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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

<b>Title - Sujet</b> ATP Integration Facility	
<b>Solicitation No. - N° de l'invitation</b> EZ899-192962/A	<b>Amendment No. - N° modif.</b> 006
<b>Client Reference No. - N° de référence du client</b>	<b>Date</b> 2019-05-22
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$PWY-022-8592	
<b>File No. - N° de dossier</b> PWY-8-41284 (022)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2019-05-28</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Pacific Daylight Saving Time PDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Lam (PWY), Tian	<b>Buyer Id - Id de l'acheteur</b> pwy022
<b>Telephone No. - N° de téléphone</b> (604) 363-7968 ( )	<b>FAX No. - N° de FAX</b> (604) 775-6633
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> NRC - Herzberg Astronomy & Astrophysics ATP Integration Facility - Victoria, BC	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

Solicitation No. - N° de l'invitation  
EZ899-192962/A

Amd. No. - N° de la modif.  
006

Buyer ID - Id de l'acheteur  
pwy028

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

File No. - N° du dossier CCC No./N°

CCC - FMS No./N° VME

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The Solicitation Amendment 006 is raised to issue Addendum 004.

Please see Addendum 004 herein.

All other terms and conditions remain unchanged.

THE FOLLOWING ADDENDUM SUPERCEDES 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. ARCHITECTURAL SPECIFICATIONS**

ADD : Specification Section 02 81 00 Hazardous Building Materials (9 pages).

**2. QUESTIONS & ANSWERS**

Q1. Is the stonshield product an acceptable alternate for the epoxy flooring? South Island Surfaces have attached data sheets for 2 types of flooring systems that best match the specs.

**A1. Product review will only be carried out after award of tender during shop drawing submission.**

Q2. Please confirm if plumbing contract is to carry supply/install of exterior RWL drops or will that be the cladding/envelope contractor. Question asked due to BOBS.

**A2. Rain water leaders on the building facade to be pre-finished metal, size to suit code requirement, and will be part of metal cladding scope of work.**

Q3. Can section 05 21 00, 06 18 00, and 06 18 12 be added to BOBS so GC can make Steel Package/Wood Package bid submission selection sooner?

**A3. The bid depository under the BidCentral Online Bidding For Subcontractors (BOBS) will not be changed. Please bid accordingly with the information provided. Please note that it is mandatory for the bidder to decide if they will be submitting a wood structure package or a steel structure and they must indicate this on their bid. See solicitation documents for details.**

Q4. SS301 Suggests that the overhead door frame is to be supplied by O/H Door Supplier. The O/HD suppliers will not supply this. Should this be a requirement for the structural steel? Additionally, WS301 does not identify who is supplying the frame for the O/H Door.

**A4. Contractor to provide Galvanized C-150 Steel Channel to form the overhead door door frame secured to adjoining structural steel. O/H door frame is not by overhead door supplier.**

END OF ADDENDUM NO. 4

**Part 1            General**

**1.1               RELATED REQUIREMENTS**

- .1        Section 01 33 00 – Submittal Procedures
- .2        Section 01 35 33 – Health and Safety Requirements
- .3        Section 01 74 19 – Waste Management Disposal
- .4        Section 01 74 11 – Cleaning

**1.2               REFERENCES**

- .1        Reports:
  - .1        *Hazardous Materials Survey, Site Services, Victoria BC, NWEG Project 20127*, North West Environmental Group Ltd. August 2013(further referred to herein as the Assessment Report) – attached in Appendix 6 of the Project Specifications.
- .2        Definitions:
  - .1        Dangerous Goods: product, substance, or organism specifically listed or meets hazard criteria established in Transportation of Dangerous Goods Regulations.
  - .2        Hazardous Material: product, substance, or organism used for its original purpose; and is either dangerous goods or material that will cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.
  - .3        Hazardous Waste: hazardous material no longer used for its original purpose and that is intended for recycling, treatment or disposal.
  - .4        Hazardous Building Material: component of a building or structure that will cause adverse impact to environment or adversely affect health of persons, animals, or plant life when altered, disturbed or removed during maintenance, renovation or demolition.
- .3        Reference Standards:
  - .1        Canadian Environmental Protection Act,1999 (CEPA 1999)
    - .1        Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149).
  - .2        Department of Justice Canada
    - .1        Transportation of Dangerous Goods Act (TDG Act) 1999, (c. 34).
    - .2        Transportation of Dangerous Goods Regulations (T-19.01-SOR/2003-400).
  - .3        Health Canada / Workplace Hazardous Materials Information System (WHMIS)
    - .1        Material Safety Data Sheets (MSDS).
  - .4        National Research Council Canada Institute for Research in Construction (NRC-IRC)
    - .1        National Fire Code of Canada (2015).

