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Solicitation No. - N° de l'invitation EE520-151410/B	Amendment No. - N° modif. 017
Client Reference No. - N° de référence du client EE520-151410	Date 2015-03-03
GETS Reference No. - N° de référence de SEAG PW-\$QCM-009-16291	
File No. - N° de dossier QCM-4-37219 (009)	CCC No./N° CCC - FMS No./N° VME
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AMENDMENT 017

Content of amendment 017:

- 1) Questions and answers #532 to 575;
 - 2) Technical addendum 06.
-

1) QUESTIONS AND ANSWERS

Question 532

Is there a type-C curb on the civil engineering plans? If so, could you provide details as to its location and dimensions?

Answer 532

No

Question 533

According to cross-sectional drawings 2/408 axis 5 and 2/406 axis J, only these two walls are to be insulated in the East Wing foundations. Is the entire perimeter of the East Wing to be insulated or only these two walls?

Answer 533

Exception made of the exterior walls that will become interior walls once construction is done, the entire perimeter of the East wing's foundation walls must be waterproofed and insulated as per typical wall sections 2/A-406 and 2/A-408.

Exception made of the exterior walls that will become interior walls once construction is done, the entire perimeter the Central Building's foundation walls must be waterproofed and insulated as per typical wall sections 2/A-400 and 2/A-403a.

Question 534

On detail drawing 4 on plan A-345, we see the fin head anchoring. Is this anchor typical of each fin? It appears that this anchor should not apply to each fin, but rather at a certain frequency/distance. Please specify the distance between each anchor.

By the way, the structural engineering detail drawings show another type of fin head (see detail drawing 2 on 6-S-698) which is at 1200 O.C. This is confusing as the number of head anchors to be supplied and the division responsible for them is unknown.

Answer 534

Typical head anchor is required at every blade. Revised detail 2/S-698 in addendum 6 shows the principle, and detail 4/A-345 is cancelled. Precision in addendum 6

Question 535

In reference to plan S-698, cross-sectional drawing 2, please indicate which division is to the stainless steel C230x30. Structural or curtain wall divisions?

Answer 535

structure

Question 536

By superimposing sheets A-111c Ibid) A-111c in Addendum 4, I noticed that there were unspecified amendments for the dimensions of elevator 5 and staircase #13, is this an error or must we consider this for each level? Please specify as the subcontractors will not see the Amendment.

Answer 536

Elevator 5 has been modified in addendum 1, Stair no.13 has been modified in addendum 3. The enlarged plans of these sectors prevail over smaller scale plans.

Question 537

Should the composition of the walls of staircase 13, elevator 6 and the mechanical shaft be modified at each level as shown in the cross-sectional drawing?

Answer 537

Refer to sections and enlarged plans on A-608. As indicated, compositions can vary depending on the structural bracing into the walls.

Question 538

Reference to answers 295, 341 and 353.

Are the communication jacks in the various rooms to be installed and the cabling run to the different telecom rooms or is the entire telecom aspect the subject of another contract?

Answer 538

Telecommunication receptacles indicated by A/V (for audiovisual) shall be provided complete and cabled till the two audiovisual rooms as indicated on drawings. For all other telecommunication receptacles, provide only empty boxes and conduits. Refer to addendum No. 4 for clarification on the scope of work for telecommunication networks (3 networks to provide including materials and cabling) and to answers to questions 295, 341 and 353.

Question 539

Masonry:

- a) Could you confirm which divisions are associated with the patrimonial masonry and those associated with the contemporary masonry?
- b) For the dark lines that appear to be fissures (above the arch in detail drawings N3.1 on plan A-515 for example), is masonry work required?
- c) Why are the Cintec anchors in side view on plans A-522a not visible in the exterior sectional drawings?

Answer 539

a) The following specification sections apply to heritage masonry : 04 03 06, 04 03 07, 04 03 08, 04 03 09, 04 03 31, 04 03 41, 04 03 42, 04 03 43, 04 05 00, 04 05 19, 04 11 00. The following specification sections apply to contemporary masonry : 04 05 12, 04 05 19, 04 05 23, 04 22 00, 04 43 16, 04 43 17, 04 43 26.

b) See answer no.501.

c) The contractor must refer to the location of Cintec anchors shown on the sheet A-522a drawings. Cintec anchors to be located approximately at the center of the West and East walls thickness. The exact location of Cintec anchors will be determined by the Departmental Representative on site and during construction.

Question 540

There does not appear to be a section of the specifications for the acrylic coating in compositions MF-13 and MF14 and for the cement coatings on the existing foundations. Please clarify.

Answer 540

The cement parging to be used on existing foundation walls (Est wing and Central building) is type 1 mortar, on-site mixed, as described in the specification section 04 03 08. It is apply in two layers of 6mm thick each. Parging shall be moist cured for a period of 7 days with burlap cloth and polyethylene film protection. A cure of 14 days total is required before installing the bituminous membrane.

Question 541

Reference to detail drawing 6/A-438:

- a) In Addenda A-04, you added detail drawing 6/A-438 "Cross-sectional drawing - Water tower parapets." Would it be possible to get the number of water towers and their location at roof level?
- b) With reference to the same detail drawing, you indicate "steel structure with angles" on certain elements. Are they to be the responsibility of metal fabrications and if so, would it be possible to get the specifications. Thank you for clarifying this.

Answer 541

- a) Refer to addendum 5, excerpt from A-113c, and to mechanical plans
- b) Steel elements by 05 50 00- Metal fabrications, refer to upcoming addendum.

Question 542

Addendum E05, Amendment 012, specifies that the electrician is responsible for excavation and backfilling, related to the precast pad and the construction of electrical ductbanks. Should this not come under civil engineering work? Please reconsider.

Answer 542

Excavation and backfilling indicated in addendum No. 5 are included in the scope of electrical works.

Question 543

Reference: doors, frames and hardware.

- a) Door schedule, openings #103-02A, 103-02B, 103-14, 103-15, 201-07, 201-08, 201-10B, 201-27. Wood doors rated STC50 are required with an elevation P2A (glazed opening of maximum size for the door). A glazed opening considerably diminishes the acoustic characteristics of a door and manufacturers also have restrictions on the dimensions of the openings allowed. Manufacturers must

- propose sound abatement much greater than STC50 if they are to offer the acoustic characteristics desired. Is it appropriate to supply type PA2 for these doors?
- b) Openings #201-04A, 201-04B, 201-04C, 201-28, 301-02, 301-03, 301-15, 402-05. Wood doors rated STC50 are required with an elevation P2B (glazed opening 250 X 1785mm). A glazed opening considerably diminishes the acoustic characteristics of a door and manufacturers also have restrictions on the dimensions of the openings allowed. Manufacturers must propose sound abatement much greater than STC50 if they are to offer the acoustic characteristics desired. Is it appropriate to supply type P2B for these doors?
 - c) Opening #402-08. A steel door rated STC47 is required with an elevation P2A (glazed opening of maximum size for the door). A glazed opening considerably diminishes the acoustic characteristics of a door and manufacturers also have restrictions on the dimensions of the openings allowed. Manufacturers must propose sound abatement much greater than STC47 if they are to offer the acoustic characteristics desired. Is it appropriate to supply type P2A for these doors?
 - d) Openings #100-15J, 100-15K. These doors are required with a thickness of 51mm and fire rating of 45 minutes. Unfortunately, these doors must have a thickness of 45mm to qualify for a fire rating of 45 minutes. Please clarify.
 - e) Openings #100-47, 100-48. These doors are required with a thickness of 51mm. However, according to industry standards, the standard thickness for steel doors is 45mm. If doors 51mm thick are required, considerable additional costs are involved. Are these doors really required to be 51mm thick?
 - f) Openings #300-ESC12, 300-ESC13. These doors are required with a thickness of 57mm and fire rating of 45 minutes. Unfortunately, these doors must have a thickness of 45mm to qualify for a fire rating of 45 minutes. Please clarify.
 - g) Openings #400-ESC12, 400-ESC13. These doors are required with a thickness of 50mm and fire rating of 45 minutes. Unfortunately, these doors must have a thickness of 45mm to qualify for a fire rating of 45 minutes. Please clarify.
 - h) Openings #S100-37, S100-38. These doors are required with a thickness of 79mm and fire rating of 45 minutes. Unfortunately, these doors must have a thickness of 45mm to qualify for a fire rating of 45 minutes. Please clarify.

