



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

**Bid Receiving Public Works and Government
Services Canada/Réception des soumissions Travaux
publics et Services gouvernementaux Canada**
800 Burrard Street, Room 219
800, rue Burrard, pièce 219
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

Title - Sujet EGD South Jetty Reconstruction	
Solicitation No. - N° de l'invitation EZ899-172412/B	Amendment No. - N° modif. 008
Client Reference No. - N° de référence du client	Date 2017-07-17
GETS Reference No. - N° de référence de SEAG PW-\$PWY-026-8060	
File No. - N° de dossier PWY-6-39315 (026)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-08-02	
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: Yi (PWY), Patty	Buyer Id - Id de l'acheteur pwy026
Telephone No. - N° de téléphone (778) 919-2578 ()	FAX No. - N° de FAX (604) 775-6633
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: PWGSC - South Jetty Reconstruction Esquimalt Graving Dock (EGD), Victoria, 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

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

Les documents français seront disponibles sur demande.

Amendment No. 008 is raised to incorporate the following:

- 1 Updates to the RFP document**
- 2 Extension to Closing date**
- 3 Inclusion of SUBMISSION REQUIREMENTS AND EVALUATION (SRE) – REVISED JULY 17, 2017**
- 4 Inclusion of Price Proposal/Bid and Acceptance Form – Revised July 17, 2017**
- 5 Inclusion of TABLES OF PROPOSAL DELIVERABLES – Revised July 17, 2017**
- 6 Questions and Answers**
- 7 Incorporate Addendum No. 003**

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pw026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

AMENDMENT 008

1. UPDATES to the RFP Document:
Please note the following changes:

1. **SI 2 PROCUREMENT STRATEGY FOR ABORIGINAL BUSINESS**

OMIT the sentence **Failure to provide this certification completed with the bid will render the bid non-responsive** and **REPLACE** with the following: **This certification should be provided with your bid submission at bid closing.**

2. **GI03 DEFINITIONS**

ADD (m) to GI03 DEFINITIONS

(m) "Bid and Acceptance Form" – same as the "Price Proposal Form"

3. **OMIT** title: **Annex A to Appendix 2: Set-aside Program for Aboriginal Business** and **REPLACE** with **Annex A to Appendix 3: Set-aside Program for Aboriginal Business**

4. **OMIT** the **SUBMISSION REQUIREMENTS AND EVALUATION (SRE)** section of the RFP document and **REPLACE** with the followed **SUBMISSION REQUIREMENTS AND EVALUATION (SRE) – REVISED JULY 17, 2017**

The **SUBMISSION REQUIREMENTS AND EVALUATION (SRE) – REVISED JULY 17, 2017** must be used when submitting your proposal.

5. **OMIT** the **PRICE PROPOSAL FORM – REVISED JUNE 28, 2017** of the RFP document and **REPLACE** with the following labelled **PRICE PROPOSAL/BID AND ACCEPTANCE FORM – REVISED July 17, 2017:**

The **PRICE PROPOSAL/BID AND ACCEPTANCE FORM – REVISED July 17, 2017** must be used when submitting your proposal. Any proposal submitted on a previous version of the **PRICE PROPOSAL FORM** will be considered non-compliant and therefore disqualified.

6. **OMIT** the **TABLES OF PROPOSAL DELIVERABLES** section of the RFP document and **REPLACE** with the followed **TABLES OF PROPOSAL DELIVERABLES – REVISED JULY 17, 2017.**

7. **PROJECT BRIEF**

In 5.9 **OMIT** stockpile at designated site on EGD facility and **REPLACE** with and disposal off site.

In 5.12 **OMIT** and stockpiling on site at a designated area and **REPLACE** and disposal off site.

In 6 **OMIT** to a designated stockpile on the EGD facility and **REPLACE** with to a disposal facility off site.

In 9 **OMIT** to a designated stockpile site within the EGD facility, and **REPLACE** with to a disposal facility off site.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

2. EXTENSION OF TIME

Extension of Time

Esquimalt Graving Dock South Jetty Reconstruction
 Esquimalt Graving Dock, Constance Cove of
 Esquimalt Harbour on Vancouver Island, BC
 EZ899-1472142/B

Notice is hereby given that the above information notice previously due at 2 :00pm PDST on July 26, 2017 is hereby **extended to 2 :00pm PDST on August 2, 2017.**

3. QUESTIONS, RESPONSES AND CLARIFICATIONS

Question 1:

We understand that the electrical and mechanical scopes are being priced independently through BOBS, does this process bind them to the PSAB and CSID requirements as well if they submit via BCCA (third party) mechanism as outlined in Amendment 001.

Answer 1:

Any inquiries to do with BOBS should be forwarded to BOBS.

Question 2:

We would like to know whether the 10 years of direct experience for the QEP (Section 2.15.1) refers to requiring 10 years of construction monitoring experience."

Answer 2:

Environmental monitoring for construction projects specifically related to compliance with the federal Fisheries Act is considered to be the most direct experience. It is not mandatory that the 10 years of direct experience be construction monitoring; however, less direct experience will be scored lower in the evaluation.

Question 3:

In the PWGSC South Jetty RFP, section 2.15.2 (page 35) states the Contractor should provide "the qualification of the QEP that will be responsible for environmental compliance". Is having a registered professional designation in BC (e.g. R.P.Bio. or P.Eng.) the only way to meet the QEP requirement?

Answer3:

Yes.

Question 4:

Is the QEP responsible for supervising staff conducting the work required to be on site during all monitoring activities, or can monitoring staff report on field activities to the QEP off site?

Answer 4:

Monitoring staff may report on field activities to the QEP off site. However, the QEP shall be responsible for the quality and accuracy of the environmental monitoring conducted.

Question 5:

Are any other monitoring staff besides the supervisor required to be registered professionals (i.e. have QEP designation)?

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Answer 5:

No, however; curriculum vitae shall be provided for all staff, clearly indicating the years of experience the project personnel have in the provision of the services specified in the Statement of Work (SOW) section. Skills and expertise for the personnel completing monitoring activities shall be applicable to the tasks they are completing; these shall include direct experience with projects occurring in and adjacent to Marine foreshore and near shore environments involving pile driving, drilling, concrete works including specific experience conducting workplace inspections, water quality monitoring, underwater acoustic monitoring and marine mammal observation.

IMPORTANT NOTE: The Statement of Work (SOW) includes:

- a) Request For Proposal Sec 2.15 Project Professional for Environmental Compliance
- b) Applicable sections of the Specifications and Drawings
- c) Applicable Appendices, including the Environmental Management Plan (EMP)

Question 6:

Section 22 05 00 In Clause 2.2 - Products – Base Bid and Approved Equal Manufacturers, the hot water heaters are gas fired. Is there gas on site?

Answer 6:

In Section 22 05 00 Clause 2.2 – DELETE Rinnai & Navien as alternate equals to instantaneous water heaters, and ADD “Chronomite” or approved alternate as an alternate equal to instantaneous electric water heaters.

Question 7:

Section 22 11 16 Clause 3.10.3.1. - Flushing and cleaning - submit to testing laboratory - confirm contractor to pay for testing.

Answer 7:

Contractor to include the cost of laboratory testing.

Question 8:

Need clarification/resolution regarding accessibility for 3 existing storm drain outfalls through sheetpile wall; also for 3 new storm drain outfalls: how to access for sampling?

Answer 8:

i) There are currently three existing 350mm storm outfalls discharging to the ocean under the jetty. For tender purposes, extend each of the three pipes approximately 5 meters. Confirm exact location of pipes on site. Install a 350mm inspection clean out. Provide label on cover reading “inspection port”. Cover to be H20 rated. Provide a check valve downstream of the inspection port, prior to discharging to the ocean. Discharge to ocean to have removable 16-gauge epoxy coated mesh screen with openings 50mm or less to keep animals out of pipes.

ii) There is an existing 100mm storm outfall pipe located near C-30. This line does not show up on the as built drawings. The mechanical contractor shall camera this line, and submit a sketch to the Departmental Representative showing this pipes routing.

Question 9:

Drawing SPCD1 / S18 Drawing SPCD1 shows width of panel is 1800mm. However, drawing S18 shows 1500mm. Please clarify.

Answer 9:

Width of panels are 1800mm.

Question 10:

Drawing SPCD1 Please clarify the dimensions on this drawing.

Answer 10:

See Amendment No. 006 for revised drawing SPCD1 Rev.3

Question 11:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Section 31 63 19.13 clause 3.3.12: Perform internal optical video camera inspection and real time 3D sonic imaging of rock socket walls and base. Video camera to have sufficient light source and capable of multi-axis rotation to view in any direction (i.e. around, up, down). Sonar imaging equipment to be capable of providing a complete image of the socket walls and base such that areas of roughness and overbreak of the socket walls can be detected. The sonar scan surveys shall be performed continuously along the sockets; and shall have sufficient accuracy and resolution to enable detection of the geotechnical features described above. Survey information shall be processed in real time such that the 3D socket surface image can be viewed during the course of the inspection. Please provide more details on the real time 3D sonic imaging technology.

Answer 11:

3D sonic imaging of the rock socket walls and base has been added to cover the scenario where turbid water conditions are encountered inside the pile after drilling the socket either due to improper sealing of the casing into bedrock or fissures in bedrock generating turbidity so that a good visual examination of the socket faces cannot be carried out using optical methods. In order to minimize delays associated with processing data, the devices and processes used should be able to record and display images collected on a real time basis to facilitate a quick decision to be made on site or in office rather than processing the data collected remotely.

Question 12:

Any potential or preferred inspectors for doing the 3D sonic imaging?

Answer 12:

We are unable to provide preferred inspectors for doing the 3D sonic imaging

Question 13:

Please clarify the discrepancy on the concrete compressive strength requirement between tables on Drawing G01 and Spec Section 03 39 00. Particularly, Type B, C, and F.

Answer 13:

For compressive strength requirements of concrete, use the strengths provided in the table in DWG G01.

Question 14:

Could you please provide the testing load requirements for the static (compression) load test as described in section 31 61 13 Item 3.14.

Answer 14

Maximum compression test load = 6 MN

Question 15:

In the South Jetty pile table on S19 there is a 914 dia pile shown at Bay Line 30 – C however no other drawings show a pile in that location. Please review.

Answer 15:

See revised drawing S19 in Amendment No. 005.

Question 16:

On page S-15 of the drawings sections 1 and 2 are supposed to be taken from pages S-07 and 08. Please review.

Answer 16:

Section 1 refers to 2000 wide pile caps, Section 2 refers to 1800 wide pile caps

Question 17:

Is there any information available on how deep the contamination extends under the capping?

Answer 17:

A detailed site investigation was conducted prior to the remediation (dredging) and engineered capping of the South Jetty area. Contamination was identified up to 6.7 metres below mud line. In addition, the former South Jetty structure was supported by creosote-treated timber pilings, with embedment depth of

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwyo26
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

approximately 9 metres. Contaminated sediments may therefore be encountered within the engineered cap area to a depth of at least 9 metres below the current seabed surface, primarily expected to be associated with creosote wood debris.

Question 18:

We are looking at the piling scope for the above project and the following question arose: Drawing S16 is specifying the required casing outside diameter as 914mm with 850mm dia rock socket and 762mm OD with 706mm rock socket. Furthermore, drawing S17 stating that 22mm WT casings to be used with 6mm thick backing plates. Considering this the remaining clearance between the drilling tool and the inside of the backing plate is 4mm for the 914mm OD piles and 0mm (zero) for the 762mm OD piles. This is insufficient. Please advise if the rock socket diameter could be reduced to 780mm for the 914mm OD and 650mm diameter for the 762mm OD piles.

Answer 18:

The proposed socket diameters of 780 mm for the 914 mm diameter pipe piles and 650 mm for the 762 mm diameter piles are acceptable.

Question 19:

Mechanical Division 22: Please provide a Description as well as Measurement and Payment details for Unit Price Item 80 Mechanical Kiosks and Freeze Protection Station.

Answer 19:

See Section 22 42 01 Plumbing Specialities and Accessories Clause 2.

Question 20:

Mechanical Division 22: Where is the Freeze Protection Station located? We cannot find it noted on any plan drawings.

Answer 20:

The freeze protection station is a new enclosure on the side of the building. Refer to DWG M2 for the location of the station, and Section 22 42 01 Plumbing Specialities and Accessories Clause 2.5 for details of the enclosure.

Question 21:

Electrical Division 26: Please provide a Description as well as Measurement and Payment details for Unit Price Item 81 Electrical

Answer 21:

Payment will be made as a percentage of completion. The full electrical scope of work is shown on the drawings and in the specifications.

Question 22:

Excavation, Trenching and Backfilling 31 23 33.01: Please provide Measurement and Payment details for the Upland Overburden Bulk Excavation at East Approach Retaining Wall

Answer 22:

See drawings S60, S61, C1A, C1B and C2 to C4.

Question 23:

We request a proposal closing extension to July 28th to competitively price all aspects of this large project.

Answer 23:

Closing has been extended to July 26 as per Amendment No. 004.

Question 24:

Steel Pipe Piles: 31 62 16.20: Drawing S17 shows a Typical Shear Ring Detail - Interior required for both the 762Ø and 914Ø pipe, which calls up a 1/4" fillet weld top & bottom to install a 6 x 12.7 shear ring 600

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

mm down the pipe from the cut off location. We believe this weld is a safety concern and ask that an alternative 3/8" weld top be approved.

Answer 24:

Refer to drawing S17 Rev3 for updated welding details.

Question 22:

Metal Fabrications 05 50 00: Drawing S41 Seismic Movement Joint shows nominal dimensions for the West Jetty = 75.796 m and the South Jetty = 241.957 m, the sum of which is 317.753 m. The Unit Price Table for Item 83 Seismic Joint has an Estimated Quantity of 290 m. Please explain the discrepancy.

Answer 22:

The estimated quantity has been revised to 305 m in the Price Proposal/Bid and Acceptance Form – Revised July 12, 2017.

