for solid surface counters

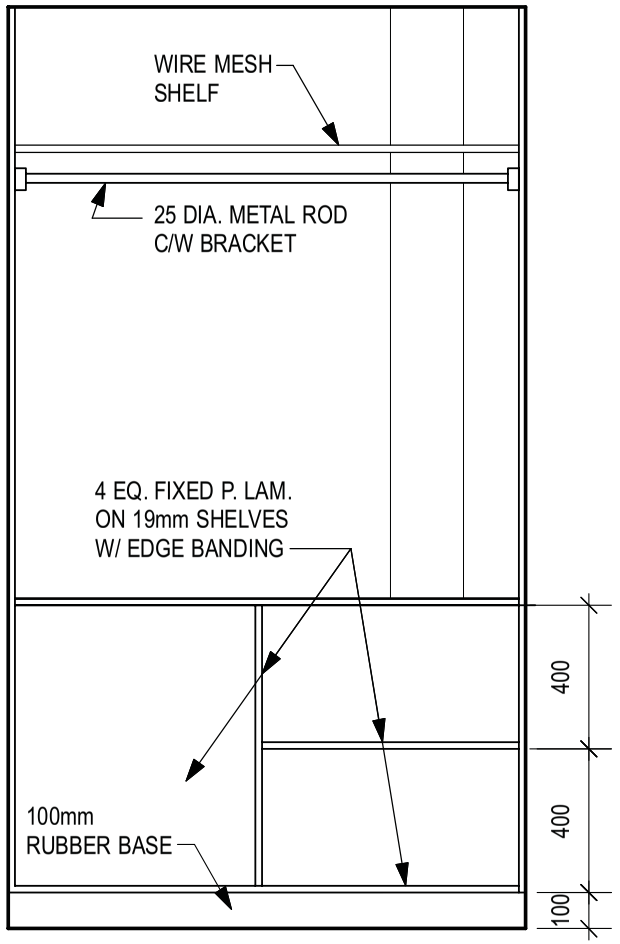
End of Addendum



7a
A7.02

GEAR STORAGE SHELVES

SCALE: 1 : 20



7b
A7.02

GEAR STORAGE SHELVES

SCALE: 1 : 20

ADDENDUM

Project:	Campbell River SAR Station	**Addendum No.:**	A-M02
Project No.:	131-19106-05	**Date:**	November 24, 2016
Distribution:	Number 10 Architectural Group - Rob Halliday		

GENERAL

This Addendum forms part of the Contract Documents for the above Project and amends the original drawings and Specifications. The following revisions supersede the information contained in the original drawings and Specifications issued to the extent referenced and shall become part thereof. No adjustment to the Contract Price will be considered or allowed due to the Contractor or to any Sub-Contractor or Supplier not being familiar with this Addendum.

1.0 SPECIFICATIONS

1.1 Specification Section 21 01 00 Clause 4.3

.1 The sanitary sump pumps shall be non-clog solids handling pumps capable of handling 2" solids. Omit the requirement for grinder pumps.

END OF MECHANICAL ADDENDUM

WSP Canada Inc.
401 Garbally Road
Suite 400
Victoria, BC V8T 5M3

Tel: 250-384-5510
Fax: 250-386-2844
www.wspgroup.com

SOW (Statement of Work)

1.The following information covers the installation of the Main terminal room (MTR) and Communications Cabinet (CC) and associated telecommunication pathway system.

2. Applicable Codes, Standards And Design Guidelines The following codes, standards and Design Guidelines shall apply:

a. Canadian Electrical Code;

b. National Building Code;

c. National Fire Code;

d. All applicable provincial and municipal codes;

e. TBITS GCG10069– Telecommunications Wiring Systems in Government-owned and Leased Buildings;

f. TIA/EIA – 569 Commercial Building Standard for Telecommunication Pathway and Spaces;

g. TIA/EIA – 606 Administration Standard for Commercial Telecommunications Infrastructure;

h. TIA/EIA – 607 Commercial Building Grounding and Bonding Requirements for Telecommunications;

i. BICSI – Telecommunication Distribution Methods Manual; and

j. BICSI - Information Transport System Installation 4th edition.

3 Terminology

a. The word “Provide” shall mean “supply and install”; and

b. The word “indicated” shall mean “as shown on the drawings and/or noted in the contract documents.

4. Telecommunication Space and Pathway Specifications

a. Incoming Communication Entrance Conduits Service: Unless otherwise

indicated, provide a minimum of one 100 mm PVC conduits encased in concrete to the outside plant facility such as telecommunications poles, service/steam tunnels, underground conduit duct banks and /or maintenance holes.

(1) Extend conduits up to the Communications Cabinet. The end of the conduits shall be suitably marked and terminated at a **maximum distance of 50 mm from the wall used to mount the telecom terminals and protector units**.