Answer 543

See addendum to come.

Question 544

Does the unit price for 150mm foundation drain also include that of building drains (Structural drawing) or only those indicated on the Civil Engineering drawings?

Answer 544

Only included those on civil drawings

Question 545

Reference Addenda 2 with regard to specifications section 26 41 13.01 - Early Streamer Emission Lightning Protection Systems.

French standard NF C17-102 (2011) is not a recognized standard in Canada or Quebec. Lightning protection in Canada and Quebec is subject to CSA B72/M87. The Code of Construction of Quebec (and

the parts of that Code relating to electrical) and the National Building Code (and the Electrical Code) of Canada, through their respective references, refer in all cases to CSA B72/M87 where lightning protection is concerned.

Our research has determined that the requirements set out in this call for tenders give rise to several problems, as discussed below.

- 1) Article 1.3.2 of the above section of the specifications (in Addenda 2) requires “drawings stamped and signed by professional engineer registered or licensed in Province of Quebec, Canada.”
- 2) This presupposes that a comparative analysis of the French standard and the standard in effect in Canada be carried out (or has been carried out) and that the opinions and reports concerning adaptation of the French standard to the Canadian standard be submitted (or are required to be submitted), including drawings, specifications and addenda signed and stamped by an engineer. In this instance, if the foregoing has been done, we do not see the result of it, since the drawings in Addenda 2 to the tender call are not signed or stamped, and moreover we are being asked to produce (not expressly) the said opinions, reports, etc., in the form of a requirement to submit signed and stamped drawings.
- 3) Moreover, articles 3.2.1 and 3.2.5 require that we install the system in accordance with the French standard.
- 4) Articles 3.2.2.2 and 3.2.3.2 require that, with respect to work carried out by the Architectural division, we “ensure compliance”.
- 5) Article 3.4.2 requires that we submit a “certificate of compliance” with the French standard.
- 6) And last, article 2.7 requires that the system be subject to approval by authority having jurisdiction.

Given the current legislation and in view of the requirements set out in the tender call, we feel some uncertainty with regard to the requirements, as discussed below.

- a) The compliance requirement prescribed in this case, if (and even if) it is based on the French standard, must necessarily be adapted to bring it in line with the Canadian standard by means of opinions/reports on the comparison with the relevant Canadian standard.
- b) Since, in any case, the French standard must be adapted to make it consistent with the Canadian standard, the requirements as currently set out in the tender call are not applicable;
- c) Two questions now arise:
 - 1) Was the aforementioned analysis carried out by the Project Engineer?
 - 2) If so, may we have it?
- d) If it has not been done, we would need to hire an engineer (licensed to practise in Canada and Quebec) to do the analysis. Since early streamer emission lightning protection is not recognized in Canada, and since engineers are not permitted to sign and stamp a document based on a foreign standard, we consider that the time and expense required to essentially redesign lightning protection would be very considerable. In consequence, what purpose do these tender documents serve and why are we being required to use a French standard?

With regard to articles 3.2.1, 3.2.5 (and to some extent article 3.4.2 mentioned earlier), be advised that unless an engineer provides detailed specifications describing how to install this system (a method unknown to us since it relies on a French standard), our work would not be guaranteed and would not be in compliance with Canadian (Quebec) law. In consequence, our business could not stake our professional and entrepreneurial liability on this type of lightning protection. The government and/or its agent or agents should assume liability in this matter, and we will request that we be provided a release from liability in writing.

Further, since the drawings provided with Addenda 2 are not signed or stamped, they cannot be used for construction if we do not accept liability. Ideally, they also should be signed and stamped before proceeding further with this matter. The foregoing addresses our concerns regarding the above issue and would obviate the need for us to incur potentially needless engineering costs.

Please advise us as to your position on this issue.

Answer 545

The specified protection system will be authorised by the means of a derogation, presently under analysis, within one year. Drawings and specifications will be modified, if needed, and will be signed by the engineering firm before being transmitted, for construction. Beside the documents issued for tender, there is no other document to provide.

Question 546

Reference specifications section 23 57 33, article 2.5.5 and Addenda 5 versus specifications section 23 25 00 article 2.11.2: For the glycol water in the geothermal well system (GEO) indicated in section 23 57 33 art 2.5.5.1, the acceptable products listed are Dow Chemical Dowfrost or Viessmann Tyfocor-HTL or Mangor or Recochem, whereas in section 23 25 00 article 2.11.2.11, only Magnus SCC-4 is mentioned as acceptable. Please indicate which article of the specifications applies or which has precedence.

Answer 546

All mentioned products in specification 23 57 33 are acceptable for propylene glycol mixtures

Question 547

In Question 343, where you indicate that the same applies to the installation of gas pipes, you seem to be saying that excavation and backfilling are the plumber's responsibility (the one who works on the buried exterior gas line). However, in Question 146, you clearly indicate that this excavation and backfill work is to be done by the civil engineers. Moreover, in addenda file PB03 (2015-02-10), you confirmed very clearly that excavation and backfilling are by general contractor.

This type of work requires machinery and workers that are the responsibility of civil engineering. Why should the plumbing contractor assume responsibility for this work?

Please confirm that your statement in Answer 343 to the effect that the same applies to installations of electrical conduit or gas pipe does not override Answer 146 and the clarification provided in addenda file PB03. The aforementioned statement in Answer 343 should be withdrawn.

Please clarify.

Answer 547

Excavation and backfilling for gas conduit are included in the scope of plumbing works. Refer to addendum No. 5 in plumbing.

Question 548

The plumbing drawings contain no information regarding ground surface finishing (concrete, asphalt, soil, lawn, etc.). Who is required to cut concrete or asphalt if needed?

Answer 548

For ground finishes, refer to civil drawings. Works shall be executed according to section 31 23 33.01-Excavating, Trenching and Backfilling. Refer to addendum No. 5.

Question 549

Could a product be specified for variable speed drives, as no details are provided in the specifications?

Answer 549

Read specification, 23 30 02, article 2.11.9

Question 550

Civil engineering:

- a. What type of membrane is to be installed over the retention basin?
- b. What tests are to be done on type 1 and type 2 rock anchors?

Answer 550

- a) See Section 071352, article 2.3.2 Heat-welded foundation membrane.
- b) On request only. No test is expected to documents

Question 551

Detail on rebuilding lintels in drawing S-492:

- a) Confirm that the temporary reinforcement and demolition of the old lintels are to be done by masons.
- b) Who is required to supply and install the new lintels?

Answer 551

- a)b) The division of labor is responsibility to the contractor for these items

Question 552

Which division is required to supply and install HSS piles? Structural steel, concrete, excavation, forming, other?

Answer 552

Steel structure

Question 553

Reference Addenda 5, article 1.4 of section 28 05 01:

1.4 CONTRACTOR'S RESPONSIBILITIES

.1 Work includes:

.1 The general contractor must be sure to make the necessary coordination of work with all involved subcontractors.