Question 23:

Where should the Utility Support Below Existing Structure, shown on Drawing S44, be priced in the Unit Price Table?

Answer 23:

Item 90 has been added to the Price Proposal/Bid and Acceptance Form – Revised July 12, 2017 for pricing of the reinforced concrete utility support below the existing structure. Metal fabrication will be measured under 05 50 00 Metal Fabrications.

Question 24:

Metal Fabrications 05 50 00 On Drawing G04 there looks to be a ladder at GL 11 but no break in the concrete bull rail. There is also no strip fender. Is this correct?

Answer 24:

Ladders locations are correct - add break in bull rail at ladder at GL 11.

Question 25:

Metal Fabrications 05 50 00 On Drawing G04 there looks to be a ladder between GL 28 & GL 29 but no break in the concrete bull rail. Is this correct?

Answer 25:

Ladder location correct - add break in bull rail between GL 28 and GL 29.

Question 26:

Cast-in-Place Concrete 03 30 00 Please confirm the CIP bull rail is 450 wide along the North and West faces of the West Jetty (S23), but 400 wide along the South face (S21). Also, that the bull rail is 400 wide along the entire South Jetty, including the East end, complete to the retaining wall. These widths exclude the actual cleat and bollard locations of course, where it is wider to accommodate the mooring devices.

Answer 26:

Base tender on all bull rails being 400 wide.

Question 27:

Cast-in-Place Concrete 03 30 00 Please clarify the length of the wider bull rail sections at each bollard location. Drawing S11 & S12 appears to show bollard locations are 1792 long, while the detail on Drawing S28 appears to show it as 1820 long

Answer 27:

The actual length will depend on the type of bollard used. For the type of bollard shown on drawing S28, the width of 1820 should be used.

Question 28:

Cast-in-Place Concrete 03 30 00 Please clarify the length of the wider cleat sections at each cleat location. Drawing S11 & S12 appears to show bollard locations are 1011 long, while the detail on Drawing S29 appears to show it as 1000 long

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Answer 28:

The actual length will depend on the type of cleat used. For the type of cleat shown on drawing S29, the width of 1000 should be used.

Question 29:

Cast-in-Place Concrete 03 30 00 Please confirm that a 2000 wide Pile-Cap closure pour is required between GL C CC2 on GL 27, and that this should call up the Section 3 detail on Drawing S15.

Answer 29:

Pile caps on GL 27 are 2000 wide as per DWG SPC13 and SPC14 and Section 3 on DWG S15.

Question 30:

Cast-in-Place Concrete 03 30 00 Please provide N-S and E-W sections through the closure pours at GL 29, GL 30 & GL 31

Answer 30:

These will be provided with the construction drawings.

Question 31:

Cast-in-Place Concrete 03 30 00 Please confirm Drawing S08 should have a 1353 Wide Deck Panel End closure pour note on GL 29.

Answer 31:

On DWG S08, there should be a note on top of GL 29, similar to the notes on GL 30 and 31 indicating that the closure pour is 1353 along that portion of the closure pour.

Question 32:

Cast-in-Place Concrete 03 30 00 In reference to Drawing S60 & S61, are there any reinforcing requirements in the new 150mm thick concrete slab?

Answer 32:

Use 152 x 152 – MW9.1 welded wire fabric.

Question 33:

Cast-in-Place Concrete 03 30 00 Please clearly specify what concrete work will be paid under Unit Price Table Item 24 Cast-in-Place Concrete: Other Reinforced Structures

Answer 33:

This is for miscellaneous concrete, as yet undetermined.

Question 34:

Pavement Marking 32 17 23 Please provide specific Measurement and Payment directions for Unit Price Table Item No. 59 Pavement Marking: Bull rails in relation to how the lineal meters of bull rail painting. For example, does it include the bull rail length only where the bull rail is 400 and 450 wide, or does it include the length in front of and/or around the cleat and bollard locations also? We are not understanding how the estimated quantity of 550 lineal meters was calculated as we get a quantity roughly 100 lineal meters less.

Answer 34:

Base tender on painting of 400 wide bull rails including the vertical sides and top of concrete at the cleats and bollards. The estimated quantity is to remain as is.

Question 35:

Pavement Marking 32 17 23 Please provide a detail for painting at both the cleat and bollard locations as the notes on both Drawings G03 and G04 indicate there should be a painted area of "2500 square" and this instruction does not seem to make sense with the dimensions of raised flat concrete around the cleat and bollard locations.

Answer 35:

Base bid on painting a flat area 2500 wide by 2500 deep centered on the bollard or cleat.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwyo26
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Question 36:

Pavement Marking 32 17 23 For Unit Price Table Item No. 60 Pavement Marking: Concrete Deck, in the Specification under 1.2.1 Measurement and Payment it says this item is for "square meters of painted surface for large flat areas on the concrete deck". The only areas we see this to be is the flat areas around the mechanical kiosk, as well as the raised flat areas around the cleats and bollards. Is this the full scope, or are there areas intended to be painted that we are missing? Please clarify as we do not understand how the estimated quantity of 500 square meters was calculated.

Answer 36:

This is an estimated quantity to include yet to be determined additional areas within the work site that may require painting.

Question 37:

Pavement Marking 32 17 23 We cannot find any scope details for Unit Price Table Item No. 61 Pavement Marking: Solid or Dotted Lines on the drawings or described in the Specifications. Please provide additional information.

Answer 37:

Refer to Section 32 17 23 Pavement Marking Clause 1.2.1. This is to be used to demarcate areas on or adjacent to the works, such as the fire lane between the buildings and the south jetty.

Question 38:

Precast Concrete 03 41 00 Many of the Precast Fender Supports and Pile Caps have closure pours above the pile locations that consist of a cylindrical portion and an angle portion. Please provide the depth of the cylindrical portion for all variations.

Answer 38:

Refer to precast drawings (S FS and S PC series). Base bid on estimated closure pour quantity in unit price table.

Question 39:

Steel Pipe Piles 31 62 16.20 What is the design bearing capacity for all the piles?

Answer 39:

Ultimate Compression Load Capacity = 9 MN

Question 40:

Appendix C2 Esquimalt Graving Dock Environmental Management Plan by Keystone Environmental (2016) contains Appendix B Permits and Approvals which is a letter from DFO stating that "Provided that the mitigation measures identified in your Request for Review form are incorporated into your plans, the Program is of the view that your proposal will not result in serious harm to fish. No formal approval is required from the Program under the Fisheries Act in order to proceed with your proposal." Please provide a copy of the Request for Review form submitted to DFO.

Answer 40:

The environmental mitigation measures for the South Jetty Reconstruction are specified in the tender documents, including the Environmental Management Plan (EMP). The Request for Review form will not be provided. The Contractor is responsible for ensuring that all work is conducted in accordance with Laws and Regulations. There may be mitigation measures in addition to those specified in the tender documents that are required in order to ensure compliance with the Fisheries Act and other Laws and Regulations, depending on the Contractor's means and methods. The Contractor and the Contractor's Qualified Environmental Professional (QEP) shall be responsible for identifying and implementing any other mitigation measures required to ensure compliance with the Fisheries Act and other Laws and Regulations.

Question 41:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Steel Pipe Piles 31 62 16.20 According to the Canadian Foundation Engineering Manual, 19.5.4.2 the rated energy of a hammer should be limited to a value of $6 \times 106 \text{ J (NM)}$ x the cross sectional area of the pipe. The D150 exceeds this value and the driving criteria of 15 blows/25mm will likely cause damage to the piles. Can the piling contractor propose a pile hammer and propose driving criteria based on a weep analysis? What is the load capacity of the piles?

Answer 41:

Yes, if there are concerns with energy and associated pile damage during seating and confirming capacity, the contractor can propose a pile driving hammer and driving criteria based on pile driveability analyses carried out using WEAP analysis. Ultimate compression load capacity = 9 MN.

Question 42:

Rock Sockets for Piles 31 63 19.13 - 1.6.4.4.1 refers to drilling of "probe holes". We cannot find any details of probe holes on the drawings or elsewhere in the specifications. Please confirm the requirement for probe holes and provide relevant drawings and specifications.

Answer 42:

Delete and replace Clause 1.6.4.4.1 with: "Provide details of equipment and procedures for excavating, drilling, cleaning out piles and rock sockets".

Question 43:

Cast-in-Place Concrete 03 30 00 In reference to Drawing S49 for the two (2) CIP Oil Water Support Beams, where should this CIP concrete be priced? Each beam appears to be roughly 14m³ so they don't appear to fit within Unit Price Table Item #24 Cast-in-Place Concrete: Other Reinforced Concrete Structures.

Answer 43:

Include these in Unit Price Table Item 24. The quantity in this item has been changed to 40 m³.

Question 44:

Cast-in-Place Concrete 03 30 00 In reference to Drawing S49 for the two (2) CIP Oil Water Support Beams, at what elevation are these beams to be set? We cannot find a detail.

Answer 44:

The elevation will depend on the type and size of oil water separator chamber used. Refer to mechanical drawings.

Question 45:

Cast-in-Place Concrete 03 30 00 Drawing S60 shows a Detail 1 but makes no indication of where the detail is from. Please clarify.

Answer 45:

The location of the control joints will depend on how the contractor constructs the wall. The requirement is that the joints should be spaced at a no more than 6000 o/c along the wall.

Question 46:

Cast-in-Place Concrete 03 30 00 Drawing S60 in Section 3, it shows a Section 5 through the pile and also a Section 5 through the retaining wall, however there is only Section 5 detailed through the pile. Please clarify where the Section 5 through the retaining wall can be found.

Answer 46:

On drawing S60 in Section 3 - delete the upper reference to Section 5.

Question 47:

Cast-in-Place Concrete 03 30 00 Drawing S61 shows a Detail 2 but makes no indication of where the detail is from. Please clarify.

Answer 47:

The location of the control joints will depend on how the contractor constructs the wall. The requirement is that the joints should be spaced at a no more than 6000 o/c along the wall.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Question 48:

Steel Pipe Piles 31 62 16.20 Are there any requirements for diver/survey inspections of the existing engineered cap after pile driving/drilling?

Answer 48:

Refer to Section 31 61 13 Clause 3.2.

Question 49:

Asphalt Paving Removal 02 41 13.14 In our experience at EDG, the asphalt demolition can be very onerous and time consuming. Is there a specification on how the existing asphalt was installed?

Answer 49:

These records are not available.

Question 50:

General Instructions 01 11 55 - 1.9.1.5 – reads “Contractor shall make allowance in its construction schedule for delays or interruptions due to vessel movement in the EGD Water lot, specifically if Contractor equipment is blocking navigation lane in or out of the Graving Dock.” Please define “allowance” - 5 days? 1 day? 5 hours?

Answer 50:

Vessels will move in and out of the graving dock at various times throughout the construction period, as per the summary of vessel bookings provided on the web link in clause 1.9.1.1. The summary shows that there are periods of time when there are no vessel movements in or out of the dry dock. Delays or interruptions due to vessel movements will depend on how the contractor sequences their work to accommodate these movements, as per clause 1.9.1.3.

Question 51:

Are there any activities that would interrupt diving?

Answer 51:

Activities in Esquimalt Harbour have the potential to interrupt work; for example, sonar testing conducted by DND may interrupt diving operations. The Contractor shall liaise with the Queen's Harbour Master to identify any Harbour activities that may affect the work, and coordinate the work with those activities. The Contractor is required to coordinate all vessel movement outside of the Work Site with the Queen's Harbour Master.

Question 52:

Are there any activities that would interrupt pile driving?

Answer 52:

Pile driving and other activities shall be completed as per the specifications and contract documents (including the EMP and WQMP). Should any environmental issues be identified by the QEP and/or QAEM during pile driving activities that are not consistent with any of the contract documents, the Contractor shall implement corrective action. The Departmental Representative (DR) has the discretion to issue a stop work order should the Contractor's corrective actions not rectify the issue so as to be compliant with the contract. EGD operations have the potential to interrupt work; the Contractor is required to coordinate work with EGD operations, via the Departmental Representative. The Contractor shall liaise with the Queen's Harbour Master to identify any Harbour activities that may affect the work, and coordinate the work with those activities. The Contractor is required to coordinate all vessel movement outside of the Work Site with the Queen's Harbour Master.

Question 53:

Can falsework piles be used? Are there any restrictions?

Answer 53:

If used, installation and removal of falsework piles shall be performed so as to not damage the existing engineered cap. The Contractor is responsible for any damage to the cap and shall be required to repair

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

the cap at their own cost if damage is observed. Refer to specification sections 31 61 13 (Pile Foundations General Requirements) clause 3.2.5, and 35 37 10 (Existing Engineered Capping), clause 1.1.1.

Question 54:

Are there any restrictions to using spud barges?

Answer 54:

The Contractor shall not use spuds to anchor barges or for other purposes in the area of the East End Engineered Cap once constructed. Use of spuds shall not cause damage to the existing engineered cap. The Contractor is responsible for any damage to the cap and shall be required to repair the cap at their own cost if damage is observed. Refer to specification sections 31 61 13 (Pile Foundations General Requirements) clause 3.2.5, 35 37 10 (Existing Engineered Capping) clause 1.1.1, and 35 37 10.01 (East End Slope Capping) clause 3.2.11.

Question 55:

Does pile water have to be contained and treated, or can it be put back into a silt curtained area?

Answer 55:

The Contractor and Contractor's Qualified Environmental Professional (QEP) shall determine appropriate measures as part of the Environmental Protection Plan (EPP). The Contractor shall conduct water quality monitoring under the direction of the (QEP) as per the contract requirements (i.e. EMP and WQMP). If water quality results exceed the specified criteria/guidelines (as per evaluation and response procedures outlined in the EMP), the Contractor will be required to take corrective action. All works must be conducted in compliance with the Fisheries Act.

