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## MCTS CENTRE AND C&P BUILDING PLACENTIA, NL

### Addendum 1

DATE: 08 August 2017

Reference No.: R.081781.004

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The following, including attachments shall be included in the scope of the Work of this project.

#### **PART A – Questions and Answers**

1. **Q:** It seems as though the project is specifying to install a sheet linoleum on top of the raised floor. This will not work as the finish is too thin and over time the seams of the floor would telegraph through. You could install a subfloor on top of our floor and then the sheet good, but then the access beneath the floor would be lost.

**A:** See reference to Section 09 69 00 – Access Flooring, this Addendum.

2. **Q:** The energy monitoring specifications appear to be missing. There are numerous sub-metering points shown on the single line diagrams but no reference to the required metering hardware.

**R:** LEED requires that electrical metering must be adequate to verify the energy model for the buildings. We coordinated the electrical metering with the Mechanical Engineer and have provided electrical metering to allow total building electrical load and the electrical loads for HVAC, Electrical Heating and Lighting to be segregated from other electrical loads. This is adequate to verify the energy model.

3. **Q:** Drawings show metering points to be connected back via CAT/6 to a computer. Is the computer supplied by the owner or part of the tender?

**A:** The computer to run the software will be supplied by contractor as part of the building management system.

4. **Q:** Is there energy management software to be included? If so please provide details on the requirements?

**A:** Energy management software will be supplied as part of the building management system. Metering software to view, analyse and record metering data will be supplied with the electrical metering system.

5. **Q:** The Switchgear Specifications call out an older Power Meter which has a kyz pulse output to the building automation system. Should this be a CAT/6 to the above system?

**A:** *The Switchgear Specification will be revised to indicate that Customer Meter shall have communication output via CAT6 cable and include the communications protocol to match the electrical metering software.*

6. **Q:** Mechanical Acceptable Alternative Materials:

General Note (Acceptable Alternative Materials) - All alternate products must satisfy requirements for capacity, quality and performance as specified on the design drawings and specifications. Products must be CSA and/or cULC certified (ie. if any of the manufacturers products referenced below, and in the attachments, are not approved for use in Canada, shop drawing submittals will be rejected). Acceptance of these products for alternate submission does not guarantee approval during shop drawing review as the products must meet the design requirements for final approval. Any extra costs, delays, or problems associated with the use and installation of this equipment will be the responsibility of the Contractor.

**A:** The products listed below are accepted for alternative submission, but must satisfy all requirements of the design and restrictions as listed in the General Note above:

| <u>Section</u> | <u>Equipment</u>                                       | <u>Alternate Product</u>  |
|----------------|--|---|
| 23 33 15       | Dampers  | Alumavent / Ventex  |
| 23 33 16       | Fire Dampers   | Alumavent / Ventex  |
| 23 34 04       | Inline Fans  | ACME Eng & Mfg Co   |
| 23 34 00       | General Purpose Fans                                   | ACME Eng & Mfg Co   |
| 23 37 13       | Supply Diffusers/Grilles, and Return & Exhaust Grilles | Airvector   |
| 23 37 20       | Gravity Roof Vent and Louvres                          | Ventex  |
| 23 55 01       | Duct Heaters   | Thermolec (these were specified on the drawings (Reheat Coil Schedule)) |
| 23 72 01       | Heat Recovery Ventilators                              | Aldes   |
| 23 10 02       | Haz. Gas Detection System                              | Honeywell 301-C Controller & E3 Point CO & NO2 Sensors                  |
| 23 81 24       | Multiple Split AC System (VRF)                         | Trane   |

7. **Q:** Door Hardware Acceptable Alternative Materials:

General Note (Acceptable Alternative Materials) - All alternate products must satisfy requirements for quality and performance as specified on the design drawings and specifications. Products must be CSA and/or cULC certified as required (ie. if any of the manufacturers' products referenced below, and in the attachments, are not approved for use in Canada, shop drawing submittals will be rejected). Acceptance of these products for alternate submission does not guarantee approval during shop drawing review as the products must meet the design requirements for final approval. Any extra costs, delays, or problems associated with the use and installation of this equipment will be the responsibility of the Contractor.

- A.** The products listed below are accepted for alternative submission, but must satisfy all requirements of the design and restrictions as listed in the General Note above:

| <u>Section</u> | <u>Equipment</u>  | <u>Alternate Product</u>                                    |
|----------------|-------------------|---|
| 08 71 00       | Door Hardware     | Assa Abloy Group (except for Keying/cylinders to be Medeco) |
| 26 09 23.02    | Lighting Controls | Ecoflex   |
| 26 09 23.02    | Sensors           | Wattstopper   |
| 26 50 00       | Light Fixtures    | Philips Day-Brite   |

**PART B – SPECIFICATIONS**

1. Section 00 01 11 – List of Contents

1. Delete Section 00 01 11 – List of Contents in its entirety and replace with new Section 00 01 11 – List of Contents, attached.

2. Section 09 69 00 – Access Flooring

1. Delete Clause 2.2.3.1 and replace with new Clause as follows;:  
“.1 Linoleum flooring, cut in tiles to match the size of flooring panels. Adhere in place in accordance with Section 09 65 16 – Resilient Sheet Flooring.”