~~.2 Security contractor is responsible for~~ Providing all of the work described in Section 27 10 05 for the IP network infrastructure dedicated to the security system.

~~.3 Security contractor is responsible for~~ Providing all of the work described in Section 11 12 00 for the supply and installation of **three (3)** parking barriers.

.4 Design, supply, install, integrate all components and accessories such as enclosures, connectors, finishing and mounting plates, cables and wiring as well as labor and services necessary for the operation of security system.

- a) With regard to article 1.4.1.2, how are responsibilities to be shared with division 27? Which tasks are to be assigned to division 28 and which to division 27? Who supplies the equipment, who installs it, etc. Please clarify.
- b) With regard to article 1.4.1.3, how are responsibilities to be shared with division 11? Which tasks are to be assigned to division 28 and which to division 11? Who supplies the equipment, who installs it, etc.. Please clarify.

Answer 553

a) IP network for security provided by section 27 10 05 is limited to backbone cabling and is included in the scope of electrical works (refer to addendum No. 4). Cabling to security components are included in the scope of physical security works.

b) Section 11 12 00 Security – Parking Control Equipment is included in the scope of physical security works. Refer to general table of contents of section 00 01 10.

Question 554

Could details, a photo or a section be provided for the grille to be restored on the East Block? To date, no information is provided in the drawings.

Answer 554

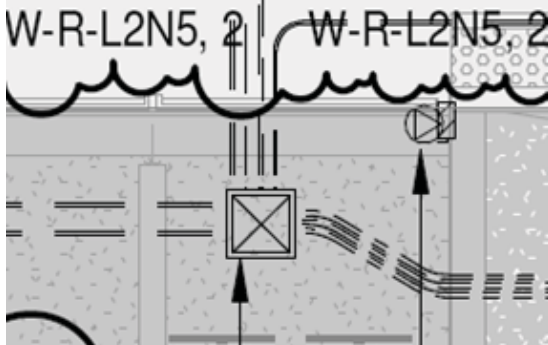
Three photos of grills will be issued for information. See sheets A-300 and A-301 to know about the scope of work and how many grills have to be restored. See the drawing 4/A-403a for a section view of a typical grill. See also the drawing 10/A-551 to know how the grills are fastened to the masonry wall.



Question 555

Series of questions on electrical:

- Further to Addenda E05, excavation and backfilling are assigned to division 26; we checked with civil engineering contractors, and it seems that this work is also included in their scope of work. Please clarify this point, since you are asking the electrical contractor to do civil engineering work.
- Concerning connection to the existing Hydro-Quebec ductbank, will we need to break concrete to connect to it or are the rings provided already? Is a contractor accredited by Hydro-Québec required to do this work?



- In drawing E-010 there are two junction boxes. Please indicate the type of box required.
- Further to Addenda E-05, drawing E-502 requires electrical cables of 750mcm continued for grounding between the West Block and in the ducts of the ductbank, but in the East Block the same cables are indicated as #3/0 continued. How can we go from 750mcm to 3/0 without a connection? Please clarify what is required.
- Further to Addenda E-05, in drawing E-502, are 2 x 750mcm copper cables in parallel really required for grounding?
- Concerning Answers 341 and 449, nothing is clear. Why do we need to supply network switches and patch cords for workstations when we are not supplying telecommunications or security equipment or cable?
- Further to Answer 465a, subcontractors, such as ventilation, plumbing and electrical, will not be required to do any demolition, as it will be done by the asbestos removal contractor. With regard to making holes in walls, given that lead and asbestos are present, shouldn't the holes be made by the asbestos removal contractor?

- h) Further to Answer 465h, please clarify once again whether or not the work needs to be done by a contractor with Hydro-Québec accreditation. If this issue is not clarified, bidders may consider that it is not required. If it is found subsequently that it is required, a notice of change might need to be issued during the work, entailing additional costs. Please clarify.

Answer 555

- a) Excavation and backfilling for electrical works are included in the scope of electrical works. Refer to addendum No. 5 in electrical.
- b) Conduits are extended beyond the ductbank concrete. Connection can be easily done. Works related to Hydro-Quebec service entrance shall be executed by a contractor who is accredited by Hydro-Quebec.
- c) These are not junction boxes but precast concrete handholes to section 33 65 73. Refer to answer to question 417-c).
- d) Grounding cable shall be 750 mcm and not 3/0.
- e) Grounding cable for telecom is 750 mcm as indicated. The two cables are not in parallel but they form a loop.
- f) Execute works as indicated.
- g) We already answered this question. See answer 486.
- h) Electrical works related to Hydro-Quebec shall be executed by a contractor who is accredited by Hydro-Quebec.

Question 556

Reference Answer 473. Who supplies and installs the concrete sheathing on the parapet? The one who does the studding or the roofer? The simplest arrangement would be to have the sheathing installed by the one who supplies it. Please clarify.

Answer 556

Interior system sub-trade is usually responsible for the parapet construction.

Question 557

No description of item ASM is provided in the specifications. It might be an elevator shaft drain. Please state your requirements in detail (brand and model or complete technical characteristics).

Answer 557

Item ASM description has been added in addendum No. 3 in plumbing.

Question 558

In plumbing, no description of item LM-1 is provided in the specifications. Please state your requirements in detail (brand and model or complete technical characteristics).

Answer 558

Type LM-1 sink is identical to type LH as described in section 22 42 03.

Question 559

Concerning snow guards, according to specifications section 07 61 00 – "Sheet Metal Roofing", article 2.2.18 - snow guards, and article 3.41.5 "Install in locations indicated on plans." We checked the drawings (sheet A-410 Note 10-001 snow guard and sheet A-440 detail 5). Are they required everywhere on the lower part of copper roofs and on the slope (lower part) throughout the project? And even above the water deflectors – see 1/A-440?

Answer 559

See sheet A-115a Rev 1 on addendum 01 and sheet A-115c revised on addendum 05.

Question 560

On sheet A-112c we can clearly see a roof at grid lines A2 and 29, over the recycling and bicycle area. See also A-111c detail 62 and sheet A105. Do we need to install a roof? If so, please provide details and composition.

Answer 560

There is a roof above bicycle area only, refer to A-439d for details.

Question 561

Reference sheet A113a between grid lines 4 and 5.1, at grid line H, where a balcony is shown with sheet metal on the two columns and over the parapet – see 6/A 450 and especially A-409a. Do we need to install copper sheet, liquid membrane (PL3) and perimeter flashing at ceiling?

Answer 561

See addendum to come.

Question 562

Between grid lines 12.2 and 15.1 and below A2 type T4.1 is specified – see sheet A-001.2 roof of South Block - Lobby; this composition applies to the interior ceiling under roof T4. Is this work to be done by the roofing contractor?

Answer 562

The steel system covering this roof section (T4.1) is included in the section 07 61 00 (see addendum 6). As this is an indoor section, we understand that the subcontractor metal recovery will be more likely to provide and install then the subcontractor copper coverage.

Question 563

Concerning gutters and downspouts, who supplies and installs them?

Answer 563

Descriptions of gutters and downspouts are in specifications, section 07 61 00, article 3.43. It is therefore considered that the copper coverage subcontractor will supply and install gutters and downspouts.

Question 564

Reference to amendment 007, question 105: Curtain wall supports in section 05 12 23 (Structural steel). Are all supports are by Structural, that is both masonry and curtain walls? See plans A436 and A437. There appears to be duplication. If this is to be done by structural steel, please identify them in a Structural Steel addendum and validate the specifications, design and welds required.