Refer to Specifications Section 01 35 13.43 (Special Procedures For Contaminated Sites) clause 1.1.7: "Contractor is responsible for its actions if they result in recontamination of areas within the Contractor's Work Site or within the EGD Waterlot, or areas outside the EGD Waterlot, that remediation has been completed as part of previous work. Contingency action to clean up uncontaminated areas that are contaminated as a result of Contractor operations will be the responsibility of Contractor at Contractor's own cost."

Question 56:

Does water from tremie pile pours have to be contained and treated, or can it be put back into a silt curtained area?

Answer 56:

The Contractor and Contractor's Qualified Environmental Professional (QEP) shall determine appropriate measures as part of the Environmental Protection Plan (EPP). The Contractor shall conduct water quality monitoring under the direction of the (QEP) as per the contract requirements (i.e. EMP and WQMP). If water quality results exceed the specified criteria/guidelines (as per evaluation and response procedures outlined in the EMP), the Contractor will be required to take corrective action. All works must be conducted in compliance with the Fisheries Act.

Question 57:

Do the piles to be removed under the demolition works have to be cleaned? If so, what are the requirements/procedure?

Answer 57:

The Contractor and Contractor's Qualified Environmental Professional (QEP) shall determine appropriate procedures for management and disposal of all debris and waste materials as part of the Environmental Protection Plan (EPP), consistent with the contract documents and Laws and Regulations.

Question 58:

Do falsework piles have to be cleaned upon removal?

Answer 58:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

The Contractor and Contractor's Qualified Environmental Professional (QEP) shall determine appropriate procedures for management and disposal of all debris and waste materials as part of the Environmental Protection Plan (EPP), consistent with the contract documents and Laws and Regulations.

Question 59:

Is there an existing approval treatment for drill spoil?

Answer 59:

No

Question 60:

Can anywhere within the extents of the project work site (as shown in Drawing G02) be utilized for temporary mooring locations? Are there any locations outside of this area that can be utilized for temporary mooring?

Answer 60:

The South Jetty Project Site and Work Area Limits shown on drawing G02 can be used for temporary moorage, provided the entrance to the graving dock is not blocked, the contractor takes full responsibility for their vessels that are moored at this site, that no permanent structures are damaged as a result of mooring of vessels, and any damage or disturbance to the engineered capping as a result of using temporary piles is repaired according to the specifications. A temporary moorage plan is to be approved by the Departmental Representative prior to mooring of any vessels.

Temporary moorage within Esquimalt Harbour may be possible, however it is at the discretion of the Queens Harbour Master, which EGD has no control over. Understanding that there will likely be multiple construction projects simultaneously within Esquimalt Harbour around the same time frame as this project, temporary moorage may be limited.

Temporary moorage within the EGD waterlot will be made available for his project at the approximate location shown in the figure below. There are two existing piles within this location.

The piles are:

914mm diameter

19.1mm wall thickness

Approximately 100ft length (each)

Approximately 30ft embedment depth

Corrosion protection – "some sections of the piles are coated"

We are unaware of any engineering design that has been done on the piles, and therefore do not know their lateral load capacity.

It is unknown what the capacity and condition of these piles are. Use of this site will be subject to submitting a moorage plan to the Departmental Representative, approval by the Departmental Representative, and providing PSPC with an acceptable waiver indemnifying the PSPC and EGD of any liability as a result of using this site. Any disturbance to the seabed in the vicinity of this location as a result of the contractor using this site will be repaired at the contractors cost to the satisfaction of the Departmental Representative. Additional environmental requirements relating to the use of this temporary moorage are to be followed and are included as a new Appendix F10: EGD – SOP Controls for the Protection of Remediated Areas.

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME



Question 61:

Are secondary surveys by an independent survey company required?

Answer 61:

Refer to specifications and section 01 11 55 clause 1.31.

Question 62:

Do we have to stop construction until surveys are approved?

Answer 62:

For surveys required for the East End Excavation and East End Engineered Capping construction activities, the Contractor may continue to perform construction work at its own risk, while surveys are being performed and reviewed for acceptance. The Contractor is responsible for any corrective actions that may be required following review of post-construction surveys if the contract requirements are not satisfied.

Question 63:

What is the approval timeline for inspections during pile installation?

Answer 63:

The piles will be approved within 3 working days of receipt of the video record or electronic scan image of the rock socketed piles. Piles driven to competent bearing strata will be approved within 5 working days after receipt of the PDA/CAPWAP results from dynamic testing.

Question 64:

Will the existing marina be relocated to provide access to east end of the South Jetty?

Answer 64:

No

Question 65:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Drawing C1 notes there is an area where "armour rock to be graded in this area to cover geomembrane and complete slope to deck." To confirm, this means we are re-grading existing in place armour rock, correct?

Answer 65:

The design intent for this area is to re-grade existing material to cover exposed areas of the geomembrane and soil/sediment adjacent to the existing concrete retaining wall and underside of the concrete jetty deck. However, additional armour material may be required to cover all exposed areas and ensure slope stability.

Question 66:

Section D on Drawing C3 shows only a profile of the existing grade. How is this to be re-graded?

Answer 66:

Contractor shall propose means and methods to re-grade the slope (potentially including placement of additional material) as part of the Construction Work Plan.

Question 67:

What is the acceptance criteria and how will acceptance be determined?

Answer 67:

Acceptance for this small area of the contract work will be based on visual inspection as the work is completed, confirming that all exposed areas of geomembrane and soil/sediment have been covered with armour rock.

Question 68:

What if there is not enough material to achieve the acceptance criteria?

Answer 68:

Additional armour material may be required for placement in this area based on Contractor inspection of the existing conditions. The estimated volumes presented in Specifications Section 35 17 10.01 (East End Slope Capping), Table 35 17 10.01-1 are inclusive of any additional armour material that may be required in this area of the work site to complete the slope re-grading activities. Photos of the underside of the deck and in the vicinity of the East End showing as constructed conditions as at July 10 2017 have been added to Appendix F9.

Question 69:

Drawing C1 and C3 also indicates "there are areas along the existing retaining wall with observed gaps below the foot of the wall (to remain)". Does this mean we are not to attempt to fill these areas while regrading? Is there more information on where these areas are? What if the slope and/or retaining wall becomes unstable due to undermining during the armour rock re-grading process?

Answer 69:

Drawing C1 has been replaced by drawings C1A Rev. 1 and C1B Rev. 1 issued in previous amendment. The original text indicating "to remain" was referring to the portion of the existing concrete retaining wall that will not be demolished as part of the South Jetty Reconstruction Project. As per the Specifications, any gaps in the rock armour are to be filled during re-grading. See photographs provided with this amendment as further information on existing site conditions. The Contractor is responsible for ensuring slope and structural stability during the armour rock re-grading, and should plan, execute and monitor the work accordingly. If undermining, erosion, or slope or structural instability is observed during excavation and demolition of the portion of the concrete wall identified on the Drawings for removal, the Contractor shall immediately notify the Departmental Representative (DR).

Question 70:

Are there any towing rules and/or restrictions at EGD or in Victoria Harbour for bringing in marine construction equipment that we should be aware of?

Answer 70:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Esquimalt Harbour is administered by the DND and is governed by the Canada Marine Act, Transport Canada's Natural and Man Made Harbour Regulations and local policies and procedures. The Harbour Authority is the Queen's Harbour Master, Canadian Forces Base (CFB) Esquimalt. Please contact the Queen's Harbour Master for any towing rules and/or restrictions. Also refer to Appendix B4a – Practices and Procedures Pursuant to the Canadian Marine Act, for more information on towing in Esquimalt Harbour.

Question 71:

Use of a silt curtain is only addressed in the Specification in regards to the East End Capping works. Is a silt curtain anticipated to be required for pile driving and/or drilling activities?

Answer 71:

Use of a silt curtain is mandatory for the East End Slope Excavation as per Specifications Section 35 20 23. For other areas of the site and for other activities, the Contractor and Contractor's Qualified Environmental Professional (QEP) shall determine as part of the Environmental Protection Plan (EPP) how to conduct the work to comply with the EMP, the Fisheries Act (including the Marine Mammals Regulations), and other Laws and Regulations.

Question 72:

Can barge transport be used for transportation of excavated material to disposal grounds?

Answer 72:

No.

Question 73:

Please provide analytical data and a corresponding plan reference for the area of excavation for upland disposal at the east end.

Answer 73:

There is no analytical data for the Upland Overburden or East End Slope material to be excavated. The only analytical data available is from nearby sample locations A13BH17 and DC11-13; see attached figures and analytical data, presented in new Appendix H2: Extracts from Detailed Site Investigations – Golder 2013, SLR 2014. This data may not be representative of the actual soil/sediment conditions and is provided for information purposes only. Other data included pertaining to other areas of the site may not be representative of current site conditions as the data is from pre-remediation investigations. For bidding purposes, all soil/sediment to be excavated shall be considered to be classified for disposal under the BC Contaminated Sites Regulation as Industrial IL+ waste material, requiring disposal at a Disposal Facility. As per previous tender amendments issued, after contract award the Contractor shall be responsible for all testing of soils as necessary for health and safety, transport, disposal, and compliance with Laws and Regulations. In-situ testing or test-pitting prior to excavation will be permitted.

Question 74:

We would like to know how much it will cost to lease a laydown area for the project. We are interest in Lot 203 and any others in the area.

Answer 74:

There is no space available in Lot 203 for additional Project Lay down for the South Jetty Reconstruction project. In addition, there is no other Contractor Project laydown space available anywhere else at the EGD.

Question 75:

Are any locations outside of the Work Area that can be utilized for temporary mooring?

Answer 75:

This question has been answered above.

Question 76:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

The Unit Price Table was revised to include Item No. 88 "Package B Protective Wrap to Existing Piles". This includes the pricing as part of Total Bid Amount (A). However, it is still also shown as Optional Work (B) and therefore the TOTAL PRICE PROPOSAL table as shown now will included for the Protective Wrap twice. We don't believe this is the intention. Please clarify.

Answer 76:

Optional Work (B) has been removed from the Price Proposal/Bid and Acceptance Form – Revised July 12, 2017 under this Amendment.

Question 77:

The Unit Price Table still describes Item No. 87 as "Mooring Cleats: 37.5 tonne" and there are still references to 37.5 Tonne Cleats on Drawing G03. Please confirm these references simply need to be updated and there is not a mixture of 34 tonne and 37.5 tonne cleats.

Answer 77:

Unit Price Item 87 has been revised to 34 tonne cleats in this Amendment.

Question 78:

Please provide details on the Existing Cathodic Protection System to be removed.

Answer 78:

See Amendment No 007.

Question 79:

Amendment 005 provided an updated DWG S19 as a response to Q14 & Q15, but this new drawing revision 3 did not update the South Jetty Piles for piles from Bay Lines 18 through to 24. Please update this drawing or indicate reasoning behind why it was not updated, as we do not understand.

Answer 79:

For Bay Lines 18 through 24 change C1 to C2 and change D1 to D2.

Question 80:

In Amendment 005 the answer to Q10 indicates that the first section (RHS) on Drawing S17 R2 refers to all fender panel piles along line A, line B, line 1, line 2, line P and line N. This would mean there is one rebar cage at the top of the pile and concrete fill is to mudline. Please confirm that all piles along line P and line N (except 3-N) are socketed, so although the section (RHS) on Drawing S17 R2 may detail the top rebar cage, these piles in fact have concrete full length (as opposed to mud line) and also have a second bottom rebar cage.

Answer 80:

All the piles along line P and line N (except 3-N) are socketed, as per drawing S19. Drawing S17 refers to the top reinforcing detail, and drawing S16 shows the rock socket reinforcing.

Question 81:

In Amendment 005 the answer to Q22 says "PWGSC is paying for the PDA". How will the Contractor be compensated for time for any PDA tests above the allowed 30 each?

Answer 81:

As per the Price Proposal/Bid and Acceptance Form – Revised July 12, 2017 Section C: Approved Changes to the Contract.

Question 82:

Please provide clarification on the disposal of the East End Slope Excavation.

Specification 35 20 23 indicates the Contractor is to dispose of the material, by the following clauses:

1.1.6 No temporary stockpiling of excavated materials is allowed

1.1.8 Contractor becomes the owner of, and is responsible for, any soil, sediment, excavated material, debris, waste, or other material once it is removed or excavated to be loaded onto a vehicle or vessel for transport to a Contractor provided Disposal Facility.

However, the Project Brief indicates the Contractor is to be transported to a designated stockpile at the

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

EDG facility, by the following clauses:

.5.12 Removal and stockpiling on site at a designated area, any contaminated material, as directed by Departmental Representative.

.6 Contractor becomes the owner of, and is responsible for disposing off-site, any demolished concrete including reinforcing steel or timber. Excavated material, soil or sediment will be transported to a designated stockpile on the EGD facility.

.9 The work will require a planned, careful, and flexible approach by an experienced Contractor to ensure that structures are constructed carefully, contaminated sediment or contaminated excavated materials are trucked to a designated stockpile site within the EGD facility, existing structures to remain are not disturbed, and that in-water placement of materials is performed according to the methods described in the Contract Documents in order to maintain environmental quality throughout completion of the work.

Answer 82:

The Project Brief has been updated in this Amendment to be consistent with Amendment No. 007, which notes that any references to stockpiling of excavated soils by the Contractor, and testing of soils by the Departmental Representative, shall be removed from the tender documents. Stockpiling of excavated soils is not permitted on-site. Contractor shall assume responsibility and include all costs for excavation, testing (as necessary), transport and disposal of all excavated soils as part of the project. For bidding purposes, all excavated soil shall be considered to be classified for disposal as Industrial IL+ waste material. The Contractor shall be responsible for all testing of soils as necessary for health and safety, transport, disposal, and compliance with Laws and Regulations. In-situ testing or test-pitting prior to excavation will be permitted.