- .5 WorkSafe BC
  - .1 British Columbia's Occupational Health and Safety Regulation (BC Reg. 296/97, including amendments to date of work)
  - .2 "Safe Work Practices for Handling Asbestos" (2017)
  - .3 "Lead-Containing Paints and Coatings; Preventing Exposure in the Construction Industry" (2011)
  - .4 "Safe Work Practices for Handling Lead" (2017)
- .6 Government of Canada
  - .1 The Canada Labour Code, Part II, Canada Occupational Health and Safety Regulations (COHSR)
  - .2 The Federal PCB Regulations (SOR/2008-273).
  - .3 The Federal Halocarbons Regulation (July 2003).
- .7 Government of British Columbia
  - .1 British Columbia Hazardous Waste Regulation (BC Reg. 63/88)

### **1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data for hazardous materials to be used by the Contractor to complete the Work:
  - .1 Submit manufacturer's instructions, printed product literature and data sheets, and include product characteristics, performance criteria, physical size, finish and limitations.
  - .2 Submit two copies of WHMIS MSDS in accordance with Section 01 35 33 Health and Safety Requirements to Departmental Representative for each hazardous material required prior to bringing hazardous material on site.
  - .3 Submit hazardous materials management plan to Departmental Representative that identifies hazardous materials, usage, location, personal protective equipment requirements, and disposal arrangements.
  - .4 Construction/Demolition Waste Management:
    - .1 Submit calculations on end-of-project recycling rates, salvage rates, and landfill rates demonstrating percentage of construction/demolition wastes were recycled or salvaged
  - .5 Low-Emitting Materials: submit listing of adhesives and sealants used in building, comply with VOC and chemical component limits or restrictions requirements.

### **1.4 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle hazardous materials to be used by the Contractor to complete the Work in accordance with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver hazardous materials to be used by the Contractor to site in original factory packaging, labelled with manufacturer's name and address.

- .3 Transport hazardous materials and wastes in accordance with Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
- .4 Storage and Handling Requirements:
  - .1 Co-ordinate storage of hazardous materials to be used by the Contractor to complete the Work with Departmental Representative and abide by internal requirements for labelling and storage of materials and wastes.
  - .2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.
  - .3 Store and handle flammable and combustible materials in accordance with National Fire Code of Canada requirements.
  - .4 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use.
    - .1 Store flammable and combustible liquids in approved safety cans bearing the Underwriters' Laboratory of Canada or Factory Mutual seal of approval.
    - .2 Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Departmental Representative.
  - .5 Transfer of flammable and combustible liquids is prohibited within buildings.
  - .6 Transfer flammable and combustible liquids away from open flames or heat-producing devices.
  - .7 Solvents or cleaning agents must be non-flammable or have flash point above 38 degrees C.
  - .8 Store flammable and combustible waste liquids for disposal in approved containers located in safe, ventilated area. Keep quantities to minimum.
  - .9 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.
  - .10 Storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:
    - .1 Store hazardous materials and wastes in closed and sealed containers.
    - .2 Label containers of hazardous materials and wastes in accordance with WHMIS.
    - .3 Store hazardous materials and wastes in containers compatible with that material or waste.
    - .4 Segregate incompatible materials and wastes.
    - .5 Ensure that different hazardous materials or hazardous wastes are stored in separate containers.
    - .6 Store hazardous materials and wastes in secure storage area with controlled access.
    - .7 Maintain clear egress from storage area.
    - .8 Store hazardous materials and wastes in location that will prevent them from spilling into environment.