Answer 564

Supports for curtain walls are completely shown in architectural plans. Section 05 12 23 applies. The masonry materials are also shown in the architectural plans , but typical details are shown on structure plans with reference to section 05 12 23.

Question 565

Civil:

- a) Reference to answer a) of question 483, it says type 2 foundation anchors are to be used. However, the question was what type of foundation is to be used for the bike shelter footpath slab. Please clarify.
- b) Reference to question 504, you refer to specification section 31 39 10 for the type 1 and type 2 rock anchor details. That said, this section of the specifications applies to active rock anchors. In short, based on our understanding, the placement of type 1 and type 2 anchors is to be done in accordance with specifications section 31 39 10, but for the anchor rods, the reinforcement specifications must be followed? Please confirm.
- c) For the horizontal anchors in the rock faces, must post tensioning be done?

Answer 565

- a) There are no types 1 or 2. Service area wall foundations (bicycle shelter and containers) are described in addendum 1; drawings S-110c, S-111c and S-683
- b) Yes
- c) No

Question 566

Question/answer 295 states that the telecommunications system is out of scope. In addition, in question/answer 341, we are asked to supply and install empty telecommunications conduits. Based on our understanding, this cancels out section 27 10 05. However, question/answer 450 states to supply ethernet switches as well as workstation patch cords. Please clarify as the requirement is still not clear.

Answer 566

Telecommunication network for scenography including "A/V" data outlets is included in the contract (including outlets, boxes, conduits and cables). Same applies to data networks for physical security systems (backbone cabling) and for DALI lighting control system. Refer to addendum No. 5. Cords to provide are for workstation provided in the project. Provide 5 cords.

Question 567

There appears to be a contradiction regarding the work to be done on the basement wall in room #-014 of the square tower on the east wing. On the architectural detail on page 11/A-525, it indicates that a new masonry structure must be built. However, at the same location on the structural plans page S-441, it states "New opening to do in existing wall." Which action is to be taken?

Answer 567

There is in room 014 an existing opening to be filled with new bricks and a "New opening to be made in existing wall".

Question 568

Slatted flooring:

- a) What is the finish for the slatted flooring?
- b) Is the slatted flooring toothed or not?
- c) What types of connections are required?
- d) Must border plates also be provided?

Answer 568

- a) Galvanised
- b) Straight
- c) Tack weld
- d) No

Question 569

Who needs to provide the metal studs for the parapets and the gauge 16 studs since they are not mentioned in division 09?

Answer 569

As indicated in section 09 22 16 Non structural Metal framing, all metal studs are 0,53mm unless otherwise indicated. Gage 16 metal studs are part of this section.

Question 570

In reference to question/answer 299.

- a) The hoists are provided and stalled by whom?
- b) Where are the anchors located?
- c) Is it already planned in structural?

Answer 570

- a) Manual hoist are supplied by section 27 51 17 and will be installed by the operator of the multifunctional room.
- b) On structural plans, S-521
- c) Yes fastening plates are provided on structure plans

Question 571

N/A

Answer 571

N/A

Question 572

Fabricated metals:

In modification 12, answer #258, it is mentioned that the curtain supports in the multi-purpose room are in section 05 50 00. We require more information for the design of these curtail rail supports, need to know:

- Weight of the system's components (curtain, rail, weights, motor, and other accessories)
- Specification sheet describing the type of rail, switches, and motorization base.

Answer 572

For specifications of curtains and rails for multipurpose room, see article 2.1.3 of Specifications, section 12 50 00. Ounces curtains must be calculated by square yard and consider that the curtains have 50% folds.

Question 573

Which are the existing duct banks that need to be protected (reference plan C-002). If the level of the duct banks are not available, can we assume that they are based on rock?

Answer 573

These duct banks are based on rock

Question 574

In the specifications, it is asked for network switches 24 or 48 ports Cisco series 300. There are numerous models in the 300 series of Cisco (and the price can vary from \$500 to \$4000). Since 10-12 units are needed, it would be important to specify the desired model. Please specify.

Answer 574

Select a SF 300 type switch.

Question 575

In reference to question/answer 357.3
Question c) asked whether the air supply diffusers-plenums needed to be thermally insulated (and not the PAF or SAV plenums mentioned in the table in article 3.4.1). In general, they are acoustically insulated. Please specify the required insulation (interior acoustic insulation or exterior thermal)?

Answer 575

See Article 3.3.1 of Section 23 33 53. The diffusers-plenums must be acoustically insulated.

Question 576

N/A

Answer 576

N/A

Question 577

In reference to question/answer 482
The Z girt are never made by the fabricated metals.
The Z girt are within an isolated composition within a gypsum composition, mostly fixed in the framing, must be provided and installed by the gypsum subcontractor.
Considering the fact that the gypsum subcontractor enters in the BSDQ, in order to avoid treating any imbroglios that may force us to pass to the next subcontractor.
Please ensure that the Z-girt and the light concrete panels are under the responsibility of the gypsum subcontractor.

Answer 577

Effectively, we cancel answer 482a), and will modify section 09 22 16-Non-structural metal framing to add the Z-girt.

Solicitation No – N° de l'invitation
EE520-151410/B

Amd. No. – N° de la modif.
017

Buyer ID – id de l'acheteur
qcm009

Client Ref No. – N° de réf. du client
EE520-151410

File No. – N° du dossier
QCM-4-37219

2) TECHNICAL ADDENDUM 07

You can now download Technical Addendum 07 on <https://buyandsell.gc.ca/> website and which affects the following disciplines:

- .1 ARCHITECTURE
 - .2 ELECTRICITY
-

*** All other terms and conditions remain unchanged ***

Projet / Project n° : R.035921.300 (TPSGC)
Projet / Project : Reconstruction du Manège militaire de la Grande-Allée de Québec
Reconstruction of the Grande Allée Armoury in Québec
Date : 2015-03-03

Les informations qui suivent complètent, modifient ou remplacent, selon le cas, les documents du dossier d'appel d'offres émis le 13 janvier 2015.
The following information supplements, modifies and/or supersedes the bid documents issued on January 13, 2015.

Le présent addenda inclut tous les documents émis tel qu'énumérés aux documents ci-joint :
This addendum include all documents issued as listed in the following documents attached :

.1 ARCHITECTURE

Addenda / addendum A07 16 pages, incluant texte, croquis et dessins format A0 2015-03-03
16 pages, including text, sketches and A0 drawings

.2 ELECTRICITÉ / ELECTRICAL

Addenda/addendum E07 4 pages, incluant texte, croquis et dessins format A0 2015-03-03
4 pages, including text, sketches and A0 drawings

FIN DE L'ADDENDA No.7

Partie 1 General

1.1 RELATED REQUIREMENTS

- .1 General requirements and additional requirements apply integrally throughout this section.
- .2 The list of Work in this division is indicative but non-limiting. It does not exclude Work described in other specification divisions shown on the drawings or required for full execution of the Work as intended on the drawings.
- .3 Section 01 33 00 Submittal Procedures.
- .4 Section 01 45 00 Quality Control.
- .5 Section 01 73 00 Execution.
- .6 Section 03 30 00 Cast-in-place Concrete.
- .7 Section 05 50 00 Metalwork.
- .8 Section 09 96 56 Epoxy Coatings.