Question 83:

From Drawing S19 Rev 3 there are:

- 762 dia. - 32 rock sockets, 3.5 meters long, total length - 112 lin.m
- 762 dia. - 7 rock sockets, 3.2 meters long, total length - 22.4 lin.m
- 762 dia. - 7 rock sockets, 6.8 meters long, total length - 47.6 lin.m
- 914 dia. - 4 rock sockets, 3.5 meters long, total length - 14.0 lin.m

Total sockets for 762 dia. - 182 lin.m

Total sockets for 914 dia. - 14 lin.m

TOTAL Sockets = 196 lin.m. but the Unit Price Table Estimated Quantity is 189 lin.m

Is there something we are missing here that reconciles the discrepancy? Should there be a distinction between the two socket sizes as it will be much more expensive per lin.m to mobilize for the 914 dia piles due to the small quantity?

Answer 83:

Unit Price Item 75 has been updated to 200m for the rock sockets.

Question 84:

Please identify where the areas are located for bid items 11 "Concrete base under asphalt paving", and 12 "Concrete parapet wall".

Answer 84:

The concrete base under asphalt paving is shown on drawing S61 section 5.

The concrete parapet wall runs along the west portion of the existing jetty (refer to drawing D03). It is about 500mm tall by 300mm wide, and likely has steel reinforcement. Unit Price Item 12 quantity has been revised to 10 m³.

Question 85:

Are the threaded #14 bars shown on page S18 of the drawings Dywidag bars?

Answer 85:

Threaded bars are specified on drawing S17 detail C.

Question 86:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Mechanical / Electrical General Backfill requirement is missing for buried mechanical pipings and electrical conduits. For buried mechanical pipings and electrical conduits, please provide section view showing required cover below top of asphalt and other backfill requirement.

Answer 86:

Provide minimum 600 mm thick import granular fill compacted to 95% modified proctor density.

Question 87:

Is the 3m of extra pipe for each pile shown in the table on page S19 of the drawings coated or uncoated? How is that extra 3m paid for if it's not required?

Answer 87:

Base bid on unit price table quantities, exact depths to bedrock and required pile bearing lengths may vary.

Question 88:

Metal Fabrications 05 50 00: Related Sections 1.2.7 refers to Specification 26 05 27 Grounding, however this does not appear to have been included in the package. Please provide.

Answer 88:

Refer to revised electrical drawings.

Question 89:

Cast-in-Place Concrete 03 30 00 In reference to Drawing S44, please provide clarification on the shaded area shown in section 2. There is a leader that describes it as "1200x900 cast-in-place conduit space" but from the dimensions on the section, this description only applies to the inside area of what looks to be a "U-Shaped" member of size 1800x1200. There also appears to be reinforcing that is within the "U-Shape" but also in the 1200 x 900 area. Is this to be a 2-staged cast-in-place pour, with the "U-Shaped" member poured first, the utilities placed inside, then encased in a 2nd concrete pour? Or? Please provide a thorough explanation of what is intended here.

Answer 89:

The duct bank may be mono-poured with conduit in place or 2 stage poured depending on Contractors means and methods. All reinforcing is in the u-shaped portion, the 1200x900 space is for conduit and concrete only.

DWG S44 is replaced in this amendment and drawing S44-A is added for further clarification.

Question 90:

In Amendment 005 the answer to Q24 indicates that the difference between the total number of piles and the number of reinforcing cages for Unit Price Form Items #15, #16, #17 & #18 is because "some piles have reinforcing cages top and bottom." However, it appears that in the revised Unit Price Form included in Amendment 005, that these Items #15, #16, #17 & #18 have been updated to account for "1 each" per pile with reinforcing, regardless if there is a cage top and bottom. Is this observation correct, despite the answer to Q24? This also means there are units within Items that are not equal, such as some piles will be single cages and some double cages within the same Unit Price Item.

Answer 90:

Quantities for reinforcing should not have been changed in previous Amendment. Refer to revised Unit Price Table for new quantities.

Question 91:

Measurement and Payment 1.3.1 for 31 62 16.20 Steel Pipe Piles says steel pipe piles will be measured from tip elevation to cut-off elevation, and therefore the Estimated Quantity in the Unit Price Table should be the Design Length of the piles. However on the current version of the Unit Price Table the Estimated Quantity is the Fabricated Length of the piles, which includes the 3m cut-off allowance, which is not payable per the Measurement and Payment terms. Please revise the Unit Price Table for the UNCOATED line Items #68, #70, #71, #72 & #74 so the Estimated Quantity corresponds to the Measurement and Payment terms.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Answer 91:

Base bid on unit price table quantities, exact depths to bedrock and required pile bearing lengths may vary.

Question 92:

Please review and revise the Unit Price Table for the Jetty Support Piles, Items #67-#70 as the Estimated Quantities are not accurate and do not reflect the updated Pile Table from Amendment 005.

Answer 92:

Base bid on unit price table quantities, exact depths to bedrock and required pile bearing lengths may vary

Question 93:

Please clarify where the type 2 grout is required.

Are we to pour concrete in the pile to the top of the pipe then switch to type 2 grout and pour to the top of the pile cap?

Is the type 2 grout required in both voids of the fender support pile caps? Should there be a separate pay item for type 2 grout?

Answer 93:

Type 2 grout is not required. This amendment revises Section 04 05 12 Grout, to remove reference to Type 2 grout.

Question 110:

Please clarify the weld size as indicated on the drawing of the seismic joint

Answer 110:

Use an 8mm weld.

Question 111:

Further to Amendment Q&A #26, it suggests coated length is the distance between top of pile to mudline elevation. Using pile on GL 1-A as an example, the pile table indicates top of pile at EL. 2.50, design coating length of 22m with a cutoff allowance of 3m. This gives us a mudline elevation of -16.5m. The bathymetry on Drawing G20 shows no more than -10m. Please clarify.

Answer 111:

Bid on the design coating length shown in drawing S19

Question 112:

Unit Price Table Items No. 67-70, 73-74: We understand the intent of separate pile unit price for coated and uncoated. This works with material furnishing. However, it creates challenges to price installation. Each pile is a mix of coated section and uncoated. Please consider adding bid items for pile installation.

Answer 112:

Bid according to the Price Table

Question 113:

It is not clear what the bearing material is between top of the precast caps and the bottom of the precast deck panels. There are two choices of materials...one could be a rubber bearing pad. The other choice is a steel shims and a grout pad. Is there a preference from your Engineer's point of view? If it is a bearing pad, who designs the size of the bearing pads. Please advise by addendum.

Answer 113:

A 20mm grout levelling pad is shown on the drawings. The precast designer/contractor shall select grout based on design loads and durability requirements for salt water exposure and submit to the Departmental Representative for approval.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

ELECTRICAL QUESTIONS AND CLARIFICATIONS

Question 114:

E1 shows conduit to Oil Water separator as 1". Cable schedules show this equipment is fed from a 4c #1 AWG Tray cable. Please confirm the conduit size.

Answer 114:

See revised Electrical Drawings included in this Amendment.

Question 115:

Numbers defining note references on Detail 2/E43 do not appear to be fully co-ordinated. Please confirm if any low voltage is required in the tug pedestal or if only Qty 4 x L520R are required.

Answer 115:

See revised Electrical Drawings included in this Amendment.

Question 116:

E42 shows all power conduits (Keynote 16) running to one pedestal while all communication conduits (Keynote 15) run to the other. Please review and confirm.

Answer 96:

See revised Electrical Drawings included in this Amendment.

Question 117:

E43 appears to have redundant notes on the page. Please confirm non applicable notes. Please provide (interior and exterior) pictures of the existing Jetty mount.

Answer 117:

See revised Electrical Drawings included in this Amendment.

Question 118:

Heat trace schedule appears on M-2. Heat trace appears in neither Division 22 nor Division 26 specifications. Detail 1 / E6 indicates heat trace installation by Division 26. Please confirm Division 22 is to carry the supply of the heat trace. Please confirm which division is to carry the installation of the heat trace.

Answer 118:

See revised Electrical Drawings included in this Amendment.

Question 119:

Please confirm neither Fire Alarm nor Emergency Pull stations or strobes are required on pole HM0.

Answer 119:

See revised Electrical Drawings included in this Amendment.

Question 120:

Please confirm no Horns are required for either Fire Alarm or Emergency Systems at the Jetty mounts.

Answer 120:

See revised Electrical Drawings included in this Amendment.

Question 121:

Please confirm if divided pullboxes (ie 160LV / 161C) require two directories for each section on a wall.

Answer 121:

See revised Electrical Drawings included in this Amendment.

Question 122:

Keynote 1 drawing E29 indicates 2/0 bonding conductor to be installed in 1" conduit. This conduit does not appear in duct bank schedules. Please confirm it is required for the full length of the installation.

Answer 122:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

See revised Electrical Drawings included in this Amendment.

Question 123:

Keynote 13 drawing E29 indicates Stainless Steel separation plate required in manholes. Please confirm division 33 should carry the cost of these plates with the supply of the manholes.

Answer 123:

See revised Electrical Drawings included in this Amendment.

Question 124:

Please issue a detail for the cable support within the manholes.

Answer 124:

See revised Electrical Drawings included in this Amendment.

Question 125:

Please confirm the existing jetty mounts can be removed from site for modifications.

Answer 125:

See revised Electrical Drawings included in this Amendment.

Question 126:

Please confirm Camlocks on 600V breaker should be 3 phase plus ground.

Answer 126:

See revised Electrical Drawings included in this Amendment.

Question 127:

Please confirm if splitter and breaker enclosures within the Jetty Mounts are required to be rated CEMA1, CEMA 3 or NEMA4X.

Answer 127:

See revised Electrical Drawings included in this Amendment.

Question 128:

Cables for status and control of the regulated service at Jetty mount 4 appear to be missing from the cable schedules. Please confirm a 50 conductor cable is required from SSSR to pick up these points.

Answer 128:

See revised Electrical Drawings included in this Amendment.

Question 129:

Please confirm Division 33 is responsible for the rubber seal shown Keynote 4 drawing E40 and drawing 2 / S13.

Answer 129:

See revised Electrical Drawings included in this Amendment.

MISCELLANEOUS ELECTRICAL CLARIFICATIONS AND REVISIONS:

- a. Heat trace installed by mechanical. Electrical to provide junction box c/w receptacle for heat trace to plug into in each kiosk.
- b. HM#0 services revised. Fire alarm and emergency alarm pulls, horns and strobes are now indicated for this location. Refer to drawing E2 Rev 3.
- c. Jetty Mounts have no horns. Refer to E30 to E35 for revised jetty mount details.
- d. Pullboxes require two directories. One for Comm side and one for LV side.
- e. Manhole separation plates can be supplied by whichever division is preferred by general contractor.
- f. Refer to ESK#1 for cable mounting details in pull boxes.
- g. Existing jetty mounts can be removed from site for work.
- h. Equipment within the jetty mounts can be CEMA 1

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

- i. Provide a 50C#12 tray cable between SSSR and the regulator kiosk for all status and control contacts
- j. Include cost for revisions to existing HMI and SCADA interface to include additional electrical and metering equipment.
- k. Lighting poles are to be mounted to the jetty structure. Anchor bolts to be cast into the structure, co-ordinated with other structural work.
- l. Poles to be tapered octagonal.
- m. Acceptable material for lighting poles are either marine grade Aluminum or Galvanized Steel.

Question 130:

Welding the shear rings in the top of each pile will damage the paint that will require extensive repairs. Is there another option available other than shear rings?

Answer 130:

This pile top at the upper shear ring will be embedded in concrete, and does not require paint. Include the cost of touch up paint in your bid price for any coating that is damaged due to welding.

Question 131:

In "Appendix-C2 Environment Management Plan June 2017" it states (pg. 43) that Concrete washout water and solids will be collected and retained in leak proof containers, so that this caustic material does not reach the soil surface then migrate to surface waters, groundwater or adjacent watercourses. Collected water must be monitored for acceptable pH levels (as per EMIP). If the pH levels are outside the allowable limits then the runoff water must be contained until the pH is between 7.0 and 8.7 pH units and turbidity must comply with Table 6-1"

We would like to know if the concrete washout water, and also the water contained from the pile tailings/dewatering, after it has been collected, filtered and treated so that it passes the above requirements – can we pump this water back into the ocean?

Answer 131:

The Contractor and Contractor's Qualified Environmental Professional (QEP) shall determine appropriate measures as part of the Environmental Protection Plan (EPP). If it is proposed to discharge any type of treated wastewater to the environment, the Contractor will be required to demonstrate to the Departmental Representative (i.e. by submission of test results), prior to the discharge, that the wastewater quality meets all specified criteria/guidelines (i.e. in the EMP), and any other requirements under Laws and Regulations, including the Fisheries Act. The Contractor shall conduct water quality monitoring at the EGD Work Site under the direction of the (QEP) as per the contract requirements (i.e. EMP and WQMP). If water quality results exceed the specified criteria/guidelines (as per evaluation and response procedures outlined in the EMP), the Contractor will be required to take corrective action. All works must be conducted in compliance with the Fisheries Act.

Question 132:

With regards to the Explosion proof heater inside of the interceptors, the supplier has asked could you please provide a specification with regard to the control panels that you require. they have also advised that Watlow now only makes the standard model which is part #OLNA37L5W, this model is not explosion proof, can we recommend that the attached Chormalox heater be approved.

Answer 132:

Chormalox is an accepted alternative to the type referred to in Answer 6.

Question 133:

Section 02 21 13 subsections 1.1.3 states the following:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwyo26
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

Contractor may complete Progress Surveys using in-house survey resources. Contractor shall employ a third-party (i.e., do not use Contractor's own survey crew to manage survey work) licensed professional surveyor, member of the Association of British Columbia Land Surveyors (ABCLS), or professional engineer employed by Contractor that is licensed to perform bathymetric and topographic surveys in British Columbia to conduct Pre-Construction and Post-Construction Surveys.

Please consider if a member of ASTTBC with the RSIS designation able to sign off on the surveys? This was accepted on the previous stage of the project.

Answer 133:

It is acceptable to employ a surveyor who is a member of ASTTBC with the RSIS designation to sign off on the surveys.

Question 134:

Section 03 41 00 subsection 3.2.15 states the following:

Provide adequate temporary connection of precast elements to steel pipe piles and cap beams to safely resist self-weight, construction live loads and environmental loads, until completion of structure.

