

# **TENDER 16-20**

# WATER TREATMENT BUILDING

## ADDENDUM NO. 7

October 14<sup>th</sup>, 2016

This addendum forms part of the Tender Documents and shall be read, interpreted, and coordinated with all other parts. The costs of all elements contained herein shall be included in the submission. The following revisions, changes, corrections, additions, and or deletions supersede the information contained in the original Documents to the extent referenced and shall become part thereof.

#### Addendum Item 1 Questions & Answers

## 260. Proponent Question:

There are four 900mm gate valves required for this project. Please confirm how many 900mm gate valves will be supplied by the City.

## Response:

Three (3) 900mm gate valves will be owner supplied.

## 261. Proponent Question:

As per question/response 159 in addendum 5: "For all SS pipes above 600 mm – XS schedule (wall thickness 0.5 in)", does this include the Ø900mm stainless steel pipe entering the surge tank?

## Response:

All stainless steel pipe equal to or less than 600mm in diameter to be Schedule 10, wall thickness 0.250" (6.3mm)

All stainless steel pipe greater than 600mm in diameter to be Schedul STD, wall thickness 0.375" (9.375mm)

This supersedes all other RFI's and responses regarding wall thicknesses for stainless steel pipe.

#### 262. Proponent Question:

What is the DR (dimensional ratio) for the 300mm PVC overflow piping on the surge prevention tank.

#### Response:

DR 35

#### 263. Proponent Question:

On 2 separate question / answer series we have asked for a detail of the air valve assembly that is to be installed on the existing 1200mm steel feeder main. The latest response was "Model number has been provided and is sufficient". The point of the question was to determine details of the chamber. Can you please tell us whether the chamber is a precast round or square structure (including size), does the chamber extend below the pipe and how far, what is the overall depth of the chamber from base to finished grade, and if there is a drain what is the size and length.

#### **Response:**

Air release valve to be 150mm Valmatic Combination Air Valve model No. 106S. This is to be installed in the inline valve chamber already installed in Phase 1 on Highway 28; no chamber or drainage required under the scope of this contract. See hand sketch attached

#### 264. **Proponent Question:**

The excavation for the base of the sanitary storage tank will be at elevation 136.0 which is 3 meters below the lake level. We anticipate an extensive dewatering / well point system to facilitate the installation. Due to the close proximity to the existing caisson it is highly likely that a portion or one side of the caisson will be exposed during excavation for the sanitary tank. Can you comment if this will compromise or put the caisson at risk?

#### **Response:**

To be addressed in Addendum 8.

#### 265. Proponent Question:

Reference drawings P103 & P107: Addendum #2, Q41 mentioned about providing structural details for the concrete valve chamber/sump on Process 2 Area (102). However none was attached. Please confirm.

#### Response:

The cast-in-place concrete valve chamber/sump is shown in plan on drawing S102. A section through it would be similar to Section 2 on drawing S106. The grating is noted on this section.

#### 266. **Proponent Question:**

Reference drawings A410, S102 & S106: Are details for exterior pad & screen on drawings S102 & S106 referring to mechanical enclosure at A410? Please confirm.

#### Response:

Yes, the details for exterior pad & screen on drawings S102 & S106 refer to the mechanical enclosure on drawing A410

#### 267. Proponent Question:

Reference drawings C102, C104 & C301: Could you please provide structural details on the concrete boat ramp?

#### **Response:**

To be addressed in Addendum 8.

#### 268. Proponent Question:

Query from misc. metals subcontractor: Can you please confirm what is scoped as guardrails 5.4 and hand railing including uprights 5.5? We have structural drawings that call out guardrails and architecturals that call the same railing handrail.

#### **Response:**

Please clarify the conflict, with drawing/spec references. To help clarify, guardrails are a min. 1070mm high, whereas handrails are at 920mm high. Generally speaking, stairs and ramps require handrail heights while landings require guardrail heights. Furthermore, please note that all exterior guardrails, pickets and handrails are stainless steel.

#### 269. Proponent Question:

Can you confirm that the reference to SCADA (Div. 25 Section 1.1) is referring to the SCADA PACK 32 shown in the MCP-100 Panel Bill of Materials on Drawing E504?

#### **Response:**

The reference to 'SCADA' in the specification 250501 Clause 1.1.6 is not in direct relation to the SCADAPack32. That said, the intent of the SCADAPack32 is for use by others, and programming for the SCADAPack32 is not part of the contractor's scope.