1.2 REFERENCES

- .1 ASTM International
 - .1 ASTM A123/A123M-09, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - .2 ASTM A775/A775M-07b, Standard Specification for Epoxy-Coated Steel Reinforcing Bars.
 - .3 ASTM C494/C494M-11, Standard Specification for Chemical Admixtures for Concrete.
 - .4 ASTM A276-10, Standard Specification for Stainless Steel Bars and Shapes.
- .2 CSA International
 - .1 CSA A23.1/A23.2-F09, Béton - Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete.
 - .2 CAN/CSA-A23.3-F04(R2010), Design of Concrete Structures.
 - .3 CSA A23.4-F09, Precast Concrete-Materials and Construction.
 - .4 CAN/CSA-A3000-F08, Cementitious Materials Compendium (Consists of A3001, A3002, A3003, A3004 and A3005).
 - .5 CSA G30.18-F09, Carbon and Steel Bars for Concrete Reinforcement.
 - .6 CSA G279-FM1982 (C1998), Steel for Prestressed Concrete Tendons.
 - .7 CSA W47.1-09, Certification of Companies for Fusion Welding of Steel Structures.
 - .8 CSA W48-F06(C2011), Welded Steel Construction (Metal Arc Welding).
 - .9 CSA W186-F1990(C2007), Welding of Reinforcing Bars in Reinforced Concrete Construction.

- .3 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards
 - .1 SCAQMD Rule 1113-A2011, Architectural Coatings.
 - .2 SCAQMD Rule 1168-A2005, Adhesives and Sealants Applications.
- .4 The Master Painters Institute (MPI)
 - .1 Architectural Painting Specification Manual – current edition.
 - .1 MPI No. 18 Primer, Zinc Rich Organic.
 - .2 MPI No. 79 Primer, Alkyd, Anti-Corrosive for Metal.
- .5 U.S. Environmental Protection Agency (EPA)/Office of Water
 - .1 EPA 832/R-92-005, Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for concrete mixes and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
 - .1 Submit drawings stamped and signed by professional engineer registered or licensed in Quebec, Canada.
 - .2 Submit shop drawings to CSA A23.4 and CAN/CSA-A23.3.
 - .3 Submit 2 copies of detailed calculations and design drawings for typical precast elements and connections for Departmental Representative review 4 weeks prior to manufacture.
 - .4 Indicate on drawings:
 - .1 Design calculations for items designated by manufacturer.
 - .2 Tables and bending diagrams of reinforcing steel.
 - .3 Camber.
 - .4 Finishing schedules.
 - .5 Methods of handling and erection.
 - .6 Openings, sleeves, inserts and related reinforcement. Including embedded handling hardware.
- .4 Samples:
 - .1 Produce, deliver and erect where directed by Departmental Representative on project site, 1 full size sample of each type of precast concrete unit showing details, colour, finish and quality for approval of Departmental Representative.
 - .1 Begin production of precast units after receipt of Departmental Representative written approval.

-
- .5 Submit evidence of welding certification including welding procedures before commencing work.

1.4 QUALITY ASSURANCE

- .1 Fabricate and erect precast concrete elements using manufacturing plant certified by CSA International in appropriate categories to CSA A23.4.
- .2 Only precast elements fabricated in such certified plants to be acceptable to Departmental Representative, and plant certification to be maintained for duration of fabrication, erection until warranty expires.
- .3 Welder Qualification: certified to CSA W47.1 and for weld type required.
- .4 Submit evidence of welding certification including welding procedures before commencing work.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground, indoors, in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect precast panels from damage.
 - .3 Replace defective or damaged materials with new.

1.6 ACCEPTABLE PRODUCTS

- .1 Where acceptable materials and products are indicated by their brand name, follow instructions under the Instructions to Tenderers for submitting requests for approval of replacement products and materials.

Partie 2 Products

2.1 MATERIALS

- .1 Cement, colouring material, aggregates, water, admixtures: to CSA A23.4 and CSA A23.1/A23.2.
- .2 Reinforcing steel: epoxy coated after assembly and welding of concrete inserts.
- .3 Prestressing steel: to CAN/CSA-S6 and CSA G279.
- .4 Welded wire fabric.
- .5 Synthetic structural fibre.
- .6 Forms: to CSA A23.4.
- .7 Hardware and miscellaneous materials: to CSA A23.1/A23.2.

- .8 Anchors and supports: to CSA G40.20/G40.21, Type 350 W, after fabrication and welding.
- .9 Welding materials: to CSA W48.
- .10 Galvanizing: hot dipped galvanizing with minimum zinc coating of 610 g/m² to ASTM A123/A123M.
- .11 Shims: steel.
- .12 Zinc-rich primer: to MPI No. 18.
- .13 Surface retardant: to ASTM C494/C494M, Type B, water based, low VOC. Do not allow moisture of any kind to come in contact with the retarder film.
- .14 Curing compound: not permitted without prior approval of Departmental Representative.
- .15 Sealers:
 - .1 No shop or field applied sealants are allowed: Roughen concrete surface sufficiently to adhere field applied dual compound epoxy coating.

2.2 CONCRETE MIXTURES

- .1 Proportion high density concrete in accordance with CSA A23.1/A23.2, Alternative 1 to give properties required for construction of stairs, stair landings, as indicated on plans.
 - .1 Proportion concrete mixture for high compressive strength architectural concrete, with colouring and 6 mm granite aggregate to withstand 100 lb/sq. ft. load at centre of stairs and stair landings.
 - .2 Minimum compressive strength at 28 days: 40 MPa.
 - .3 Provide mixture formulas at the same time as the shop drawings.

2.3 DESIGN REQUIREMENTS

- .1 Design precast elements to CAN/CSA-A23.3, CSA A23.4, CAN/CSA-S6 and to resist handling, stockpiling, shipping and erection stresses.
- .2 Design precast elements to carry loads as indicated, and in accordance with NBCC and applicable codes.
 - .1 Design to include resistance to creep, shrinkage and temperature effects, and, wind and earthquake loads.
- .3 Carry out vibration analysis and test if and as required by Departmental Representative.
- .4 Design connections and attachments of precast elements to load and forces as indicated, and in accordance with NBCC.
 - .1 Connections to be designed to withstand long-term corrosion for exposed elements.

2.4 PERFORMANCE REQUIREMENTS

- .1 Tolerance of precast elements: to CSA A23.4.
- .2 Length of precast elements not to vary from design length by more than plus or minus 1.0 mm.

- .3 Cross sectional dimensions of precast elements not to vary from design dimensions by more than plus or minus 1.0 mm.
- .4 Deviations from straight lines not to exceed 1.0 mm in 2 m.
- .5 Precast elements not to vary by more than plus or minus 1 mm from true overall cross sectional shape as measured by difference in diagonal dimensions.

2.5 FABRICATION

- .1 Manufacture units to CSA A23.4.
- .2 Mark each precast unit to correspond to identification mark on shop drawings for location with date cast on part of unit which will not be exposed.
- .3 Design and attach anchors and inserts to precast concrete elements to carry design loads.
- .4 Do not apply primer to embedded portion of anchors or inserts.
- .5 Galvanize anchors and steel embedments after fabrication and touch up with zinc-rich primer after welding.

2.6 FINISHES

- .1 Sanded finish: rough blast surface to adhere epoxy coating field applied by third party, corresponding to approved sample kept on site in Departmental Representative's office.
- .2 Protect precast concrete surfaces with OSB board or tear resistant film during transportation and until application of finish materials.

2.7 SOURCE QUALITY CONTROL

- .1 Provide Departmental Representative with certified copies of quality control tests related to this project as specified in CSA A23.4.
- .2 Upon request provide Departmental Representative with certified copy of mill test report of reinforcing steel supplied, showing physical and chemical analysis.

Partie 3 Execution

3.1 GENERAL

- .1 Do precast concrete work to CSA A23.4 and CAN/CSA-A23.3/CAN/CSA-S6.