Please confirm that the above means that the contractor engineered temporary falsework under the pile caps needs to resist the self-weight of the pile caps and deck panels until the completion of the project. I.e. until the closure pours and infills have been completed and cured. Not only until the pile caps and stage 1 pour in the pile caps is completed and cured.

Answer 134:

We confirm that the above means: that the contractor engineered temporary falsework under the pile caps needs to resist the self-weight of the pile caps and deck panels until the completion of the project. I.e. until the closure pours and infills have been completed and cured. Not only until the pile caps and stage 1 pour in the pile caps is completed and cured.

Question 135:

Are there specifications available for the concrete tug boat float as detailed on Drawing No. S51?

Typically we are provided with specifications for casting the float, launching, polystyrene, timber etc.

Answer 135:

1. Refer to Section 03 41 00 Precast Structural Concrete for specifications for casting the float.
2. Launching of the float is the responsibility of the contractor.
3. The float polystyrene materials will meet or exceed the following standards:
 - a) Compressive Strength at 10% deformation (minimum): 76kPa
 - b) Flexural Strength (minimum): 124 kPa
 - c) Water Absorption By volume (maximum): 6%
 - d) Density (minimum): 16 kg/m³
 - e) The expanded polystyrene will be a uniform cellular structure free of voids resulting from unexpanded components or any other causes. If a beaded product is to be used, the beads will be fused so that when the product is broken by hand pressure, there is an excess of broken or sheared beads.
 - f) The billets to be built-up to correct vertical depth using thinner layers, providing the bonding method is approved by the Engineer. No vertical joints will be permitted within the billet. Before coating the polystyrene billets will be cured to minimize moisture content.
 - g) Polystyrene will contain 100% virgin bead (no reground material is permitted).
4. The float timber will meet the following requirements:
 - a) All timber for the purpose intended shall conform to the requirements of the N.L.G.A. Standard Grading Rules for Canadian Lumber.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

- b) All timber shall be Coast Douglas Fir. No 1 Structural Grade or better, unless specified otherwise.
 - c) All timber shall be free of heart centre with no sap.
 - d) Rubboards and bullrails shall be salt-treated.
5. Salt-treated Materials requirements:
- a) All salt-treated timber to be treated in accordance with CSA 080-1989, "Wood Preservation", and its current amendments CSA 080.14, for materials in contact with ground or water. (Only non-leachable ACA salts will be accepted).
 - b) All salt treatment will follow the Best Management Practices for ACA and ACZA as outlines in "Best Management Practices for the use of Treated Wood in Aquatic Environments".
 - c) All salt-treated timber will have a minimum retention of 6.4 kg/m³ (0.40 lb. Per cubic foot) and a depth of penetration of 10mm as specified in CSA 080.14.
 - d) Salt-treated timber members that have fresh cut surfaces exposed in the structure shall be treated as specified:
 - e) All field cut surfaces to be treated with two (2) coats of Copper Naphthenate.
 - f) When field treating by brushing, spraying, dipping or soaking do so in such a manner that the preservative does not drip into the water or onto the ground.

Question 136:

Can Public Works Government Services Canada please clarify the water sampling requirements as provided in the newest version of the environmental management plan that was released on July 12, 2017? The wording suggests that analytical samples will be collected three times per day at three depths and at one or more 'early warning' stations, at a minimum of three 'compliance stations', and at one background location whenever in-water works have the potential to impact water quality. This has significant cost implications. However, the language in the document also suggests that it may be acceptable to only collect one analytical water sample from the location with the highest turbidity for submitting to the analytical laboratory.

Answer 136:

In-situ and laboratory analysis requirements for water quality samples are specified in Section 5.1.1 of the EMP. Samples for in-situ analysis must be collected at all of the specified stations and depths, at the specified frequencies.

With respect to laboratory analysis, the sample from the Early Warning Station with the highest daily turbidity value shall be submitted for laboratory analysis (i.e. minimum one sample to lab per day). The Contractor may propose a reduction in lab analysis frequency following analysis of a sufficient number of samples to establish trends. For the Compliance Station, if in-situ data for a given work activity each day exceeds criteria, the sample with the highest turbidity levels for that day shall be submitted for laboratory analysis (i.e. minimum one sample to lab per day IF in-situ criteria are exceeded). Note that more than one set of Early Warning and Compliance Stations may need to be established each day, depending on the extent and type of work activities.

Question 137:

Bid item #64, Spec 53 37 10 - Displacement Control Pile Cap Levelling 100 Cu.m. What is the scope of work for this item, is there any excavation and disposal offsite/. Or remove existing Armour Rock around the area. It is not clear the Specification what is in.

Answer 137:

There is no excavation and disposal offsite of existing armour rock in the area of the displacement control piles. The Displacement Control Pile Cap Leveling material is to be used to level the seabed for the displacement control pile caps to be placed upon. Refer to drawing S48.

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pwy026

CCC No./N° CCC - FMS No./N° VME

Question 138:

One of the changes on Drawing E1 Rev 3 is incorrect. The duct bank SJC does not match up with the duct bank SJB.

I believe SJC was to stay where it was and SJB to be duplicated in its place. Please advise.

Answer 138:

This has been corrected in this Amendment, and a new drawing E1 has been issued.

End of Questions and Answers

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

SUBMISSION REQUIREMENTS AND EVALUATION (SRE) – REVISED JULY 17, 2017

SRE 01 General Information
SRE 02 Submission Requirements and Evaluation

SRE 01 GENERAL INFORMATION

1.1 Reference to the Selection Procedure

An 'overview of the selection procedure' can be found in General Instructions to Contractor (GI 06).

1.2 Submission of Proposals

The Bidder is responsible for meeting all submission requirements. Please follow detailed instructions in "Submission of Proposals", General Instructions to Bidders (GI 12).

1.3 Calculation of Total Score

The Total Score will be established as follows:

Technical Rating x 30%	=	Technical Score (Points)
<u>Price Rating x 70%</u>	=	<u>Price Score (Points)</u>
Total Score		Max. 100 Points

SRE 02 SUBMISSION REQUIREMENTS AND EVALUATION

Bidders' responses will be assessed in accordance with the entire requirement of the request for proposal document including the technical and pricing Evaluation Criteria. An evaluation team composed of representatives of Canada and Herold Engineering will evaluate the proposals.

Each responsive proposal will be evaluated against the mandatory criteria and point-rated criteria listed below. The information should be detailed enough so as to allow a complete evaluation. It would assist in the evaluation if each section clearly indicates the specific criteria it is addressing.

For each rated criterion where a maximum number of points is shown, evaluators may award any even, whole number in the range of points from zero up to the maximum number of points.

Bidders' responses will be evaluated against the definitions and information requirements as described by these Evaluation Criteria. Bidders should ensure that all responses provide the necessary details regarding dates, education and credentials, and demonstrative project experience. Points will be awarded solely on the basis of information as explicitly written in the Bidders' response. Once individual evaluations by the evaluation team has been completed, the evaluation team will meet with the Contracting Authority and Fairness Monitor to discuss scores and comments. An average score from all evaluators will be taken as the overall score for each point-rated criteria.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

1.0 REQUIREMENT FOR PROPOSAL FORMAT

- a) The following proposal format information should be implemented when preparing the Technical Evaluation Component of the proposal:
- (1) Maximum number of pages (including text and graphics) to be submitted for the Technical Evaluation Requirements is: **fifty (50) pages all inclusive.**
 - (2) Submit five (5) bound copies of the proposal + one (1) original + one (1) CD of the proposal
 - (3) Minimum font size – 11 point; font types: Times New Roman or equal
 - (4) Minimum margins – 12 mm left, right, top, and bottom
 - (5) Double-sided submissions are preferred
 - (6) One (1) page – means one side of a 216mm x 279mm sheet of paper (8.5" x 11")
 - (7) 279mm x 423 mm (11" x 17") fold-out sheets will be counted as 2 pages
 - (8) The order of the documents should follow the order presented in Section 4.2 and 4.3
 - (9) The following are not part of the page limitation mentioned above;
 - (a) Covering letter
 - (b) Table of Contents
 - (c) Front page of the Technical Evaluation Document
 - (d) Any amendments to the Technical Evaluation Document issued prior to date set for receipt of bid
 - (e) Transmittal Sheets
 - (f) Cover and backing of the document
 - (g) Blank tabs
 - (h) Mandatory Criteria Response for SRE 2 2.2
 - (i) Appendix 1-7
 - (j) Annexes A-D
- b) Consequence of non-compliance: any pages which extend beyond the maximum limits indicated, will be extracted from the proposal and will not be forwarded to the PWGSC Evaluation Board for evaluation.
- c) In order to facilitate the evaluation of the solicitation, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same heading.

2.0 MANDATORY REQUIREMENTS

Using the provided forms or using a reasonable copy of the provided forms on a separate page or pages, provide a response to each of the following requirements.

Canada reserves the right to verify information for completeness and accuracy and to confirm reference satisfaction with the services provided. In the event the information cannot be verified or the service is found to be unsatisfactory, the proposal will be considered non-responsive and no further consideration will be given to the Bidder.

2.1 Integrity Provisions – Associated Information

The Bidders who are incorporated, including those submitting bids as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Contractor. Contractor submitting bids as sole proprietorship, including those submitting bids as a joint venture, must provide the name of the owner. Contractor submitting bid as societies do not need to provide lists of names. If the required names have not been received by the time the evaluation of proposals is completed, Canada will inform the Contractor of a time frame within which to provide the information. Failure to provide the names within the time frame specified will render the bid non-responsive. Providing the required names is a mandatory requirement

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

2.2 Identification of Bidder's Team

The Bidders Team for the Esquimalt Graving Dock - South Jetty Reconstruction Project, including all subcontractors and/or partners that will provide the primary services in completing the contract.

At least one party MUST be identified for each of the primary services identified in the table below.

Only **one** party may be identified as the **Bidder/Prime Contractor**.

A party may be identified for more than one primary service; however, **all parties identified below for the primary services MUST be the parties that are also identified in the following sections as providing the necessary experience for that primary service to meet the qualification requirements.**

The parties identified for the primary services MUST be the resources used to complete the work under the contract

The parties are not required to have previous project experience as a subcontractor and/or partner with the Bidder. In the separate table below, Bidders may identify additional services and associated parties deemed important to their team to successfully complete the project.

Primary Service	Name of Party
Bidder - Prime Contractor	
Pile Driving Contractor	
Rock Anchor Drilling Contractor	
Concrete Contractor	
Lightweight Foam Concrete Contractor	
Precast Concrete Fabrication Contractor	
Electrical Contractor	
Mechanical Contractor	
Corrosion Protection Specialist	
Environment Management and Compliance	

Additional Services (if applicable)	Name of Party

Provide full name of each company, the address of main office, form of business entity (whether it is incorporated or partnership, etc.), contact persons names and designation, telephone number, email address, Province or State that company is registered in.

3.0 RATED REQUIREMENTS

Proposals meeting the mandatory requirements will be evaluated in accordance with the following criteria. The clarity of the proposal writing will form part of the evaluation (use of language, document structure, conciseness and completeness of the response):

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

3.1 Prime Contractor Experience

1. *What we are looking for:*

The Esquimalt Graving Dock South Jetty Reconstruction Project, as shown in the project tender drawings and specifications, is a major marine infrastructure project. We are looking for recent demonstrated experience with major marine infrastructure projects in an environment similar to that which is described in the current tender drawings and specifications.

Identify that the Bidder - Prime Contractor/Marine Construction Team for the Esquimalt Graving Dock South Jetty Reconstruction Project has, over the past twelve (12) years, participated in at least three (3) significant Marine Construction Infrastructure Projects, with at least one project being over \$10 Million, and all three projects located along the West Coast of North America, or in similar environment to EGD.

Projects listed should have involved Piling, Rock Socket Drilling, Underwater Concrete Placement, and Precast Concrete placement in an environment similar to what has been specified in the current tender drawings and specifications.

2. *What the company should provide:*

- a. A brief description of the projects.
- b. Include the names of senior personnel and project personnel who were involved as part of the project team and their roles and respective responsibilities, as well as the scope, and budget per trade.
- c. Indicate the dates the services were provided for the listed projects.
- d. Indicate those projects which were carried out in joint venture and the responsibilities of each of the involved entities in each project.
- e. Provide client references - name, address, phone and fax of client contact at working level. Canada reserves the right to verify information for completeness and accuracy and to confirm reference satisfaction with services provided. In the event the information cannot be verified or the service is found to be unsatisfactory, the proposal will be considered non-responsive and no further consideration will be given to the Contractor.

3. The Contractor (as defined in General Instructions GI 03) must have direct experience on the above projects. Past project experience from entities other than the Contractor will not be considered in the evaluation unless these entities form part of a joint venture Contractor.

3.2 Prime Contractor Senior Personnel Expertise and Experience

1. *What we are looking for:*

A demonstration that the Contractor has senior (over 5 years direct experience with the firm) in-house personnel with the capability and expertise to plan, manage and execute work identified in the attached drawings and specifications. To be considered senior in-house personnel for the purposes of this section, the individual should have over five (5) years of experience planning, managing and executing work with the Bidder/Prime Contractor firm.

2. *What the company should provide:*

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

- a. Submit a maximum of two (2) c.v.'s of senior personnel. Each curriculum vitae should clearly indicate the years of experience the senior personnel has in the provision of the services specified in the Project Brief section.
 - b. Identify the personnel's years of experience with the current firm in a senior role.
 - c. A brief description of five (5) significant project completed over the last ten (10) years, in which the senior personnel had ongoing involvement with these projects.
3. In-house personnel means personnel within the Contractor's organization, or subsidiary company, and will be available to be directly involved with the management of this project (see definition of Contractor in General Instructions GI 03).

3.3 Prime Contractor Site Personnel Expertise and Experience

1. What we are looking for:

A demonstration that the Contractor has in-house project personnel (over 5 years direct experience with the firm) with the capability, capacity and expertise to provide the required services and deliverables listed in the drawings and specifications.

