

RESPONSES TO QUESTIONS DURING TENDERING

- 1) On the Site visit there was mention that there are pictures available for the individual panels. Wondering if it is possible to get those pictures for the Gear that has to be modified or breakers added.

Response: Pictures are available for most panels but not all. If a specific panel is in question a picture can be provided if there is one.

Most existing 120/208V panels are a mixture of ITE, Commander, Square D, Westinghouse, Siemens, GE.

Unit 6 Main CDP is ITE, C-13 main switchgear/switchboards are Square D, B-1 Dome Attic CDP are Square D.

- 2) What are the Panel sizes, KA ratings and breaker quantities of all panels? Especially the ones requiring just replacing the existing breakers.

Response: See response in addendum #1 for panel sizes and breaker quantities. Main distribution equipment to be rated at 42kA, CDPs to have a KA rating of 25kA, 120/208V panel boards (225A buss and less) to be rated at 10kA.

- 3) Can we get a 2 week extension? With the amount of panels to go through and logistics required for site we need more time to give an accurate price.

Response: A two week extension will be given. Tender closes on May 2nd.

- 4) What is the intent of the cable trays shown inside the E-House? Are we running teck cables in all the duct banks?

Response: Cable trays shown to allow for running Teck cables within E-houses. Majority of conductors in duct banks are Teck. Verify on SLDs.

- 5) If we are pulling 2 runs of teck cables, can we run it in one 125mm conduit? Because in the Duct Detail 7/ E3-01-01, it only shows one run of 125mm conduit for '6DPP2-N1'.

Response: Revise 2x4#1/0 to 3#350MCM Teck.

- 6) Are we using the spare conduit in the duct bank for running the fibre cables?

Response: Correct.

- 7) Are you providing panel schedules for the existing panels to be replaced? If not, can you describe a NEW PANELBOARD we can use for pricing.

Response: See addendum #1 for response.

- 8) Is there a drawing E7-01-05 as noted on drawing E2-01-02 Detail 1?

Response: No, this is a mistype. See drawing E7-01-04.

- 9) In section 01 35 13

1.9 Work hours

.1 Work hours are to be Monday to Friday 7:30am – 6:00 pm

.2 Work will not be permitted during weekends and Statutory holidays, without permission

1.10 Overtime work

.1 No Overtime work will be permitted, without permission

.2 When Overtime work, weekend, statutory holiday work is required and approved, Canada may attribute the costs of extra security staff to the contractor

UER wishes to propose a 7 day work week of 10 hours a day, a total of 70 hours of work a week. For a set shift and rotate the working crew in and out for the duration of the project. A 2 week on 2 week off schedule is being discussed currently. We think it would help facilitate a quicker and efficient project completion. Is Public Works and Government Services Canada opposed to the work schedule proposed in this email?

Please advise.

Response: PWGSC/CSC have reviewed and declined the request. The bidder should bid the work based upon the hours of work described in the contract documents.

Although the institution operates 24/7, the maintenance staff and security staff controlling the sallyport will not be available over the requested hours. The exception described is intended to address temporary short term occurrences, such as shutdowns, that might occur during the course of the work.

10) 1. Are the "E-Houses" for this project going to be prefabricated off site? If they are fabricated off site will they come equipped with the required electrical gear installed within?

Response: E-houses to come to site ready to install and fully commissioned.

11) What is the Feeder size for the Unit 7 Normal and Emergency Feeder? It is shown we are to remove it and refeed it from C-13.

Response: 4#350MCM Teck

12) Will a mud-slab be required in trench bottom prior to duct installation? Spec 33 65 73 3.2.4 indicates a mud-slab is required in trench while typical detail of ductbanks on drawings indicate 75mm sand bed.

Please confirm.

Response: Sand bed is acceptable.

13) The 4160V feed to sectionalized switchgear on Detail 1 DWG E2-01-02 is shown going west. This feeder is not indicated on the ductbank drawings of Site Plan E1-01-01. Please confirm the routing of this 4160V feeder duct and cable.

Response: The ductbank to 6DPP1-N1 will be expanded to include the 2 more ducts (1 – 4160V, 1 – spare). The 4160V conductor will branch off and head to the sectionalized switchgear. This will be updated on the next addendum.

14) Are the E-houses for emergency generators required to be from the same manufacturer as Distribution E-houses? Re: the same look architecturally?

Response: Prefer to have same look architecturally.

15) Section 33 65 73 3.4.6 Pull Pits are listed as New Castle "Christy" Series. Does this mean Old Castle products?

Response: Correct.