3.2 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for precast concrete installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.3 ERECTION

- .1 Erect precast elements within allowable tolerances as indicated.
- .2 Non-cumulative erection tolerances in accordance with CSA A23.4.
- .3 Set elevations and alignment between units to within allowable tolerances before connecting units.
- .4 Install components in accordance with Section 05 50 00 – Metalwork.
- .5 Fasten precast panels in place as indicated on reviewed shop drawings.
- .6 Secure bolts with lockwashers.
- .7 Uniformly tighten bolted connections with torque indicated.
- .8 Clean field welds with wire brush and touch-up galvanized finish with zinc-rich primer.
- .9 Remove shims and spacers from joints of non-load bearing panels after fastening but before sealant is applied.

3.4 WELDING

- .1 Weld to CSA W59 for welding to steel structures and to CSA W186 for welding of reinforcement.

3.5 CLEANING

- .1 Obtain approval of cleaning methods from Departmental Representative before cleaning soiled precast concrete surfaces.
- .2 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .3 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

3.6 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by precast concrete installation.

END OF SECTION

Partie 1 Généralités

1.1 EXIGENCES CONNEXES

- .1 Les clauses des conditions générales et des conditions générales supplémentaires s'appliquent intégralement à la présente section comme si elles y étaient tout au long reproduites.
- .2 La liste des ouvrages énumérés dans cette division est indicative et non-limitative. Elle n'exclut pas les ouvrages décrits dans d'autres divisions du cahier des charges, montrés sur les dessins ou nécessaires à l'exécution complète de l'ouvrage dans l'esprit des plans.
- .3 Section 01 33 00 Documents et échantillons à soumettre.
- .4 Section 01 45 00 Contrôle de la qualité.
- .5 Section 01 73 00 Exigences concernant l'exécution des travaux.
- .6 Section 03 30 00 Béton coulé en place.
- .7 Section 05 50 00 Ouvrages métalliques
- .8 Section 09 96 56 Revêtements époxydiques

1.2 RÉFÉRENCES

- .1 ASTM International
 - .1 ASTM A123/A123M-09, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - .2 ASTM A775/A775M-07b, Standard Specification for Epoxy-Coated Steel Reinforcing Bars.
 - .3 ASTM C494/C494M-11, Standard Specification for Chemical Admixtures for Concrete.
 - .4 ASTM A276-10, Standard Specification for Stainless Steel Bars and Shapes.
- .2 CSA International
 - .1 CSA A23.1/A23.2-F09, Béton - Constituants et exécution des travaux/Essais et pratiques normalisées pour le béton.
 - .2 CAN/CSA-A23.3-F04(R2010), Calcul des ouvrages en béton.
 - .3 CSA A23.4-F09, Béton préfabriqué : constituants et exécution des travaux.
 - .4 CAN/CSA-A3000-F08, Compendium de matériaux (contient : A3001, A3002, A3003, A3004 et A3005).
 - .5 CSA G30.18-F09, Barres d'acier au carbone pour l'armature du béton.
 - .6 CSA G279-FM1982 (C1998), Acier pour le béton précontraint.
 - .7 CSA W47.1-09, Certification des compagnies de soudage par fusion des structures en acier.
 - .8 CSA W48-F06(C2011), Métaux d'apport et matériaux associés pour le soudage à l'arc.

- .9 CSA W186-F1990(C2007), Soudage des barres d'armature dans les constructions en béton armé.
- .3 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards
 - .1 SCAQMD Rule 1113-A2011, Architectural Coatings.
 - .2 SCAQMD Rule 1168-A2005, Adhesives and Sealants Applications.
- .4 The Master Painters Institute (MPI)
 - .1 Architectural Painting Specification Manual - édition courante.
 - .1 MPI #18 Primer, Zinc Rich Organic.
 - .2 MPI #79 Primer, Alkyd, Anti-Corrosive for Metal.
- .5 U.S. Environmental Protection Agency (EPA)/Office of Water
 - .1 EPA 832/R-92-005, Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.

1.3 DOCUMENTS/ÉCHANTILLONS À SOUMETTRE POUR APPROBATION/INFORMATION

- .1 Soumettre les documents et les échantillons requis conformément à la section 01 33 00 - Documents/Échantillons à soumettre.
- .2 Fiches techniques
 - .1 Soumettre les fiches techniques requises ainsi que les instructions et la documentation du fabricant concernant les mélanges de béton. Les fiches techniques doivent indiquer les caractéristiques des produits, les critères de performance, les dimensions, les limites et la finition.
- .3 Dessins d'atelier
 - .1 Les dessins d'atelier soumis doivent porter le sceau et la signature d'un ingénieur compétent reconnu ou habilité à exercer au Canada, dans la province de Québec.
 - .2 Soumettre les dessins d'atelier requis conformément aux normes CSA A23.4 et CAN/CSA-A23.3.
 - .3 Soumettre, quatre (4) semaines avant de commencer la fabrication, deux (2) exemplaires des dessins de conception et des calculs détaillés portant sur les éléments en béton préfabriqués et les assemblages types aux fins de vérification par le Représentant du Ministère.
 - .4 Indiquer sur les dessins ce qui suit.
 - .1 Les notes de calcul des éléments conçus par le fabricant.
 - .2 Les tableaux et les schémas de cintrage de l'acier d'armature.
 - .3 La cambrure.
 - .4 La nomenclature des finis.
 - .5 Les méthodes de manutention et de mise en place.
 - .6 Les ouvertures, les manchons, les pièces à noyer et les armatures connexes, y compris les dispositifs de manutention noyés.

-
- .4 Échantillons
 - .1 Confectionner un (1) échantillon pleine grandeur de chaque élément en béton préfabriqué présentant les détails, ainsi que la couleur, la qualité et le fini prescrits, puis les livrer et les mettre en place sur le chantier, à l'endroit indiqué par le Représentant du Ministère, afin d'obtenir l'approbation de ce dernier.
 - .1 Lancer la production des éléments préfabriqués après avoir reçu l'approbation écrite du Représentant du Ministère.
 - .5 Soumettre une preuve d'accréditation en soudage, y compris en procédures de soudage, avant de commencer les travaux.

1.4 ASSURANCE DE LA QUALITÉ

- .1 Les éléments en béton préfabriqués doivent être réalisés et mis en place par des fabricants et des installateurs certifiés par CSA International en ce qui concerne les produits des catégories appropriées, selon la norme CSA A23.4.
- .2 Seuls les éléments en béton préfabriqués produits par ces fabricants certifiés seront acceptés par le Représentant du Ministère. En outre, l'accréditation de ces fabricants et de ces installateurs doit être maintenue durant toute la période de fabrication et de mise en place de ces éléments, soit jusqu'à la fin de la période de garantie.
- .3 Qualification des soudeurs/soudeuses : accrédités CSA W47.1 pour le type de soudage requis.
- .4 Soumettre une preuve d'accréditation en soudage, y compris en procédures de soudage, avant de commencer les travaux.

1.5 TRANSPORT, ENTREPOSAGE ET MANUTENTION

- .1 Transporter, entreposer et manutentionner les matériaux et le matériel conformément à la section 01 61 00 - Exigences générales concernant les produits aux instructions écrites du fabricant.
- .2 Livraison et acceptation : livrer les matériaux et le matériel au chantier dans leur emballage d'origine, lequel doit porter une étiquette indiquant le nom et l'adresse du fabricant.
- .3 Entreposage et manutention
 - .1 Entreposer les matériaux et le matériel de manière qu'ils ne reposent pas sur le sol à l'intérieur au sec, dans un endroit propre, sec et bien aéré, conformément aux recommandations du fabricant.
 - .2 Entreposer et protéger les éléments préfabriqués contre tout dommage.
 - .3 Remplacer les matériaux et le matériel endommagés par des matériaux et du matériel neufs.