2. *What the Contractor should provide:*

- a. Submit a maximum of two (2) c.v.'s of project personnel which will be dedicated to the EGD South Jetty Reconstruction Project. Each curriculum vitae should clearly indicate the years of experience the project personnel has in the provision of the services specified in the Project Brief section.
 - b. Identify the personnel's years of experience, the number of years with the firm, and the number of years in a Site Supervisor or Site Superintendent role.
 - c. A brief description of at least two (2) relevant projects completed with the company.
3. In-house personnel means personnel within the Contractor's organization, or subsidiary company, and will be available to be directly involved with management of this project (see definition of Contractor in General Instructions GI 03).

3.4 Prime Contractor Project Planning and Organization

1. *What we are looking for:*

A project shown on the drawings and specification will need to be completed within 20 months from time of award. We are looking for the contractor to provide a realistic description of how this will be achieved.

2. *What the Contractor should provide:*

A written description of how the project is anticipated to be constructed, detailing the sequence of installation of the piles, how large items, such as pipe piles and precast concrete elements are to be delivered to site and how the contractor plans on managing the deliveries to the work site.

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

A Gant Chart showing sequencing of construction and quality assurance activities: At a minimum the contractor will need to provide a Gant Chart showing following activities (Mobilization, Dredging, Piling, Precast work, Cast-in-place concrete work, Civil, Mechanical, Electrical, Quality assurance review, Project closeout).

3.5 Project Plant and Equipment

1. *What we are looking for:*

A demonstration the Prime Contractor and their team has adequate resources to carry out the works as per the drawings and specifications.

2. *What the Contractor should provide:*

Submit a list of anticipated Plant and Equipment required to complete the works. Include description of the plant and equipment, quantity available for this project, its capacity, location, and whether it is owned or hired.

3.6 Piling Contractor Experience

1. *What we are looking for:*

The Esquimalt Graving Dock South Jetty Reconstruction Project, as shown in the project tender drawings and specifications, is a major marine infrastructure project involving a significant amount of piling work. We are looking for recent demonstrated experience with projects of a similar scope in an environment similar to that which is described in the current tender drawings and specifications.

Identify that the Piling Contractor for the Esquimalt Graving Dock South Jetty Reconstruction Project has, over the past twelve (12) years, participated in two (2) significant marine piling projects located in an environment similar to EGD.

Projects listed should have involved Piling, Rock Socket Drilling, and/or Precast Concrete placement in an environment similar to what has been specified in the current tender drawings and specifications.

2. *What the Contractor should provide:*

- a. A brief description of the projects, including project location and piling budget.
- b. Include the names of project personnel who were involved as part of the project team and their roles and respective responsibilities.
- c. Indicate the dates the services were provided for the listed projects.
- d. Provide client references - name, address, and phone of client contact at working level. Canada reserves the right to verify information for completeness and accuracy and to confirm reference satisfaction with services provided.

3. The Piling Contractor must possess the knowledge on the above projects. Past project experience from entities other than the Contractor will not be considered in the evaluation unless these entities form part of a joint venture Contractor.

3.7 Piling Contractor Site Personnel Expertise and Experience

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

1. *What we are looking for:*

A demonstration that the Contractor has in-house project personnel (over 5 years direct experience with the firm) with the capability, capacity and expertise to provide the required services and deliverables listed in the drawings and specifications

2. *What the Contractor should provide:*

a. Submit a maximum of two (2) c.v.'s of project personnel which will be dedicated to the piling portion of the EGD South Jetty Reconstruction Project. Each curriculum vitae should clearly indicate the years of experience the project personnel has in the provision of the services specified in the Statement of Work (SOW) section.

b. A brief description of at least two (2) relevant projects completed with the company.

3. In-house personnel means personnel within the Contractor's organization, or a subsidiary company.

3.8 Project Piling Methodology

1. *What we are looking for:*

The project shown on the drawings and specification involves the installation of piles through varying underwater subsurface conditions including engineered capping, contaminated sediments, clay, till, and bedrock . We are looking for the contractor to demonstrate capability with a variety of piling techniques that can be used to successfully install the piles within the project constraints.

2. *What the Contractor should provide:*

Provide a description of piling methods that can be employed by the contractor to mitigate pile issues such as improper seating, disturbance of sediments and damage to the engineered cap, and pile misalignment. Include examples of projects where the contractor has employed the methods described above.

3.9 Precast Contractor Experience

1. *What we are looking for:*

The Esquimalt Graving Dock South Jetty Reconstruction Project, as shown in the project tender drawings and specifications, is a major marine infrastructure project involving a significant amount of pre-cast work. We are looking for recent demonstrated experience with projects of a similar scope in an environment similar to that which is described in the current tender drawings and specifications.

Identify that the Pre-Cast Contractor for the Esquimalt Graving Dock South Jetty Reconstruction Project has, over the past twelve (12) years, participated in two (2) significant marine precast projects located in an environment similar to EGD.

Projects listed should have involved Precast Concrete placement in an environment similar to what has been specified in the current tender drawings and specifications.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

2. *What the Contractor should provide:*

- a. A brief description of the projects, including project location and pre-cast budget.
- b. Include the names of project personnel who were involved as part of the project team and their roles and respective responsibilities.
- c. Indicate the dates the services were provided for the listed projects.
- d. Provide client references - name, address, and phone of client contact at working level. Canada reserves the right to verify information for completeness and accuracy and to confirm reference satisfaction with services provided.

3. The Pre-Cast Contractor must possess the knowledge on the above projects. Past project experience from entities other than the Contractor will not be considered in the evaluation unless these entities form part of a joint venture Contractor.

3.10 Pre-Cast Contractor Site Personnel and Project Professional Expertise and Experience

1. *What we are looking for:*

A demonstration that the Contractor has in-house project personnel (over 5 years direct experience with the firm) with the capability, capacity and expertise to provide the required services and deliverables listed in the drawings and specifications.

The project also requires pre-cast elements to be designed by the supplier, demonstrate that the Contractor has obtained a qualified precast design engineer, registered with the Association of Professional Engineers and Geoscientist of BC, to provide signed and sealed designs for the precast elements

2. *What the Contractor should provide:*

- a. Submit a maximum of two (2) c.v.'s of in-house project personnel which will be dedicated to the pre-cast portion of the EGD South Jetty Reconstruction Project. Each curriculum vitae should clearly indicate the years of experience the project personnel has in the provision of the services specified in the Project Brief section.
- b. A brief description of at least two (2) relevant projects completed with the company.
- c. Submit a maximum of two (2) c.v.'s of project personnel that will be responsible for precast design. Each curriculum vitae should clearly indicate the years of directly related experience the project personnel have in the provision of pre-cast design services, personnel qualifications, and relevant project experience.

3. In-house personnel means personnel within the Contractor's organization

3.11 Electrical Contractor Experience

1. *What we are looking for:*

A demonstration that the Electrical Contractor for the Esquimalt Graving Dock South Jetty Reconstruction Project has completed at least two (2) projects in the past twelve (12) years, in an environment similar to the EGD, of similar size and scope to that which is described in the current tender drawings and specifications.

2. *What the company should provide:*

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

- a. A brief description of the projects, including key personnel, project scope, budget, and completion dates.
- b. Provide client references for the listed projects - name, address, and phone of client contact at working level. Canada reserves the right to verify information for completeness and accuracy and to confirm reference satisfaction with services provided.
- c. A maximum of two (2) c.v.'s of the project personnel that will be responsible for the provision of services on the South Jetty Reconstruction Project.

3. The Electrical Contractor must have direct experience on the above projects. Past project experience from entities other than the Contractor will not be considered in the evaluation unless these entities form part of a joint venture Contractor.

3.12 Corrosion Protection Specialist

1. *What we are looking for:*

The project shown on the drawings and specification requires the contractor to provide a Design Build Corrosion Protection System. Demonstrate that the contractor understands the scope of the corrosion protection work and has obtained a qualified Corrosion Specialist accredited with the National Association of Corrosion Engineers International.

2. *What the Contractor should provide:*

- a. A brief description from the contractor on the type of system the contractor intends installing for cathodic protection.
- b. Submit a maximum of two (2) c.v.'s of project personnel that will be responsible for the design of the corrosion protection system. Each curriculum vitae should clearly indicate the years of directly related experience the project personnel have in the provision of design services for cathodic protection for marine structures specified in the Statement of Work.

3.13 Project Professional for Environmental Compliance

1. *What we are looking for:*

A demonstration that the Contractor has obtained a qualified environmental professional (QEP), with over 10 Years direct experience.

Environmental monitoring tasks are to be conducted by, or under, the supervision of a qualified environmental professional (QEP) following procedures outlined in an Environmental Monitoring Implementation Plan (EMIP). The QEP is to have demonstrated experience conducting Environmental Monitoring for construction projects specifically related to compliance with the federal *Fisheries Act*.

A QEP is defined as an applied scientist specializing in the area of biology or engineering who is registered and in good standing with an appropriate B.C. professional organization constituted under an Act; and, through suitable education, experience, accreditation and knowledge, may reasonably be relied upon to provide advice regarding environmental management of the Project.

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

It is anticipated that various personnel will be necessary to undertake different monitoring components for the Project (e.g., water quality, aquatic mammals, etc.) and the experience of the personnel used should reflect those needs.

2. *What the Contractor should provide:*

- a. Submit a maximum of six (6) c.v.'s of project personnel which will perform the work and the qualification of the QEP that will be responsible for environmental compliance. Each curriculum vitae should clearly indicate the years of experience the project personnel have in the provision of the services specified in the Statement of Work (SOW) section. Skills and expertise should include direct experience with projects occurring in and adjacent to Marine foreshore and near shore environments involving pile driving, drilling, concrete works including specific experience conducting workplace inspections, water quality monitoring, underwater acoustic monitoring, marine mammal observation.
- b. Copy of QEP Professional Certificate of Registration in BC.

4.0 EVALUATION AND RATING

All bids which meet all the mandatory requirements set out in these documents will be reviewed, evaluated and rated by a PWGSC Evaluation Board. In the first instance, price envelopes will remain sealed and only the qualification components of the proposal will be evaluated in accordance with the following:

Criterion	Weight Factor	Rating	Weighted Rating
Prime Contractor Experience	1.5	0 - 10	0 – 15
Prime Contractor Senior Personnel Expertise and Experience	1.0	0 - 10	0 – 10
Prime Contractor Site Personnel Expertise and Experience	1.0	0 - 10	0 – 10
Prime Contractor Project Planning and Organization	1.25	0 - 10	0 – 12.5
Project Plant and Equipment	0.25	0 - 10	0 – 2.5
Piling Contractor Experience	1.0	0 - 10	0 – 10
Piling Contractor Site Personnel Expertise and Experience	0.25	0 - 10	0 – 2.5
Project Piling Methodology	0.75	0 - 10	0 – 7.5
Precast Contractor Experience	1.0	0 - 10	0 – 10
Precast Contractor Site Personnel and Project Professional Expertise and Experience	0.25	0 - 10	0 – 2.5
Electrical Contractor Experience	0.75	0 - 10	0 – 7.5
Corrosion Protection Specialist	0.5	0 - 10	0 – 5

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pwy026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

Project Professional for Environmental Compliance	0.5	0 - 10	0 – 5
Total	10.0		0 - 100

5.0 PWGSC EVALUATION BOARD AND GENERIC EVALUATION TABLE

The PWGSC Evaluation Board will evaluate the strengths and weaknesses of the Bidder's response to the Technical Evaluation Component criteria and will rate each criterion with even numbers (0, 2, 4, 6, 8 or 10) using the generic evaluation below.

Technical Evaluation Component Generic Evaluation Criteria

Non Responsive	Inadequate	Weak	Adequate	Fully Satisfactory	Strong
0 Point	2 Points	4 Points	6 Points	8 Points	10 Points
Did not submit information which could be evaluated	Lacks complete or almost complete understanding of the requirements.	Has some understanding of the requirements but lacks adequate understanding in some areas of the requirements.	Demonstrates a good understanding of the requirements.	Demonstrates a very good understanding of the requirements.	Demonstrates an excellent understanding of the requirements.
	Weaknesses cannot be corrected	Generally doubtful that weaknesses can be corrected	Weaknesses can be corrected	No significant weaknesses	No apparent weaknesses
	Bidder does not possess qualifications and experience	Bidder lacks qualifications and experience	Bidder has an acceptable level of qualifications and experience	Bidder is qualified and experienced	Bidder is highly qualified and experienced
	Team proposed is not likely able to meet requirements	Team does not cover all components or overall experience is weak	Team covers most components and will likely meet requirements	Team covers all components - some members have worked successfully together	Strong team - has worked successfully together on comparable projects
	Sample projects not related to this requirement	Sample projects generally not related to this requirement	Sample projects generally related to this requirement	Sample projects directly related to this requirement	Leads in sample projects directly related to this requirement

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pw026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

	Extremely poor, insufficient to meet performance requirements	Little capability to meet performance requirements	Acceptable capability, should ensure adequate results	Satisfactory capability, should ensure effective results	Superior capability, should ensure very effective results
--	---	--	---	--	---

To be considered further, Contractor must achieve a minimum weighted rating of Seventy (70) out of the hundred (100) points available for the rated qualification criteria as specified above. **No further consideration will be given to Contractor not achieving the pass mark of seventy (70) points.**

6.0 PRICE EVALUATION

All price proposal envelopes corresponding to responsive proposals which have achieved the pass mark of Seventy (70) points are opened upon completion of the qualifications evaluation. When there are three or more responsive proposals, an average price is determined by adding all the price proposals together and dividing the total by the number of price proposals being opened. This calculation will not be conducted when one or two responsive proposals are received.

All price proposals which are greater than Twenty Five percent (25%) above the average price will be set aside and will receive no further consideration.