16) Is there a spoils material dumping area on site? Or will excavated spoils need to be hauled off-site?

Response: Hauled off site.

17) Is there an existing asphalt spec available

Response: Asphalt specification added to contract documents in this addendum.

18) Drawing E7-01-04

- Please confirm conductors required between the 1500A Breaker in the Generator E-House and the A-6 Transfer Switch.
- Please confirm conductors required between the 1500A Breaker in the Power E-House and the A-6 Transfer Switch.

Response: Conductors to A6 not in this contract.

19) Drawing E2-01-02

- Detail 1 – Please confirm if the man gate is required as it is not shown on Drawing E3-01-01 Detail 18C.
- Detail 1 – Is there a requirement to backfill the area inside the new fence with crushed rock? If so, please provide details.

Response: Man gate required. Man doors for E-house and G-house to be facing east. Crushed rock to be installed in a 2m radius around transformer and sectionalizing switchgear. Crushed rock to also be installed around 4160V sectionalizing switchgears elsewhere on site. 6 inches of material to be removed and replaced with crushed rock.

20) Drawing E3-01-02

- Detail 4a – Please define the 'manhole ground grid' referenced in this note.
- Detail 4a, 4b, 4c, 4d – Please provide a connection detail between the concrete pile and a pre-cast manhole.

Response: A standard two rod ground grid to meet CEC requirements. Detail for connection will be provided in next addendum.

21) Drawing S1-00-01

- The size of the Power E-Houses requested in a typical (Ex. Drawing E3-01-02 Detail 1) are larger than the foundations detailed on this drawing. Please revise the structural details to support the E-Houses or the typical dimensions of the E-Houses.

Response: Structural details will be updated in next addendum.

22) Section 33 65 73 2.8.6

- Can the Oldcastle Synertech 3660 (Stacked) be used in place of the 'Christy' Series? I don't believe a 'Christy' series pull pit is produced in the dimensions requested.

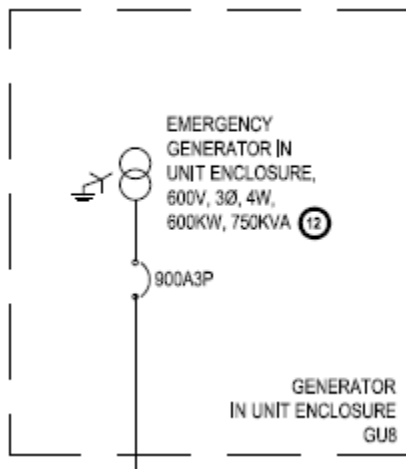
Response: Old castle Synertech is acceptable.

23) Regarding the Diesel Generators ... Should Section 26 32 13 be removed from the tender package in favour of using only Section 26 32 14 to define the work? There is conflicting information between the two sections and 26 32 14 appears to align with the requirements of this particular project.

Response: Specification 26 35 13 to be removed from contract documents.

24) Drawing E1-05-01

- Is the 600KW Generator to be installed in an E-House (like Package 1) or is this generator to have a standard enclosure only (not in an E-House)?
- If an E-House is to be provided for this generator ... should a branch panel be provided from outside the building for the required loads (block heater, lighting, battery charger, etc) similar to Package 1? Branch Panel circuit details and panel schedule?



Response: Generator enclosure to be a walk in enclosure similar to WP01. Branch panel was added in Addendum #1.

25) Drawing E3-01-01 Detail 15

- The housekeeping pad appears to be built on void form and independent of the piles for the panel ... How will this pad stay where it was installed without adequate support?

Response: Detail will be updated for next addendum.