1.6 MATÉRIAUX OU PRODUITS ACCEPTABLES

- .1 Lorsque des matériaux ou des produits acceptables sont prescrits par leur marque de commerce, consulter les Instructions aux soumissionnaires afin de connaître la marche à suivre concernant la demande d'approbation de matériaux ou de produits de remplacement.

Partie 2 Produits

2.1 MATÉRIAUX ET MATÉRIEL

- .1 Ciment, pigment de coloration, granulats, eau et adjuvants : conformes aux normes CSA A23.4 et CSA A23.1/A23.2.
- .2 Acier d'armature : revêtu de résines époxydiques après montage et soudures des pièces à noyer dans le béton.
- .3 Acier de précontrainte : conforme aux normes CAN/CSA-S6 et CSA G279.
- .4 Treillis métallique soudé.
- .5 Fibre structurale synthétique.
- .6 Coffrages : conformes à la norme CSA A23.4.
- .7 Pièces de quincaillerie et matériaux divers : conformes à la norme CSA A23.1/A23.2.
- .8 Ancrages et supports : conformes à la norme CSA G40.20/G40.21, en acier de nuance 350W, galvanisés après le façonnage et soudure.
- .9 Matériaux de soudage : conformes à la norme CSA W48.
- .10 Galvanisation : procédé par immersion à chaud recouvrant la surface d'une (1) couche de zinc d'au moins 610 g/m² d'épaisseur, selon la norme ASTM A123/A123M.
- .11 Cales d'espacement : acier.
- .12 Enduit riche en zinc : conforme à la norme MPI numéro 18.
- .13 Retardateur de prise : conforme à la norme ASTM C494/C494M de type B à base d'eau, à faible teneur en COV. Le film retardateur de prise ne doit être exposé à aucune source d'humidité.
- .14 Produit de cure : ne doit pas être utilisé sans l'approbation préalable du Représentant du Ministère.
- .15 Produits de scellement.
 - .1 Aucun produits de scellement appliqué en atelier ni au chantier : La surface du béton devra être suffisamment rugueuse afin de permettre l'adhésion de résine d'époxy à deux composantes appliqué au chantier.

2.2 FORMULES DE DOSAGE DU BÉTON

- .1 Le béton de masse volumique élevée doit être préparé conformément à la norme CSA A23.1/A23.2 variante 1, afin d'obtenir un mélange ayant les caractéristiques nécessaire pour le béton utilisé dans la construction des marches et paliers d'escalier, selon les indications aux plans.
 - .1 La formule de dosage du béton doit considérer un béton architectural à haute résistance, avec pigment de couleur et agrégats en granit de 6 mm pour supporter une charge de 100 lb/ pi² au centre des marches et du palier de l'escalier.
 - .2 Résistance minimale à la compression à 28 jours : 40 MPa.
 - .3 Fournir la formule de dosage en même temps que les dessins d'atelier.

2.3 CRITÈRES DE CALCUL

- .1 Calculer les éléments préfabriqués conformément aux normes CAN/CSA-A23.3, CSA A23.4, CAN/CSA-S6 et de façon qu'ils puissent résister aux contraintes attribuables à la manutention, à l'entreposage, au transport et au montage.
- .2 Calculer les éléments en béton préfabriqués de manière qu'ils puissent supporter les charges indiquées, conformément au Code national du bâtiment du Canada (CNB) aux codes applicables.
 - .1 Les calculer pour qu'ils puissent résister au fluage, au retrait, aux effets de la température et aux séismes.
- .3 Procéder à des essais et à des analyses de vibration à la demande et selon les indications du Représentant du Ministère.
- .4 Calculer les pièces d'assemblage et de fixation des éléments en béton préfabriqués en fonction des charges et des forces indiquées, conformément au Code national du bâtiment du Canada (CNB).
 - .1 Les éléments apparents des pièces d'assemblage et de fixation doivent être conçus pour résister à la corrosion qui se formera à long terme.

2.4 EXIGENCES DE PERFORMANCE

- .1 Les tolérances relatives aux éléments préfabriqués doivent être conformes à la norme CSA A23.4.
- .2 La tolérance maximale en plus ou en moins entre la longueur réelle et la longueur de calcul des éléments préfabriqués est de 1,0 mm.
- .3 La tolérance maximale en plus ou en moins entre les dimensions réelles et les dimensions nominales des coupes transversales des éléments préfabriqués est de 1,0 mm.
- .4 L'écart par rapport à la ligne droite ne doit pas excéder 1,0 mm par longueur de 2 m.
- .5 La tolérance maximale en plus ou en moins entre la forme réelle des éléments préfabriqués et la forme hors tout de leur section transversale est de 1,0 mm, tel que mesuré par l'écart de longueur des diagonales.

2.5 ÉLÉMENTS PRÉFABRIQUÉS

- .1 Les éléments préfabriqués doivent être confectionnés conformément à la norme CSA A23.4.
- .2 Chaque élément préfabriqué doit porter la date de coulée et la marque d'identification correspondante figurant sur les dessins d'atelier et servant à en préciser l'emplacement. Cette date de coulée et cette marque d'identification doivent être apposées sur une partie de l'élément qui ne sera pas apparente, une fois les travaux terminés.
- .3 Les pièces à noyer ainsi que les ancrages doivent être calculés et fixés aux éléments préfabriqués de manière à pouvoir supporter les charges prévues.
- .4 Aucune peinture d'impression ne doit être appliquée sur les parties des ancrages ou des pièces qui doivent être enfoncées dans le béton.

- .5 Une fois le façonnage terminé, les ancrages et les pièces à noyer en acier doivent être galvanisés; ils doivent être retouchés avec un enduit riche en zinc, après le soudage.

2.6 FINIS

- .1 Fini sablé : la surface doit être décapée au jet de sable pour rendre la surface rugueuse afin de permettre la mise en place du fini à l'époxy fait au chantier par d'autre et doit correspondre à celui de l'échantillon approuvé conservé sur le chantier au bureau du Représentant du Ministère.
- .2 Les surfaces des éléments préfabriqués en béton ainsi que le métal apparent doivent être protégées au moyen de panneaux OSB ou de pellicules en toile solide lors du transport et jusqu'à l'application des matériaux de finition.

2.7 CONTRÔLE DE LA QUALITÉ À LA SOURCE

- .1 Remettre au Représentant du Ministère des exemplaires certifiés des rapports des essais de contrôle de la qualité concernant les présents ouvrages, conformément à la norme CSA A23.4.
- .2 Sur demande, fournir au Représentant du Ministère un (1) exemplaire certifié du rapport des essais effectués en usine indiquant les résultats des analyses physiques et chimiques des barres d'acier d'armature fournies.

Partie 3 Exécution

3.1 GÉNÉRALITÉS

- .1 Exécuter les ouvrages préfabriqués en béton conformément aux normes CSA A23.4 CAN/CSA-A23.3 CAN/CSA-S6.

3.2 EXAMEN

- .1 Vérification des conditions : avant de procéder à l'installation du béton préfabriqué, s'assurer que l'état des surfaces/supports préalablement mis en oeuvre aux termes d'autres sections ou contrats est acceptable et permet de réaliser les travaux conformément aux instructions écrites du fabricant.
- .1 Faire une inspection visuelle des surfaces/supports en présence du Représentant du Ministère.
- .2 Informer immédiatement le Représentant du Ministère de toute condition inacceptable décelée.
- .3 Commencer les travaux d'installation seulement après avoir corrigé les conditions inacceptables et reçu l'approbation écrite du Représentant du Ministère.