The remaining price proposals are rated as follows:

1. The lowest price proposal receives a Price Rating of 100
2. The second, third, fourth and fifth lowest prices receive Price Ratings of 80, 60, 40, and 20 respectively. All other price proposals receive a Price Rating of 0.
3. On the rare occasions where two (or more) price proposals are identical, the matching price proposals receive the same rating and the corresponding number of following ratings are skipped.

The Price Rating is multiplied by the applicable percentage to establish the Price Score

7.0 TOTAL SCORE

Total Scores will be established in accordance with the following:

Rating	Possible Range	% of Total Score	Score (Points)
Qualifications Rating	0 - 100	30	0 - 30
Price Rating	0 - 100	70	0 - 70
Total Score		100	0 - 100

The bids will be ranked in order from the highest to the lowest using the total score (qualification plus price). The Contractor submitting the highest ranked bid will be recommended for issuance of a Contract. In the case of a tie, the Contractor submitting the lower price for the services will be selected.

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pwy026

CCC No./N° CCC - FMS No./N° VME

END OF SUBMISSION REQUIREMENTS AND EVALUATION (SRE) – REVISED JULY 17, 2017

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

PRICE PROPOSAL/BID AND ACCEPTANCE FORM – REVISED JULY 17, 2017

PROJECT IDENTIFICATION

Description: ESQUIMALT GRAVING DOCK (EGD) SOUTH JETTY RECONSTRUCTION
CONSTANCE COVE OF ESQUIMALT HARBOUR ON VICTORIA ISLAND, BC CANADA

Project No.: R.026729.003

BUSINESS NAME AND ADDRESS OF BIDDER

Name: _____

Address: _____

Telephone: _____ Fax: _____ PBN: _____

E-mail address: _____

Industrial Security Program Organisation Number (ISP ORG#) _____

THE OFFER

The Bidder hereby offers to Canada, represented by the Minister of Public Works and Government Services, to perform and complete the Work for the above named project in accordance with the Contract Documents which are more particularly described in Appendix 1 – Terms and Conditions, at the place and in the manner set out therein for the TOTAL PRICE PROPOSAL AMOUNT INDICATED BELOW.

- 1) The prices per unit shall govern in establishing the Total Price. Any arithmetical errors in this section will be corrected by Canada.
- 2) Canada may reject the bid if any of the prices submitted do not reasonably reflect the cost of performing the part of the work to which that price applies.

A) UNIT PRICE TABLE

The Unit Price Table designates Work to which a Unit Price Arrangement applies.

- (a) The Price per Unit shall not include any amounts for Work that is not included in that unit price Item.

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pwy026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

The following are the Unit Prices for work, including all labour, material, tools, equipment, overhead, and profit, required to complete the works as described in the attached Specifications and Drawings. These Unit Prices may be used to adjust the Contract price as the scope of work increases or decreases as required by the Departmental Representative.

Item No.	Spec. Section	Description of Work	Unit	Estimated Quantity	Unit Price (GST Extra)	Total Price (GST Extra)
1	01 11 55	Directed Move	ea	2		
2	01 11 55	Stand-by Time	Hours	60		
3	01 33 00	Pre-Construction Submittals	LS	1		
4	01 33 00	Post-Construction Submittals	LS	1		
5	01 50 00	Mobilization	LS	1		
6	01 50 00	Demobilization	LS	1		
7	01 11 55	Pre-Construction Survey	LS	1		
8	01 91 13	Commissioning	LS	1		
9	02 41 16.01	Structure Demolition: Navigation Piles and Timber Piles, used piles stored on deck and old tug boat float and ramp	LS	1		
10	02 41 16.01	Structure Demolition: Concrete demolition at seismic joint	cu. m	18		
11	02 41 16.01	Structure Demolition: Concrete base under asphalt paving	cu. m	47		
12	02 41 16.01	Structure Demolition: Concrete parapet wall	cu. m	10		
13	02 41 16.01	Structure Demolition: Concrete retaining wall	cu. m	43		
14	02 41 13.14	Asphalt Paving Removal	cu. m	30		
15	03 20 00	Concrete Reinforcing: Reinforcing in Pipe Piles 914mm diameter	each	67		
16	03 20 00	Concrete Reinforcing: Reinforcing in Pipe Piles 762mm diameter, lines A, B, N, P, 1 & 2	each	100		
17	03 20 00	Concrete Reinforcing: Reinforcing in Pipe Piles 762mm diameter, displacement piles	each	14		
18	03 20 00	Concrete Reinforcing: Reinforcing in Pipe Piles 762mm diameter, remainder	each	72		
19	03 30 00	Cast-in-Place Concrete: Pipe Pile Infill (excluding reinforcing)	cu. m	2,185		
20	03 30 00	Cast-in-Place Concrete: Closure Pours	cu. m	934		
21	03 30 00	Cast-in-Place Concrete: Jetty Deck Slab	cu. m	2,350		
22	03 30 00	Cast-in-Place Concrete: East Approach Retaining Wall	cu. m	66		
23	03 30 00	Cast-in-Place Concrete: Concrete base at asphalt paving	cu. m	70		
24	03 30 00	Cast-in-Place Concrete: Other Reinforced Concrete Structures	cu. m	40		

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pwy026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

Item No.	Spec. Section	Description of Work	Unit	Estimated Quantity	Unit Price (GST Extra)	Total Price (GST Extra)
25	03 37 26	Underwater Placed Concrete: Displacement Control Piles	cu. m	50		
SUPPLY AND FABRICATION OF PRECAST MEMBERS: Items 26-39						
26	03 41 00	Precast Concrete: Pile Caps PC1 to PC 16	each	76		
27	03 41 00	Precast Concrete: Corner Caps CC1 and CC2	each	2		
28	03 41 00	Precast Concrete: Fender Supports (wide) FS1, FS2, FS2A, FS2B, FS2C, FS4	each	34		
29	03 41 00	Precast Concrete: Fender Supports (narrow) FS3, FS3A, FS3B	each	6		
30	03 41 00	Precast Concrete: Deck Panels DP1 To DP4	each	441		
31	03 41 00	Precast Concrete: Deck Panels DP5A, DP5B, DP5C, DP6A, DP6B, DP7A, DP7B	each	7		
32	03 41 00	Precast Concrete: Utility Trench UT1, UT2, UT4, UT6, UT6A	each	37		
33	03 41 00	Precast Concrete: Utility Trench Corner UT3 and UT5	each	2		
34	03 41 00	Precast Concrete: Storm Drain Panels: SD1, SD1A, SD2	each	33		
35	03 41 00	Precast Concrete: Box Girders BG1 to BG8	each	40		
36	03 41 00	Precast Concrete: Flat Panels FP1, FP2, FP3, FP3A, FP4, FP5, FP6	each	11		
37	03 41 00	Precast Concrete Panels: Displacement Pile Caps DCP A-	each	7		
38	03 41 00	Precast Concrete Panels: Oil Water Separator Support Beam	each	1		
39	03 41 00	Precast Tug Boat Float Box Girder, including polystyrene foam, bullrail, rubrail and pile guides	each	1		
SHIPPING AND ERECTION OF PRECAST CONCRETE MEMBERS: Items 40-53						
40	03 41 00	Precast Concrete: Pile Caps PC1 to PC 16	each	76		
41	03 41 00	Precast Concrete: Corner Caps CC1 and CC2	each	2		
42	03 41 00	Precast Concrete: Fender Supports (wide) FS1, FS2, FS2A, FS2B, FS2C, FS4	each	34		
43	03 41 00	Precast Concrete: Fender Supports (narrow) FS3, FS3A, FS3B	each	6		
44	03 41 00	Precast Concrete: Deck Panels DP1 To DP4	each	441		
45	03 41 00	Precast Concrete: Deck Panels DP5A, DP5B, DP5C, DP6A, DP6B, DP7A, DP7B	each	7		
46	03 41 00	Precast Concrete: Utility Trench UT1, UT2, UT4, UT6, UT6A	each	37		
47	03 41 00	Precast Concrete: Utility Trench Corner UT3 and UT5	each	2		

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pwy026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

Item No.	Spec. Section	Description of Work	Unit	Estimated Quantity	Unit Price (GST Extra)	Total Price (GST Extra)
48	03 41 00	Precast Concrete: Storm Drain Panels: SD1, SD1A, SD2	each	33		
49	03 41 00	Precast Concrete: Box Girders BG1 to BG8	each	40		
50	03 41 00	Precast Concrete: Flat Panels FP1, FP2, FP3, FP3A, FP4, FP5, FP6	each	11		
51	03 41 00	Precast Concrete Panels: Displacement Pile Caps DCP A-G	each	7		
52	03 41 00	Precast Concrete Panels: Oil Water Separator Support Beam	each	1		
53	03 41 00	Precast Tug Boat Float Box Girder, including polystyrene foam, bullrail, rubrail and pile guides	each	1		
54	31 23 33.01	Upland Overburden Bulk Excavation at East Approach Retaining Wall: See Item No. 62	N/A			
55	31 24 15	General Fill	cu. m	400		
56	32 11 16.01	Granular Sub-Base	cu. m	75		
57	32 11 23	Granular Base	cu. m	75		
58	32 12 16	Asphalt Paving	sq. m	455		
59	32 17 23	Pavement Marking: Bull Rails	lin. m	550		
60	32 17 23	Pavement Marking: Concrete Deck	sq. m	500		
61	32 17 23	Pavement Marking: Solid or Dotted Lines	lin. m	1000		
62	35 20 23	East End Slope Excavation and Disposal (Includes upland overburden excavation at east end approach retaining wall)	cu. m	925		
63	35 37 10.01	East End Slope Capping	LS	1		
64	35 37 10	Displacement Control Pile Cap Leveling	cu. m	100		
65	35 37 10	Sand Material, Filter Material and Armour Rock - Navigation Pile Holes	cu. m	15		
66	35 90 00	Corrosion Protection (CP) System	LS	1		
66.1	35 90 00	CP System Connectivity	LS	1		
67	31 62 16.20	Jetty Support Pipe Piles (762 dia, coated)	lin. m	2,753		
68	31 62 16.20	Jetty Support Pipe Piles (762 dia, uncoated)	lin. m	3,540		
69	31 62 16.20	Jetty Support Pipe Piles (914 dia, coated)	lin. m	1013		
70	31 62 16.20	Jetty Support Pipe Piles (914 dia, uncoated)	lin. m	1,371		
71	31 62 16.20	Displacement Control Piles (762 dia, uncoated)	lin. m	276		
72	31 62 16.20	East End Retaining Wall Piles	lin. m	108		
73	31 62 16.20	Tug Boat Wharf Piles (914 dia, coated)	lin. m	28		
74	31 62 16.20	Tug Boat Wharf Piles (914 dia, uncoated)	lin. m	24		

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pwy026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

Item No.	Spec. Section	Description of Work	Unit	Estimated Quantity	Unit Price (GST Extra)	Total Price (GST Extra)
75	31 63 19.13	Drilling Rock Sockets	lin. m	200		
76	33 41 00	Storm Utility Drainage	L.S	1		
77	33 11 16	Fire Water Main	L.S	1		
78	22 15 00	Compressed Air	L.S	1		
79	22 13 18	Drainage Waste and Vent Piping - Plastic	LS	1		
80	Division 22	Mechanical Kiosks and Freeze Protection Station	LS	1		
81	Division 26	Electrical	LS	1		
82	05 50 00	Metal Fabrications: Miscellaneous	LS	1		
83	05 50 00	Seismic Joint	lin. m	305		
84	35 59 13.19	Floating Fenders	ea.	34		
85	35 59 13.19	Rubbing Strip Fenders	lin. m	178		
86	35 59 29	Mooring Bollards: 100 tonne	ea.	13		
87	35 59 29	Mooring Cleats: 34 tonne	ea.	12		
88	Package B	Protective Wrap to Existing Piles	lin. m	650		
89	03 52 16	Lightweight Concrete	cu. m	800		
90	03 30 00	Under Deck Electrical Utility Support	LS	1		
Total Bid Amount (Applicable taxes extra)						

B) OPTIONAL WORK - DELETED**C) APPROVED CHANGES TO THE CONTRACT**

1. The Bidder agrees that if there are any approved changes to the Contract or the work, including any extra work or deletions from the work that it will charge or give credit for, as the case may be, for trades which will be employed on the work or equipment used in the performance of the work or other additions or deletions set out in the schedule of unit prices at the rates set out in the following schedules:

- a. Schedule of Labour Rates:

The following labour rates shall apply to approved changes, extra work and errors or omissions to or in the Contracts. This schedule shall cover all classes of trades which will be employed on the work of the Contract

TRADE/CLASSIFICATION	REGULAR WAGE	OVERTIME: X 1.5	OVERTIME: X 2

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pw026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

--	--	--	--

Note:

- i) All rates are inclusive of applicable payroll burdens, fringes and benefits, overhead and profit.
- ii) Overtime rates apply for all hours worked in excess of **8** hours per day and **40** hours per week

b. Schedule of Rental Equipment Required

The following rates for equipment shall apply to approved changes, extra work and errors or omissions to or in the Contract.

DESCRIPTION	MODEL/MFG'ER	PRESENT LOCATION	DAILY RATE	HOURLY RATE

TOTAL PRICE PROPOSAL

TOTAL PRICE PROPOSAL	\$
-----------------------------	----

BID (PROPOSAL) VALIDITY PERIOD

The bid (Proposal) shall not be withdrawn for a period of one hundred and eighty (180) days following the date of solicitation closing.

AMENDMENT(S)

By submission of its proposal, the Bidder confirms that it has read and understands the requirements expressed in all amendments and has included all costs of these requirements in its Total Price Amount.

ACCEPTANCE AND CONTRACT

Upon acceptance of the Bidder's offer by Canada, a binding Contract shall be formed between Canada and the Bidder. The documents forming the Contract shall be the contract documents identified in Contract Documents (Appendix 1 – Terms and Conditions).