## 270. Proponent Question:

Please add Division 41 to Appendix 1 of the Tender Form.

## Response:

See Specification Revision in Addendum Item 2,

## 271. Proponent Question:

This is a response to item #165 in Addendum 5, the only product I am applying to be used as a 'rigid insulation' is our 'Quik-Therm Multi-Purpose Insulation.

## **Response:**

In order to be acceptable for below grade vertical applications, it must be shown to comply and have been tested in accordance with the following standards. Furthermore, this product is not intended to substitute the concrete faced rigid insulation that is applied on foundations walls above grade and as shown on the drawings. The following testing and standards include:

1. CAN/ULC-S701, including the verification of quality consistency in Annex B for EPS.

2. Thermal Resistance: RSI 0.87/25 mm minimum

a. (Provide testing data showing type 3 EPS system compliance. The testing data provided appears to be for type 1 insulation: "The new CIS product consists of metalized polymer faced Type 1 expanded polystyrene (EPS) boards which are affixed directly to the interior side of the building's exterior concrete wall.")

3. Compressive Strength: minimum 172 kPa at 10% deformation in accordance with ASTM D1621

a. (The test from GeoPacific indicates that only type 1 and 2 have been reviewed, however, in order to meet the compressive strength requirements, it needs to be shown that type 3 (30psi) has been tested to ASTM D1621. "We have reviewed the specifications for type 1 and 2 materials as listed with technical data on the attached sheet." There was no attached sheet in the PDF.)

4. Water Absorption: maximum 0.7% (% by volume) in conformance with ASTM D2842.

More information is required before this can be considered an approved alternate.

## 272. Proponent Question:

According to the drawings, the VFDs are for pumps, which make the application Variable Torque load type. However in the spec, Constant Torque sizing is asked. What's the reason for this? This would make a large difference in the size and cost of the 300HP VFDs.

## **Response:**

The requirement of constant torque will remain (Specification 262911.2.4.1). Note that two of the highlighted drives (P-400, P-410) are supplied by the OSHG Supplier.

## 273. Proponent Question:

There seem to be an error in RFI response to question #242. It seems the units of the pipe flow (MLD) and the pipe pressure (psi) is swapped.

## **Response:**

All stainless steel pipe equal to or less than 600mm in diameter to be Schedule 10, wall thickness 0.250" (6.3mm)

- All stainless steel pipe greater than 600mm in diameter to be Schedul STD, wall thickness

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## 0.375" (9.375mm)

This supersedes all other RFI's and responses regarding wall thicknesses for stainless steel pipe.

#### 274. **Proponent Question:**

18 ga baffle details (4 and 5 on A405): Please clarify where these apply?

#### **Response:**

Extent of baffle can be found as a note and dashed line on the reflected ceiling plan on drawing 15-508-A111

#### 275. Proponent Question:

Do you need the smaller VFDs (2X 1.5HP, P400 and P410 feed pumps) in a separate enclosure, or are they loose drives going into an existing MCC?

#### **Response:**

The P-400/410 drives are supplied by the chlorine generation skid vendor and scope includes installation and commissioning only

#### 276. Proponent Question:

Regarding Section 08 11 13:

- a. 1.6 indicates a temperature rate rise core; 2.2 indicates Polystyrene Core; 2.6.1 indicates welded stiffener core construction (which comes with fibreglass between the stiffeners);
   2.7 indicates Polystyrene Core
  - · Please advise door core(s).
  - Please advise door core(s) as per application.
- b. On the floor plan, Door 005 is indicated as a Double Egress Door in a 3-hour wall; the Finish Hardware Scheduled is for a different door function; the door sizes are offset.
  - Please advise opening function.
- c. On the floor plan, Door 004 is indicated as a Pair of Doors in a 3-hour wall; the Finish Hardware Scheduled is insufficient for door function.
  - Please advise appropriate hardware.
- d. As oversized HM Doors and thermally broken PS Frames, Doors 001D and 002 will cause too mush torsion on the thermally broken frame construction.
  - Please advise solution.
- e. Doors 001D and 002 are scheduled to receive "welded hinges' but specified to receive template butt hinges; the Frame and Doors are specified to be mortised, blanked, reinforced, drilled and tapped for templated hardware in 2.8.2;
  - Please advise hinge type so as to provide preparations

## **Response:**

a. Exterior doors: follow section 2.7: polystyrene core, interlocked and tack welded seams Interior doors: honeycomb core, interlocked and tack welded seams
Fire rated doors: polystyrene core is acceptable, provided it meets the fire rating requirements for its application. Also, it must meet the following requirements:
Steel fire rated doors and frames: labelled and listed by an organization accredited by Standards Council of Canada in conformance with CAN4-S104 or NFPA 252 for ratings specified or indicated.