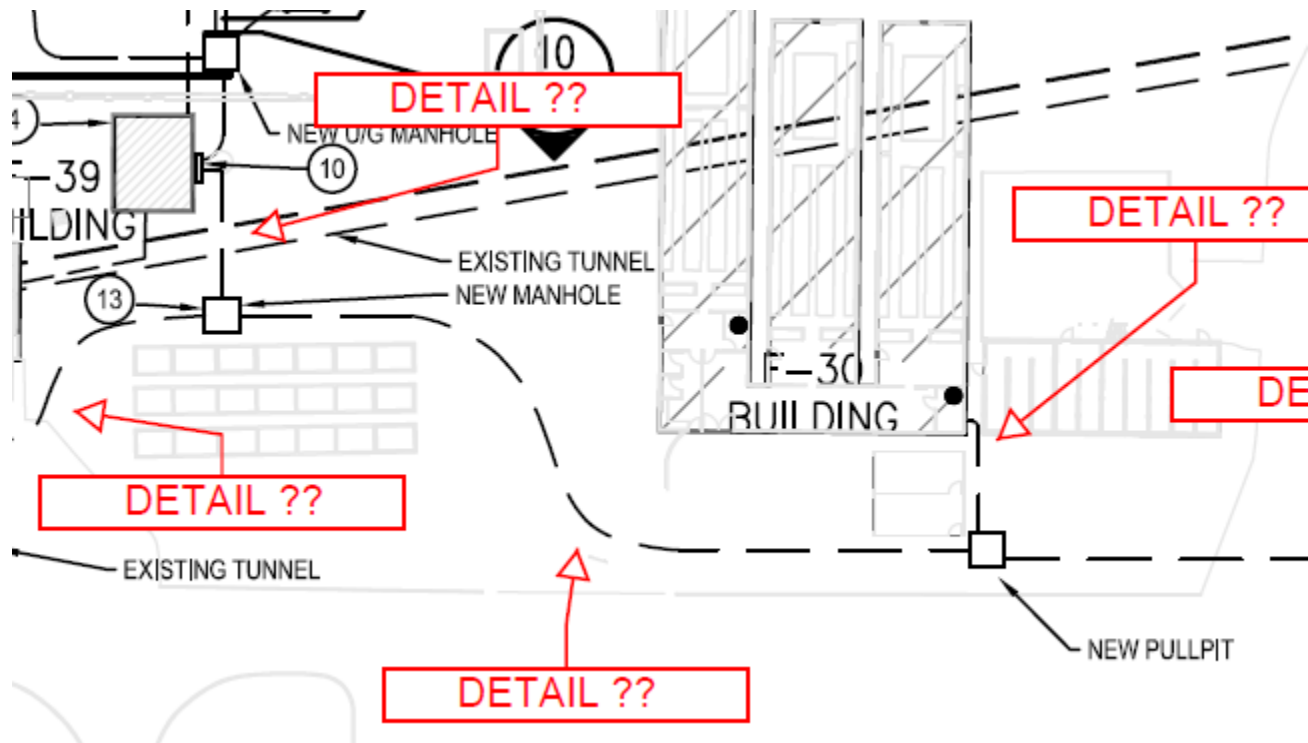
26) Drawing E1-01-01

- Routing of Detail 9 would require us to remove the front steps off the facility. Can the manhole East of the Entrance be moved North (Detail 8 also extended North) and enter the existing utility tunnel further North than shown?

Response: To not interfere with existing stairwell, duct bank can be shifted north.

27) Drawing E1-05-01

- Please provide duct bank details for the following locations:



Response: Ductbank details will be provided in next addendum.

28) Drawing E7-02-05

- New Emergency Power MCC (6MCCB1-E1) – Is new pipe & wire to the fan required for each load (Key Note 1) or are we to land the existing feeds to the new MCC? If new feeds are required, can you provide location of equipment within the room facility? (Drawing E2-02-01 does not provide any equipment location)

Response: Intercept existing feeds and route to new MCC.

29) Drawing E7-02-07

- Note 12 – Please provide a relay count for each low voltage relay panel or minimum number of relays to provide for each panel.
- New Normal Power CDP (2DPBE1-N1) there is a load that the breaker and feeder size is not defined. Please provide details of this circuit or what we should assume for our estimate.
- Is a Tie-Breaker required in E-House BE-1?

Response: Each panel to have a minimum of 36 relays. For the unknown breaker and conductor estimate 20A3P, 4c#12 Teck. Tie-breaker not required in BE-1 E-house.

30) NEW LV RELAY PANELS – Will you be able to provide a load schedule for these new relay panels?

Response: LV relay panels feed light in cell blocks, load schedule not available at this time. See response to question #29.

31) NEW CIRCUIT BREAKERS – Will you be able to provide us with the number and size of circuit breakers that needs to be replaced in each panel-boards shown as note 2 on drawing E7-04-05?

Response: See addendum #1 for breaker sizes and quantities for estimating.

32) Can you please give more details on the cash allowances? Like make a note on the plans which part of the single line covers the cash allowances.

Response: See updated SLDs in this addendum for metering cash allowance. Switchgear cash allowance is for 4160V switchgear in building C-36.

AMENDMENTS TO PROJECT – GENERAL

1. Duct bank conductors:
 - a. 4160V – non-armoured power cable suitable for underground installations.
 - b. 600V and less – Teck cable.