CONSTRUCTION TIME

The following schedule conditions are fundamental to the Contract:

- .1 Complete the work of this Contract (Esquimalt Graving Dock South Jetty Reconstruction) ready for use within **twenty (20) months**
- .2 The marine fisheries timing windows when in-water construction is permitted are as follows:

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ899-172412/B	008	pw026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-6-39315	

- a. July 1st through September 30th (in the same year); December 1st through February 15th (of the following year).
 - b. In accordance with the EMP, which includes the EMP, if any works are planned to be conducted by the Contractor outside of the Timing Windows, their QEP shall identify in the EPP the mitigative measures to prevent serious harm to fish
- .3 The above mentioned schedule conditions have been made with the EGD facility. The successful Bidder is expected to complete all activities as described in the Contract documents within these dates.

PROPOSAL (BID) FINANCIAL SECURITY

Proposal security is enclosed herewith in accordance with GI 20 of the General Instructions to Bidders.

The Bidder understand that if a security deposit is furnished as proposal security and the Bidder refuses to enter into a contract when called upon to do so, its security deposit shall be forfeited.

The Bidder understands that if the security furnished is not in the approved form or provided by an approved institution as described in GI 21 of the General Instructions to Bidders, its proposal will be disqualified.

CONTRACT FINANCIAL SECURITY

Within fourteen (14) days after receipt of written notification of the acceptance of its Offer, the Bidder shall furnish contract security in accordance with GC9, CONTRACT SECURITY, of the Terms and Conditions of the Contract Documents.

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

SIGNATURE OF BIDDER OR JOINT VENTURE

The Bidder agrees to provide ALL services requested in the Request For Proposal.

.....
Name Signature

.....
Title

I/We have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture

.....
Name Signature

.....
Title

I/We have authority to bind the Corporation / Partnership / Sole Proprietorship / Joint Venture

END OF PRICE PROPOSAL/BID AND ACCEPTANCE FORM– REVISED JULY 17, 2017

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pwy026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

TABLES OF PROPOSAL DELIVERABLES – REVISED JULY 17, 2017
Mandatory Proposal Deliverables

Regardless of requirements specified elsewhere in this bid solicitation and its associated Statement of Work, the following are the mandatory documents that must be submitted with the bid at the time of bid closing. The bid must be compliant on each item to be considered responsive.

Item	Description
	Envelope One - Technical Component Submission
1	Proposal (SRE 01 and SRE 02 – excluding SRE 2.1 and 2.2) - 1 signed original, plus 4 copies and 1 CD - Completed and Attached
2	Adhere to GI 08 Limitation of Submissions
	**Bidders MUST ensure their attendance of the Bidders Conference and Site Visit by signing the attendance sheets. The Contracting Authority will keep the signed attendance sheets on file.
	Envelope Two – Price Component Submission
1	Price Proposal Form - Completed and Attached
2	Proposal (Bid) Financial Security - Original Attached

Supporting Proposal Deliverables

If the following documents which support the Proposal are not submitted with the Proposal they may be requested by the Contracting Authority (CA) and must be provided within 48 hours of the written request otherwise the Proposal will be considered non-compliant:

Item	Description
1	Front page and any amendments of the RFP - Completed and Attached
2	SRE 2.2 Identification of Bidder's Team - Completed and Attached
3	Set-aside Program for Aboriginal Business (Appendix 3) - Completed and Attached
4	Integrity Provisions – List of Names (Appendix 4) - Completed and Attached
5	Declaration Form (Appendix 7) - Completed and Attached

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

6	List of Subcontractors (Annex D) – Completed and Attached
---	--

END OF TABLES OF PROPOSAL DELIVERABLES – REVISED JULY 17, 2017

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

ADDENDUM No. 003

The following changes/clarifications in the tender documents are effective immediately. This addendum will form part of the contract documents.

REVISIONS TO SPECIFICATIONS

1. Within Section 01 11 55 (General Instructions), 1.11 Time of Completion and Construction Windows, replace clause .1.2.2 with: "In accordance with the EMP, if any works are planned to be conducted by the Contractor outside of the Timing Windows, their QEP shall identify in the EPP the mitigative measures to prevent serious harm to fish. Bidders shall not contact Fisheries and Oceans Canada about any aspect of this project during the tender period."
2. Within Section 04 05 12 Grout, DELETE clauses 1.1.1.2, 2.1.2, 2.2 and 3.1.2, removing any reference to Type 2 grout.
3. Within Section 31 63 19.13 Rock Sockets for Piles, DELETE Clause 1.6.4.4.1. and REPLACE with: "Provide details of equipment and procedures for excavating, drilling, cleaning out piles and rock sockets"

REVISIONS TO DRAWING

1. OMIT drawing S19 Rev3 and REPLACE with drawing S19 Rev4.
2. OMIT drawing G020 Rev3 dated 2017-06-22 and REPLACE with drawing G20 Rev3 dated 2017/06/19 – Note about temporary resuspension barrier removed.
3. OMIT drawing S44 Rev2 and REPLACE with drawing S44 Rev3.
4. ADD drawing S44-A Rev 0.
5. OMIT drawing S16 Rev2 and REPLACE with drawing S16 Rev 3.
6. OMIT drawing S60 Rev2 and REPLACE with drawing S60 Rev 3.
7. OMIT electrical drawings E1 Rev 2, and REPLACE with drawing E1 Rev.3
8. OMIT Revision 2 of the following electrical drawings and replace with Revision 3: E1, E2, E5, E7, E8, E10, E11, E12, E13, E22, E23, E29, E30, E31, E32, E33, E34 and E35.
9. ADD new electrical drawing ESK#1

THE ELECTRICAL DRAWINGS HAVE THE FOLLOWING REVISIONS:

2. Electrical drawing E1 Rev.3 has the following revisions:

Solicitation No. - N° de l'invitation

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

EZ899-172412/B

008

pwy026

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

File No. - N° du dossier

CCC No./N° CCC - FMS No./N° VME

PWY-6-39315

-
- a. Section SJA - revised feeder layout in section to more evenly spread out thermal loading
 - b. Section SJB – revised feeder layout in section to more evenly spread out thermal loading.
 - c. Section SJD – revised feeder layout in section to more evenly spread out thermal loading.
 - d. Section SJF – revised feeder layout in section to more evenly spread out thermal loading.
 - e. Section SJG – revised feeder layout in section to more evenly spread out thermal loading.
 - f. Conduit raceway between gridlines 16 and 26 revised from 450kg/m³ foamcrete to 1350kg/m³ to increase thermal conductivity and allow for proper loading of 2000a jm#4 service. Refer to structural drawings for additional information.
 - g. Tug wharf lighting mast revised with fire alarm horn, emergency alarm horn details.
 - h. SSSR floor plans – revised equipment locations based on construction drawings.
 - i. Added general notes related to construction navigation and barricade lights to be installed by contractor and maintained during construction.
 - j. Oil water separator power conduits revised to 1 x 53mm.
3. Electrical drawing E2 Rev 3 has the following revisions:
- a. Section SJJ – revised conduit layout in section to allow for conduits to sweep into proper configuration for duct bank under existing jetty section.
 - b. Section SJK – revised conduit layout in section to allow for conduits to fit between existing piles and allow for deflection couplings to be installed effectively.
 - c. Pull pit details 2/e22 and 1/e23. Revised pull pits to double wide version, this will allow use of existing covers. Extra length needed to match the splayed-out section sjj to allow for conduit marshalling and arrangement.
 - d. Duct bank plan crossing under existing jetty revised to meet requirements for bends, support and seismic joints.
 - e. 1/E41 duct bank elevation revised to match proposed elevation changes and crossing details needed to pass under existing jetty. Refer to structural sheets for exact anchoring and support details.
 - f. New lighting pole and 5/E2 grid lines revised to add in emergency alarm horns and pull station details.
 - g. Fire alarm pullstation and 3/E44 revised to add in emergency alarm pull and horn.
 - h. Cathodic protection rectifier location revised to gridline 12.
 - i. Location of JM#3 revised west to match new manhole locations.
 - j. Pullboxes 166LV/167C and 168LV/169C locations revised to allow for conduit sweeps and elevation changes to meet duct bank crossing requirements.
 - k. Nav light details revised to meet Nav. Canada requirements.
 - l. Oil water separator power conduits revised to 1 x 53mm.

4. Electrical drawing E5 Rev 3 has the following revisions:

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

-
- a. Revised detail 6/- to include the requirements for a new MFP relay and associated CT's.
 - b. Revised location of SCADA control panel to match site.
 - c. Revised locations of existing HFB to match site.
 - d. Revised location and footprint of regulated switchboard to match site.
5. Electrical drawing E7 Rev 3 has the following revisions:
 - a. Revised fire alarm system detail to properly reflect symbols and devices required.
 - b. Revised SCADA panel to show addition of HAART media converters for existing water meter signal processing.
 6. Electrical drawing E8 Rev 3 has the following revisions:
 - a. Revised emergency alarm system detail to properly reflect symbols and devices required.
 - b. Provided wiring diagram as to how emergency alarm horns operate as they are not wired in the same fashion as a typical fire alarm horn system.
 7. Electrical drawing E10 Rev 3 has the following revisions:
 - a. Section SJA – revised feeder layout in section to more evenly spread out thermal loading.
 - b. Section SJB – revised feeder layout in section to more evenly spread out thermal loading.
 8. Electrical drawing E11 Rev 3 has the following revisions:
 - a. Section SJD – revised feeder layout in section to more evenly spread out thermal loading.
 - b. Section SJF – revised feeder layout in section to more evenly spread out thermal loading.
 - c. Section SJG – revised feeder layout in section to more evenly spread out thermal loading.
 9. Electrical drawing E12 Rev 3 has the following revisions:
 - a. Section SJJ – revised conduit layout in section to allow for conduits to sweep into proper configuration for duct bank under existing jetty section. Feeder conduit assignment revised.
 10. Electrical drawing E13 Rev 3 has the following revisions:
 - a. Section SJK – revised conduit layout in section to allow for conduits to fit between existing piles and allow for deflection couplings to be installed effectively. Feeder conduit assignment revised.
 11. Electrical drawing E22 Rev 3 has the following revisions:
 - a. Pull pit details 2/E22. Revised pull pits to double wide version, this will allow use of existing covers. Extra length needed to match the splayed-out section SJJ to allow for conduit marshalling and arrangement. Provide stainless steel separation plate between power and comm sections. Similar to manhole 160LV/161C. Intent
-

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

is to use two sets of manhole covers over this pull box. Provide internal bracing if needed.

12. Electrical drawing E23 Rev 3 has the following revisions:

- a. Pull pit details 1/E23. Revised pull pits to double wide version, this will allow use of existing covers. Extra length needed to match the splayed-out section SJJ to allow for conduit marshalling and arrangement. Provide stainless steel separation plate between power and comm sections. Similar to manhole 160LV/161C. Intent is to use two sets of manhole covers over this pull box. Provide internal bracing if needed.

13. Electrical drawings E29 Rev 3 has the following revisions:

- a. 1c#2/0 bond wire conduit revised to 53mm conduit
- b. 2/0 bond wire identified as SJG in duct bank sections.
- c. 2/0 has dedicated 1 x 53mm conduits within the new jetty duct banks. refer to SJA/E1 for SJG installation in existing duct bank.

14. Electrical drawings E30 Rev 3 to E35 Rev 3 have the following revisions:

- a. Revised jetty mount details for fire alarm and emergency alarm pull station requirements.
- b. Revised details for strobe light and roll bar installation arrangements and requirements.
- c. Revised single line protection and control details.

15. Electrical drawing E37 Rev 3 has the following revisions:

- a. Revised protection single line for 2000A regulator service with the addition of an MFP meter. Type and control interface to match that existing on site. Existing meter is SEL-751A relay. Revise programming on existing system and new relay to allow for integration of this third distribution.

16. Electrical drawing E41 Rev 3 has the following revisions:

- a. Revised duct bank to new design.
- b. Duct bank is to be split into three seismically separate sections separated by two sets of deflection couplings.
- c. Duct bank must co-ordinate with new and existing pile locations as shown.
- d. Duct to co-ordinate with pile cap system to pass below new jetty structure where needed.
- e. Refer to structural details for additional details.

17. Electrical drawing E42 Rev 3 has the following revisions:

- a. Tug wharf lighting mast revised with fire alarm horn, emergency alarm horn details.
- b. Revised keynote wording and numbering.

18. Electrical drawing E43 Rev 3 has the following revisions:

- a. Revised keynote wording and numbering

Solicitation No. - N° de l'invitation

EZ899-172412/B

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

Amd. No. - N° de la modif.

008

File No. - N° du dossier

PWY-6-39315

Buyer ID - Id de l'acheteur

pw026

CCC No./N° CCC - FMS No./N° VME

19. Electrical drawing E44 Rev 3 has the following revisions:

- a. Revised notes on navigation and collision warning lights for permanent installations during construction.

20. MISCELLANEOUS CLARIFICATIONS AND REVISIONS:

- a. Heat trace installed by mechanical. Electrical to provide junction box c/w receptacle for heat trace to plug into in each kiosk.
- b. HM#0 services revised. Fire alarm and emergency alarm pulls, horns and strobes are now indicated for this location. Refer to drawing E2 Rev 3.
- c. Jetty Mounts have no horns. Refer to E30 to E35 for revised jetty mount details.
- d. Pullboxes require two directories. One for Comm side and one for LV side.
- e. Manhole separation plates can be supplied by whichever division is preferred by general contractor.
- f. Refer to ESK#1 for cable mounting details in pull boxes.
- g. Existing jetty mounts can be removed from site for work.
- h. Equipment within the jetty mounts can be CEMA 1
- i. Provide a 50C#12 tray cable between SSSR and the regulator kiosk for all status and control contacts

UPDATES TO THE "APPENDICES TO THE SPECIFICATIONS"

1. Specification Appendix F6 – EGD South Jetty Remediation – As-built Seabed Bathymetry, ADD As Built Photos - Under Deck East End
2. ADD Appendix H2: Extract from Detailed Site Investigations – Golder 2013, SLR 2014.
3. ADD Appendix F10 EGD - SOP Controls for the Protection of Remediated Areas.

END OF SECTION