- .9 Have appropriate emergency spill response equipment available near storage area, including personal protective equipment.
- .10 Maintain inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.
- .11 When hazardous waste is generated on site:
  - .1 Co-ordinate transportation and disposal with Departmental Representative.
  - .2 Comply with applicable federal, provincial and municipal laws and regulations for generators of hazardous waste.
  - .3 Use licensed carrier authorized by provincial authorities to accept subject material.
  - .4 Before shipping material obtain written notice from intended hazardous waste treatment or disposal facility it will accept material and it is licensed to accept this material.
  - .5 Label containers with legible, visible safety marks as prescribed by federal and provincial regulations.
  - .6 Only trained personnel handle, offer for transport, or transport dangerous goods.
  - .7 Provide photocopy of shipping documents and waste manifests to Departmental Representative.
  - .8 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide photocopy of completed manifest to Departmental Representative.
  - .9 Report discharge, emission, or escape of hazardous materials immediately to Departmental Representative and appropriate provincial authority. Take reasonable measures to control release.
- .12 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.
- .13 Report spills or accidents immediately to Departmental Representative. Submit a written spill report to Departmental Representative within 24 hours of incident.
- .5 Include provisions for Work of this Section in Waste Reduction Workplan as outlined in Section 01 74 19 – Waste Management and Disposal.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Description:
  - .1 Bring on site only quantities hazardous material required to perform Work.
  - .2 Maintain MSDS in proximity to where materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

**Part 3            Execution**

**3.1                HAZARDOUS MATERIALS ABATEMENT**

- .1        Scope of Abatement Activities.
  - .1        Abatement shall be conducted to handle, alter, remove and/or dispose of hazardous building materials as identified in the Assessment Report in accordance with applicable regulations, guidelines, standards and/or best practices for such work, where such identified hazardous building materials will be impacted (handled, altered, damaged, removed) by the Work.
  - .2        Contractor is responsible for reviewing plans, specifications and reports such that they understand the locations and amounts of hazardous materials that will be impacted by the Work of this contract.
  - .3        The listing below is a summary of the identified hazardous building material categories and associated removal and disposal regulations, guidelines and/or standards.
    - .1        Asbestos-Containing Materials (ACMs)
      - .1        Refer to the Assessment Report for identities and locations of ACMs that will require disturbance during the Work. In summary, the following ACMs are known or suspected to be present in the building:
        - .1        Vermiculite insulation in masonry block wall cavities:
          - .1        Unconfirmed as present, unconfirmed asbestos content if present, if vermiculite is found assume it is asbestos containing until sampled and analyzed.
          - .2        Contractor is to conduct destructive assessment to determine presence/absence and/or asbestos content of vermiculite in masonry block wall cavities, prior to undertaking other Work that will involve penetrating masonry wall cavities.
            - .1        Any such assessment must be completed by a qualified person, in accordance with the requirements of the 2017 WorkSafe BC publication "Safe Work Practices for Handling Asbestos"
        - .2        Actions that will disturb identified ACMs (if any) are to be conducted in accordance with the requirements of the 2017 WorkSafe BC publication "Safe Work Practices for Handling Asbestos", by appropriately trained personnel.
          - .1        Submit Provincial and/or local requirements for Notice of Project Form.
          - .2        Submit proof of Contractor's Asbestos Liability Insurance.
          - .3        Submit to DCC Representative necessary permits for transportation and disposal of asbestos containing waste

- and proof that asbestos containing waste has been received and properly disposed.
- .4 Submit proof that all asbestos workers and/or supervisor have received appropriate training and education by a competent person in the hazards of asbestos exposure, good personal hygiene and work practices while working in Asbestos Work Areas, and the use, cleaning and disposal of respirators and protective clothing. Instruction and training related to respirators is to include, at a minimum:
  - .1 Fitting of equipment.
  - .2 Inspection and maintenance of equipment.
  - .3 Disinfecting of equipment.
  - .4 Limitations of equipment.
- .5 Contractor is to conduct a risk assessment and document work procedures for actions/tasks that will or may disturb identified ACMs.
- .6 Contractor is to submit the documented work procedures to the Departmental Representative for review, at least 10 days prior to initiation of work.
- .7 Contractor must not proceed with work that will impact identified ACMs without approval from Departmental Representative.
- .8 If air monitoring is required as part of the Contractor's work procedures, Contractor to provide the required air monitoring and inspections, and provide monitoring data demonstrating compliance to WorkSafeBC requirement.
- .9 If, in the opinion of the Departmental Representative, the work procedures developed by the Contractor do not meet the intent of the 2017 WorkSafeBC publication "Safe Work Practices for Handling Asbestos", revisions will be required, at no cost to the Owner, and at no impact to the schedule.
- .3 Waste transportation to be conducted in accordance with BC Reg. 63/88 and the Federal Transportation of Dangerous Goods Regulation.
- .4 Waste disposal to be conducted in accordance with BC Reg. 63/88.
- .5 Notify Departmental Representative of suspected ACM discovered during Work and not apparent from drawings, specifications, or report pertaining to Work. Do not disturb such material pending instructions from Department Representative.
- .2 Lead and Lead-Containing Paints (LCPs)
  - .1 Refer to the Assessment Report for identities and locations of LCPs that will require disturbance during the Work. In summary, the following LCPs are known or suspected to be present in the building:

- .1 External wall - white paint
- .2 Internal walls - unconfirmed as present, assume lead containing until it has been sampled and analyzed.
- .2 Contractor is to conduct an assessment to determine presence/absence of lead on the paint on internal walls.
- .3 Any such assessment must be completed by a qualified person, in accordance with the requirements in WorkSafe BC.
- .4 Actions that will disturb lead-containing materials (including paints and materials coated with LCPs) are to be conducted in accordance with the requirements of the current version of the WorkSafe BC publication "Lead-Containing Paint and Coatings: Preventing Exposure in the Construction Industry", keeping airborne exposure to lead dust to less than the 8-hour Occupational Exposure Limit (OEL) for lead of 0.05 milligram per cubic metre (mg/m<sup>3</sup>).
- .5 Although LCPs and items coated with LCPs will be disturbed and/or removed for disposal during the Work, unless deemed necessary through risk assessment or cost analysis conducted by the Contractor, comprehensive removal of LCPs from items or surfaces is not expected to be required during the Work.
  - .1 Refer to the provisions of the 2012 WorkSafe BC publication "Lead-Containing Paint and Coatings: Preventing Exposure in the Construction Industry" for removal of LCPs from surfaces before any welding and torch-cutting, should the Contractor plan to use such methods to complete the Work.
    - .1 Contractor will be responsible for verification testing of surfaces where LCPs have been removed. Confirmation of acceptable results is to be provided to the Departmental Representative for review before proceeding with any welding or torch-cutting on surfaces where LCPs were present.
- .6 Waste transportation to be conducted in accordance with BC Reg. 63/88 and the Federal Transportation of Dangerous Goods Regulation.
- .7 Waste disposal to be conducted in accordance with BC Reg. 63/88.
- .3 Polychlorinated Biphenyls (PCBs)
  - .1 When decommissioned, verify the PCB content of fluorescent lamp ballasts as per the Environment Canada publication Identification of Lamp Ballasts Containing PCBs, 1991.
  - .2 Should a material suspected to contain PCBs become uncovered during renovation activities (i.e., dielectric fluids, hydraulic fluids), all work in the areas that may disturb the material should be stopped. Samples of the suspect material should be submitted for laboratory analysis to determine if PCBs are present.

- .3 PCB-containing items identified for removal and disposal should be handled, transported, stored and disposed of in accordance with the following:
  - .1 The transportation and disposal requirements of BC Reg. 63/88 .
  - .2 The transportation requirements of the Federal Transportation of Dangerous Goods Regulation.
  - .3 The Federal PCB Regulations (SOR/2008-273)
- .4 Mercury
  - .1 Removal, alteration and/or disposal of mercury-containing equipment is not anticipated to be required during the Work.
- .5 Silica
  - .1 When silica-containing materials are to be disturbed and/or removed (e.g., coring through concrete slabs, masonry block or drywall), ensure dust control measures are employed such that airborne silica dust concentrations do not exceed the exposure limit as stipulated by BC Reg. 296/97 (Cristobalite and Quartz – each 0.025 mg/m<sup>3</sup>). This would include, but not be limited to, the following:
    - .1 Providing workers with respiratory protection
    - .2 Wetting the surface of the materials, use of water or dust suppressing agents to prevent dust emissions
    - .3 Providing workers with facilities to properly wash prior to exiting the work area.

### 3.2 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 – Cleaning. Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 – Cleaning.
- .3 Waste Management: separate waste materials for reuse and recycling.
  - .1 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.
  - .2 Recycle hazardous wastes for which there is approved, cost effective recycling process available.
  - .3 Send hazardous wastes to authorized hazardous waste disposal or treatment facilities.
  - .4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.
  - .5 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.
  - .6 Dispose of hazardous wastes in timely fashion in accordance with applicable federal and provincial regulations.

- .7 Minimize generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.
- .8 Identify and evaluate recycling and reclamation options as alternatives to land disposal, such as:
  - .1 Hazardous wastes recycled in manner constituting disposal.
  - .2 Hazardous waste burned for energy recovery.
  - .3 Lead-acid battery recycling.
  - .4 Hazardous wastes with economically recoverable precious metals.

**END OF SECTION**