3. Section 14 20 06 – Passenger Elevators

1. Delete Section 14 20 06 – Passenger Elevators in its entirety and replace with new Section 14 20 06 – Passenger Elevators, dated 2017-08-01 attached.

4. Section 23 81 25 – Mini-Split Air Conditioning System
  1. Delete Clause 1.5 - Warranty and replace with new Clause 1.5 Warranty as follows:
    - .1 For mini-split air conditioning systems 12 months warranty period is extended to 60 months.
    - .2 Contractor hereby warrants that computer room air conditioning systems will not spall or show visible evidence of cracking, except for normal hairline shrinkage cracks for 5 years.
5. Section 22 42 01 – Plumbing Specialties and Accessories
  1. Delete Clause 2.17.2 and replace with new Clause to read as follows:
    - .2 Dimensions as indicated. Water capacity not less than 34 litres, flow rate 57 L/min.”
  2. Delete Clause 2.17.4 and replace with new Clause to read as follows:
    - .4 Standard of Acceptance: Zurn Z1186-ST-400 or approved equal.”
  3. Delete Clause 3.10.1 - Water Metres and replace with new Clause to read as follows:
    - .1 Install water meters as indicated on drawings and as required for measurement and verification (see mechanical drawings for details and quantity).
6. DIVISION 26
  1. Add new Section 26 12 16.01 – Dry Type Transformers Up to 600 V Primary dated 2017-08-01 attached.
7. Section 26 24 02 – Service Entrance Board
  1. Delete Section 26 24 02 – Service Entrance Board in its entirety and replace with new Section 26 24 02 – Service Entrance Board dated 2017-08-04 attached.
8. Section 27 54 02 – Sustainability Management System Sensors & Meters
  1. Add the following Clause

“2.1.2.3.2.3 Communications protocol shall be compatible with Sustainability Management System software.”

2. Add the following Clause;

“2.2.1.8 Communications protocol shall be compatible with Sustainability Management System software.”

9. Section 28 13 00 – Access Control

1. Delete Clause 1.5.1 and replace with new Clause to read as follows:

.1 The 12 month warranty period prescribed in General Conditions is extended to 60 months.”

2. Delete Clause 2.2.1 and replace with new Clause to read as follows:

.1 12 VDC power supply with adequate capacity to meet the requirements of item .6 below and integral battery charger.”

10. Section 23 34 00 – HVAC Fans

1. Delete Clause 2.8.1.5 and replace with new Clause to read as follows:

.5 Finish: stainless steel, polished.

11. Section 26 05 28 – Grounding - Secondary

2. Delete Clause 1.1.3 and replace with new Clause to read as follows:

.3 Lightning and Grounding Protection for MCTS sites: 67-013-000-ES-EQ-001, see Appendix “J”.

12. Section 28 13 00 – Access Control

1. Delete Clause 1.5.1 and replace with new Clause to read as follows:

.1 The 12-month warranty period prescribed in General Conditions is extended to 60 months.

13. Section 31 22 13 – Rough Grading

1. Clause 3.4.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

“Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

14. Section 32 11 16.01 – Granular Sub-Base

1. Clause 3.6.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

“Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

15. Section 32 11 23 – Aggregate Base Courses

1. Clause 3.5.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

“Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

16. Section 32 12 16 – Asphalt Paving

1. Clause 3.10.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

“Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

17. Section 32 16 15 – Concrete Walks, Curbs and Gutters

1. Clause 3.5.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

“Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

18. Section 32 92 19.16 – Hydraulic Seeding

1. Delete Clause 2.1.3 in its entirety and replace with new Clause to read as follows:

.3 Tackifier: water dilutable, liquid dispersion or water soluble, vegetable carbohydrate powder.

2 Delete Clause 3.4.2 and replace with new Clause to read as follows:

.2 Fertilize during establishment and warranty period in accordance with industry practice so as to encourage robust growth.

19. Section 33 11 16 – Site Water Utility Distribution Piping

1. Clause 3.16.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

. “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

20. Section 33 31 13 – Public Sanitary Utility Sewerage Piping

1. Clause 3.8.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

“Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

21. 33 41 00 – Storm Utility Drainage Piping

1. Clause 3.7.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

. “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

22. Section 33 42 13 – Pipe Culverts

1. Clause 3.9.1 – Testing, delete the first sentence “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency designated by Departmental Representative.” and replace with new sentence to read as follows:

. “Inspection and testing of soil compaction will be carried out by an independent inspection and testing agency acceptable to Departmental Representative.”

23. Section 01 35 29.06 – Health and Safety Requirements

2. Delete Clause 1.8.1.13 and replace with new Clause as follows:

“.13 Completing work onsite along with working in close proximity with other contractors.”

**PART C – DRAWINGS**

1. Drawing E10 – Single Line Diagram

1. Delete drawing E10, Rev. D, Single Line Diagram in its entirety and replace with new drawing E10, Rev. E Single Line Diagram attached.

**END OF ADDENDUM**