(2) Install conduits parallel or perpendicular to building grid lines.

(3) All conduits shall be clear of any obstructions and shall meet or exceed all design requirements.

(4) Maximum distance between building MTR and the nearest access point (manhole or pole) shall not exceed 180 M.

(5) The contractor is to refer to applicable documentation to determinate if additional entrance conduits are required and for the proper installation method.

b. Main Telecommunication Room (MTR): is a centralized space where the telecommunications service entrance ducts terminate and where the main entrance cable from the outside plant is terminated along with its associated equipment and hardware. The following general requirements shall apply to the Main Telecom Room:

(1) The MTR shall be located in a dry area not subjected to flooding and as close as possible aligned with the vertical backbone pathway.

(2) N/A

(3) The Communications Cabinet shall be located a minimum of 4 meter away from sources of electromagnetic interference and at a distance which will reduce the electrical interference to 3V/m and reduce the magnetic interference @ 60Hz to 1A/m. Special attention shall be given to electrical power wiring, radio frequency (RF) sources, transformers, motors, motor control centres and relays, generators, induction heaters, photocopiers, arc welders, etc. The MTR room shall ***not*** be located in the electrical/mechanical room. Shared space with other building facility shall be avoided.

(4) The Communications Cabinet shall be connected to the zone conduit and cable tray system.

(5) N/A

(6) N/A

(7) N/A

(8) The room shall be equipped with a minimum of two wall mounted dedicated, non-switched, 3-wire, 15 amp, 120 volt duplex powered receptacles and one wall mounted dedicated, non-switched, 3-wire, 20 amp, 120 volt duplex powered receptacles All receptacles shall be installed using single point grounding principles in accordance with Building Network Design (BND) Manual C-56-007-003/AB-001 Section 7. Location of electrical outlets ***shall*** be coordinated with the Design Approval Authority***.*** Conduit installed for electrical shall, whenever possible, be installed within the walls of the MTR.

(9) N/A

(10) N/A

(11) N/A

(12) Provide a minimum 100mm wide x 6mm thick x 255mm long predrilled copper telecommunications main grounding bus bar (TMGB) mounted on insulated supports. The TMGB shall be variable in length and shall accommodate the bonding and grounding of all telecommunications equipment and support structures. TMGB is to be complete with standard NEMA bolthole sizing and spacing for the type of connector used. TMGB is to be mounted in proximity to the service entrance ducts.

(13) Supply, install and terminate an independent green jacketed, insulated, stranded copper ground wire (refer to the standards for the exact size), to the main building approved electrical ground. The ground wire shall be terminated to the approved ground. Bond and ground all conduits, riser cable, cable tray, racks, etc in accordance with CEC and Manufacture's specifications. Refer to the Design Approval Authority for clarification of requirements.

(14) N/A

(15) All distribution conduits shall be terminated, bushed and reamed immediately upon entering the MTR.

(16) N/A

(17) Piping, duct work, vents etc. not dedicated or supporting telecommunications and related equipment **shall not** be located in or pass through the MTR.

(18) N/A

(19) N/A

c. N/A:

d. Conduit Specifications:

(1) All telecommunications cables shall be installed in home run conduits originating from the outlet .

(2) All conduits shall be installed in accordance with CEC, part 1 and

applicable building codes. Conduit shall be rigidly fastened and adequately supported to withstand pulling tensions.

(3) The inside radius of a bend in a conduit shall be not less than six times the internal diameter when the conduit is less than 50 mm in diameter and ten times the internal diameter when conduit is 50 mm in diameter or larger.

(4) All conduits shall be identified and labelled at both ends. Tags shall identify start and finish of conduit runs. Pull boxes shall be labelled on the exposed exterior.

(5) All conduits shall originate and be physically connected to the telecom backboards in the MTR, cable tray and pull box.

(6) All metallic parts of the cable distribution supporting system shall be bonded together mechanically, including at all transition points (i.e. distribution conduit not mechanically connected) using a 6 AWG green jacketed stranded copper ground wire. The metallic components of the cable distribution system shall be bonded together at the Communication cabinet.

(7) All fittings, connectors and couplings are to be steel.

(8) All conduits/sleeves shall be fitted with an approved ground bushing c/w ground lug and bonded together mechanically (one continuous piece preferred). This shall be connected to the approved building ground by means of a No. 6 AWG to the grounding bus bar.

(9) All conduits entering or existing through the ceiling or walls of the MTR shall protrude into the room 25-50mm or as designated by the Design Approval Authority.

(10) N/A

(11) All conduit runs shall follow building grid lines and shall be concealed where possible.

(12) All conduits shall be thin wall EMT, reamed and bushed at both ends and bonded to the distribution system. ***Rigid PVC or flexible metallic conduits are NOT acceptable.***

(13) Unless otherwise specified, all conduit runs shall be a maximum of 30 meters (100 ft) in length with a maximum of two 90 degree bends between pull points.