AMENDMENTS TO THE SPECIFICATIONS

Reference: 32 12 13 23 – ASPHALT PRIME COAT

1. Specification added to contract documents.

Reference: 32 12 16 – ASPHALT PAVING

1. Specification added to contract documents.

Reference: 33 65 73 – CONCRETE ENCASED DUCT BANKS, MANHOLES, AND PULL PITS

1. Revised section 2.7.1.2.

AMENDMENTS TO THE DRAWINGS

Reference: E0-00-01 – COVER PAGE

1. Updated drawing revisions.
2. Updated legend.

Reference: E3-02-01 – ELECTRICAL DETAILS

1. Revised details #12 & #13 to read 'B-W' in lieu of 'B8'.

Reference: E3-03-01 – ELECTRICAL DETAILS

1. Revised detail #2.

Reference: E7-01-03 – SLD - New

1. Revised existing metering to new networked digital metering units on 4160V switchgear, SGR-E1-1, and SGR-E2-1.

Reference: E7-01-04 – SLD – NEW

1. Revised DMU's (digital metering units) to NDMUs (networked digital metering units) on '6LCNE-N1' and '6LCNE-E1'.
2. Revised breakers in '6LCNE-N1' & '6LCNE-E1' to be complete with metering capabilities.
3. Removed metering from '6DPP2-N1', '6DPA3-E1', '6DPA4-E1', and '6DPC31-E1'.

Reference: E7-02-05 – SLD – NEW MAIN 600V MAIN SWITCHGEAR

1. Revised breaker in SGR-E2-2 to B-1 to be complete with metering capabilities.
2. Revised MCC '6MCCB1-E1'.

Reference: E7-02-06 – SLD – NEW BE & B4 LOAD CENTER

1. Revised DMU's (digital metering units) to NDMUs (networked digital metering units) on '6CLBE-E1', '6LCBE-N1', '6LCB4-E1', and '6LCB4-N1'.
4. Revised breakers in '6CLBE-E1' and '6LCBE-N1' to be complete with metering capabilities.
2. Removed DMUs from D-1 armoury CDPs.

Reference: E7-02-07 – SLD – NEW BE1 & BW LOAD CENTER

1. Revised DMU's (digital metering units) to NDMUs (networked digital metering units) on '6CLBE1-E1', '6LCBE1-N1', '6LCBW-E1', and '6LCBW-N1'.
2. Revised breakers in '6CLBE1-E1', '6LCBE1-N1', '6LCBW-E1', and '6LCBW-N1' to be complete with metering capabilities.

Reference: E7-03-03 – SLD – NEW C-13 LOAD CENTER

1. Revised DMU's (digital metering units) to NDMUs (networked digital metering units) on '6LCC13-E1', '6LCC131-N1', '6DPC5-N1', '6DPC5-E1', '6DPC24-E1', '6DPC1-N1', '6DPC1-E1', '6DPC29-N1', '6DPC24-E1', and '6DPC29-E1'.
3. Revised breakers in '6DPC5-N1', '6DPC5-E1', '6DPC24-E1', '6DPC1-N1', '6DPC1-E1', '6DPC29-N1', and '6DPC29-E1' to be complete with metering capabilities.
2. Removed DMUs from C-2, C-4, and C-29.

Reference: E7-04-04 – SLD – NEW UNIT 7 LOAD CENTER

1. Revised DMU's (digital metering units) to NDMUs (networked digital metering units) on '6EDC' and 'MDC'.

Reference: E7-04-05 – SLD – NEW UNIT 6 LOAD CENTER

1. Added new NDMUs to '6DPU6-E1' and '6DPU6-N1'.
2. Added key note 5.
3. Revised breakers in '6DPU6-E1' and '6DPU6-N1' to be complete with metering capabilities.

Reference: E7-05-05 – SLD – NEW MAIN FARM DISTRIBUTION

1. Revised DMU to NDMU in '6SBF39-E2'.
2. Revised breakers in '6SBF39-E2' to be complete with metering capabilities.

Reference: E7-05-06 – SLD – NEW UNIT 8 LOAD CENTER & F-25, F-72

1. Revised DMU to NDMU in '6SBF39-N1', '6SBF39-E1', and '6SBF25-E1'.
2. Revised breakers in '6SBF39-E1' to be complete with metering capabilities.

Attachments:

33 65 73 – Concrete Encased Duct Banks, Manholes, and Pull Pits.
32 12 13 23 – Asphalt Prime Coat

32 12 16 – Asphalt Paving

E0-00-01

E3-02-01

E3-03-01

E7-01-03

E7-01-04

E7-02-05

E7-02-06

E7-02-07

E7-03-03

E7-04-04

E7-04-05

E7-05-05

E7-05-06

END OF ADDENDUM NO. 3