• Provide fire labelled frames for openings requiring fire protection ratings. Test products in conformance with CAN4-S104, ASTM E152 or NFPA 252 and listed by nationally recognized agency having factory inspection services.

- b. The wall that D005 is located in is 45min rated. The door rating requirements for this is 20min. The door size are two 915mm doors as per the schedule and should both swing out from the storage room like D004. As this is a storage room, the door can have a store function.
- c. Same as response above for D005
- d. Provide standard insulated pressed steel frame for these doors
- e. To be addressed in Addendum 8

## 277. Proponent Question:

Regarding Section 08 71 00

- a. 3.6.TAG: CL Cylindrical Locks indicates Heavy Duty Mortise Lockset, Panic [Device] and Schlage ND series [cylindrical leversets].
  - Please advise lockset type
- b. 3.6.TAG HB Hinges Butt indicates six hinges ("3 pairs") per door leaf. There are hinge pitching and sizing standards based upon height, width and weight of door leaf.
  - Please indicate hinge weighting, sizing and pitching quantities as per application.
- c. 3.6.TAG FB Flushbolt is specified for double [pairs] of doors to [pin] the inactive door. These bolts are also scheduled for the oversize pairs of doors
  - Please advise pinning product(s) for oversize doors
- d. Welded hinges are scheduled for oversized pairs of doors, however
  - No hinge type is specified
  - · No direction is given as to welding type and application as based on material
  - Welding contradicts the specifications, as to mortising and templating, of Sections 08 11 13 and 08 71 00. Please advise
- e. Doors 004 and 005 are scheduled to receive interlocking [manual] flushbolts, however, these are 90 minute fire-rated openings (3-hour fire rated wall)
  - Please advise hardware as per fire-rating and function.

## Response:

- a. ND70PD, classroom lock
- b. To be addressed in Addendum 8

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- c. To be addressed in Addendum 8
- d. To be addressed in Addendum 8
- e. Doors are 20min rated in a 45min rated wall

## Addendum Item 2 Additional to clause to 265000.2.1.2

Alternates to luminaire schedule will be considered at shop drawing review stage; if submitted luminaires do not meet the performance, physical and aesthetic intent of the proposed equipment in the luminaires, they will be rejected.

## Addendum Item 3 Clarification to our main breakers

Power breakers for main and generator in SWG-61 (E201) to meet requirements of specification 262313, including clause 2.8.2 (drawout type). Rackout/Drawout of this equipment is to ensure isolation during maintenance of equipment.

#### Addendum Item 4 One of the lights we have specified does not meet CSA requirements

Luminaire type RE defined on E305, remove and replace with the following: Type EA, Emergency Battery Pack, 120Vac, 12W, 12VDC, Nema4, 90minute, LUMACELL RG12NX 72 2 LD10

## Addendum Item 5 Specification 262419.2.12

Specification 262419.2.15, add the following approved MCC/Switchgear manufacturer 2.15.1.6 Eaton

## Addendum Item 6 Tender Closing Date Revision

Change Tender closing date from "Thursday October 20<sup>th</sup>, 2016" and replace with "**Thursday** October 27<sup>th</sup>, 2016".

## Addendum Item 7 Question & Answer Period Extended

All questions, clarifications, requests, etc. regarding this Tender must be made in writing and received by **3:00 p.m.** (Campbell River local time) **Friday October 21**<sup>st</sup>, **2016.** 

## Addendum Item 8 Delete and Replace Supplementary Specification Construction Schedule & Progress Reports Section 01 31 00, 1.3.2 Schedules

Delete Section 1.3.2 and replace as follows:

Show completion time and all specific dates and sequencing requirements. Identify activities making up the critical path. Schedule to include the following milestones:

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Construction anticipated to commence No later than: November 30th, 2016 Substantial Performance of Contract to be achieved on or before: January 31<sup>st</sup>, 2018.

## End of Addendum

## Acknowledgement of this Addendum in your Tender submission is required.

Clinton J. Crook, SCMP, CPSM Senior Buyer