(14) A pull box shall be placed in conduit runs where the cumulative sum of

the bends exceeds 180 degrees, where the overall length of the conduit run is more than 30m, or if there is a reverse bend in the run.

(15) Pull boxes shall be constructed in accordance with Canadian Standard Association, of code gauge steel and shall have a rust resistant finish. Each pull box should be sized per CEC requirements and in accordance with TIA/EIA 569. The locations and sizes of all pull boxes shall be indicated on the 50% Design review submission.

(16) In all instances pull boxes shall be placed in straight sections of conduit run and **shall not** be used in lieu of a bend. Corresponding ends of the conduit are to be aligned with each other. Conduit fittings **shall not** be used in place of pull boxes or bends.

(17) Pull boxes shall be installed at a reasonable height, in an exposed location and such that access for installation of cables is not prohibited. Pull boxes shall not be placed in a fixed false ceiling space, unless immediately above a suitably marked and hinged access panel. Provide indicator decals on ceiling T-bar rail or ceiling tiles showing location of pull box or splice box.

(18) Conduit must enter the wall outlet boxes from the top or bottom.

(19) All conduits shall be installed in accordance with Canadian Electrical Code, Part 1 Section 12, applicable building codes and TIA/EIA- 569.

(20) N/A

(21) Conduit and pull boxes shall be rigidly fastened and adequately supported to withstand pulling tension in accordance with CEC, Part 1, Section 12.

(22) To assist with the design of the horizontal telecom support infrastructure the following is provided:

a. The maximum conduit horizontal distance shall be 90 metres. This is the cable length from the mechanical termination in the communications cabinet to the outlet.

b. The initial cable fill capacities of conduit, cable tray and raceway system shall not be greater than 40%.

c. N/A

(23) A pull cord or fish tape shall be installed in all conduits.

(24) The telecommunications outlet conduit system shall be labelled green.

(25) Place pull boxes in readily accessible locations only.

(26) The use of LB, LL and LR type fittings is strictly prohibited.

(27) N/A

e. N/A

f. Outlet boxes specification:

(1) All outlet boxes shall be Double gang (minimum 100mm x 100mm x 70mm deep) and, unless otherwise specified, flush mounted in all areas.

(2) Outlet boxes shall be installed in locations identified on drawings. Unless otherwise noted on the building plans, the outlet box shall be installed at 300mm AFF or at the same height and within 300mm of the adjacent electrical duplex receptacles. Wherever possible, the face of the plaster ring should be installed flush with the finished wall.

(3) Back to back outlet boxes **shall not** be used.

(4) Plaster rings or raised adapter plates shall not reduce the size of the outlet such that two additional outlets could not be added in the future.

5. Bonding And Grounding Requirements:

(1) The Telecommunications Bonding Backbone (TBB) consists of green jacketed stranded copper conductors and insulated copper buss bars. The system extends from the Building Grounding Electrode Conductor through the communications cabinet, within the building. The construction of the TBB is a requirement of the latest version of Treasury Board Information Technology Standard TBITS GCG10069 and TIA/EIA - 607 “Grounding and Bonding for telecommunications in Commercial Building”. These publications shall be used in the design, installation, management and administration of the TBB systems in government-owned and leased buildings.

(2) All metallic parts shall be bonded together mechanically and attached to the approved building ground in accordance with the CEC, CSA and TIA/EIA standards. In all cases, the CEC shall be met or exceeded.

(3) Bonding conductors shall be continuous and routed in the shortest possible straight-line path. Any bends placed in the conductor shall be sweeping bends.

(4) Aluminium wires, clamps or terminal connectors are **unacceptable** for grounding and bonding.

(5) The following general requirements shall apply when constructing the TBB system:

a. An insulated pre-drilled copper busbar, minimum dimensions of 6mm thick x 100mm wide x 255mm long, (longer length may be required to accommodate large or future connection requirements), shall be installed on the wall of the MTR adjacent to the cable entrance conduits, 150mm from the corner of the MTR and 150mm AFF. This busbar is known as the Telecommunications Main Grounding Busbar (TMGB) and shall be insulated from its support by a minimum of 50mm.

b. An insulated pre-drilled copper busbar, minimum dimensions of 6mm thick x 50mm wide x 255mm long, shall be installed in the communications cabinet.

c. A green jacketed stranded copper ground wire sized to maintain a voltage drop of less than 40 Volts under maximum short time rating. This wire shall be sized no smaller than No. 6 AWG from the electrical service equipment (power) ground (main Building ground) to the communications cabinet.

d. N/A

e. The Bonding Conductor for Telecommunications (BCT) shall be connected to the service equipment (power) ground (main building ground) by qualified personnel.

f. N/A.

g. N/A.

h. N/A

i. T N/A

j. N/A

6. N/A

7. Through 13. N/A