3.3 MISE EN PLACE

- .1 Mettre en place les éléments préfabriqués en respectant les tolérances admissibles indiquées.
- .2 Respecter les tolérances de mise en place indiquées dans la norme CSA A23.4. Ces tolérances ne peuvent en aucun cas être cumulées.

- .3 Avant de les assembler, placer les éléments préfabriqués selon les cotes de niveau et les alignements établis, en respectant les tolérances admissibles.
- .4 Poser les éléments, conformément à la section 05 50 00 – Ouvrages métalliques
- .5 Assujettir les éléments préfabriqués selon les indications des dessins d'atelier vérifiés.
- .6 Bloquer les boulons au moyen de rondelles-freins.
- .7 Serrer uniformément les assemblages boulonnés en appliquant le couple indiqué.
- .8 À l'aide d'une brosse métallique, nettoyer les soudures effectuées sur le chantier et retoucher le revêtement galvanisé avec un enduit riche en zinc.
- .9 Enlever les cales et les espaceurs, après l'assujettissement de ces derniers, mais avant l'application du produit de finition.

3.4 SOUDAGE

- .1 Exécuter les travaux de soudage conformément à la norme CSA W59 dans le cas des éléments à souder aux charpentes en acier, et à la norme CSA W186 dans le cas des armatures.

3.5 NETTOYAGE

- .1 Avant de nettoyer les surfaces souillées des éléments préfabriqués en béton, faire approuver, par le Représentant du Ministère, les méthodes de nettoyage proposées.
- .2 Nettoyage en cours de travaux : effectuer les travaux de nettoyage conformément à la section 01 74 11 - Nettoyage.
 - .1 Laisser les lieux propres à la fin de chaque journée de travail.
- .3 Nettoyage final : évacuer du chantier les matériaux/le matériel en surplus, les déchets, les outils et l'équipement conformément à la section 01 74 11 - Nettoyage.

3.6 PROTECTION

- .1 Protéger le matériel et les éléments installés contre tout dommage pendant les travaux de construction.
- .2 Réparer les dommages causés aux matériaux et au matériel adjacents par l'installation du béton préfabriqué.

FIN DE LA SECTION

Projet / Project n° : R.035921.300 (TPSGC)

Projet / Project : Reconstruction du Manège militaire de la Grande-Allée de Québec
Reconstruction of the Grande Allée Armoury in Québec

Date : 2015-03-02

Les informations qui suivent complètent, modifient ou remplacent, selon le cas, les documents du dossier d'appel d'offres émis le 13 janvier 2015.

The following information supplements, modifies and/or supersedes the bid documents issued on January 13, 2015.

ARCHITECTURE

Devis / Specifications :

1. **Section 03 45 00 Éléments préfabriqués en béton architectural/ Precast architectural concrete**

Ajouter la nouvelle section de devis 03 45 00 jointe au présent addenda (version française 03_45_00F, 7 pages et version anglaise 03_45_00A, 6 pages).

Add new specification section 03 45 00 issued with this addendum (03_45_00F, French version, 7 pages and 03_45_00A, English version, 6 pages).

2. **Section 09 22 16 Ossatures métalliques non porteuses / Non structural metal framing**

.1 Modifier l'article 1.1 de la façon suivante :

« .1 Section 06 10 00 – Charpenterie.

.2 Section 06 20 00- Menuiserie

.3 Section 08 11 00 – Portes et bâtis en métal.

.4 Section 08 11 16 – Portes et bâtis en aluminium.

.5 Section 09 21 16 – Revêtements en plaques de plâtre.

.6 Section 09 53 00 – Ossatures de suspension pour plafonds

acoustiques. »

Modify article 1.1 as follows :

« .1 Section 06 10 00 – Rough Carpentry.

.2 Section 06 20 00 – Finish Carpentry

.3 Section 08 11 00 – Metal Doors and Frames.

.4 Section 08 11 16 – Aluminum Doors and Frames.

.5 Section 09 21 16 – Gypsum Board Assemblies.

.6 Section 09 53 00 – Acoustical Ceiling Suspension Assemblies. »

.2 Ajouter l'article 2.1.7 suivant :

« **.7 Fournir et installer, toute ossature non porteuse réalisée par pliage en usine ou au chantier et fabriquée à l'aide de tôle d'acier galvanisé, tel que les barres en Z en une pièce ou deux pièces pour permettre l'ajustement et les barres en J en une pièce ou deux pièces pour permettre l'ajustement ou de tout autre forme de pliage selon les indications aux plans, l'épaisseur minimale pour ces ossatures sera de 1,51 mm (calibre 16) après galvanisation. La largeur des ailettes de raccordement des pliages ne sera jamais inférieure à 50 mm. »**

Add following article 2.1.7 :

« **.7 Provide and install any non structural metal framing produced by bending galvanized steel sheet at the factory or at the site, such as Z bars in one piece or two pieces to allow adjustment and J bars in one piece or two pieces to permit adjustment or any other form of folding as indicated**

in the plans , the minimum thickness for these frames will be of 1.51 mm (16 gauge) after galvanizing. The width of the connecting fins bends will never be less than 50 mm . »

3. **Section 09 96 56 Revêtements epoxydiques / Epoxy coatings**

.1 Modifier l'article 2.1.2.1.7 de la façon suivante :

« .7 Produit acceptable :

.1 Sikafloor-261 de Sika

.2 Dur-a-Glaze no.4 de Dur-a-flex

.3 Matériaux ou produits de remplacement : approuvés par addenda conformément aux Instructions aux soumissionnaires. »

Modify article 2.1.2.1.7 as follows :

« .7 Acceptable product:

.1 Sikafloor-261 by Sika.

.2 Dur-a-Glaze no.4 from Dur-a-flex

.3 Replacement materials and products: approved by addendum to Instructions to Bidders. »

.2 Modifier l'article 2.1.3.1.9 de la façon suivante :

« .9 Produit acceptable :

.1 Sikafloor 2002 de Sika

.2 Dur-a-glaze no.5 de Dur-a-flex

.3 Matériaux ou produits de remplacement : approuvés par addenda conformément aux Instructions aux soumissionnaires. »

Modify article 2.1.3.1.9 as follows :

« .9 Acceptable product:

.1 Sikafloor 2002 by Sika

.2 Dur-a-glaze no.5 from Dur-a-flex

.3 Replacement materials and products: approved by addendum to Instructions to Bidders. »

.3 Modifier l'article 2.1.4.1.3 de la façon suivante :

« .3 Produits acceptables :

.1 Sikafloor Morritex Self-Levelling et Sikafloor Duochem 5206 de Sika

.2 Stonclad GS 3mm avec une couche de Stonkote GS4 (avec texture) et une couche de Stonseal GS7 finit satiné.

.3 Dur-a-quartz 3mm et Armor top de Dur-a-flex

.4 Matériaux ou produits de remplacement : approuvés par addenda conformément aux Instructions aux soumissionnaires. »

Modify article

« .3 Acceptable products:

.1 Sikafloor Morritex Self-Levelling and Sikafloor Duochem 5206 by Sika

.2 Stonclad GS 3mm with Stonkote GS4 (textured) and one coat of Stonseal GS7 satin finish.

.3 Dur-a-quartz 3mm and Armor top from Dur-a-flex

.4 Replacement materials and products: approved by addendum to Instructions to Bidders. »

Clarifications / Clarification :

1. **A-409a** Prenez note des précisions suivantes / *Note the following clarifications :*

Fournir et installer de nouveaux solins et contre-solins en cuivre 20oz sur tout le périmètre du plancher du balcon, où une composition PL3 est prévue, ainsi qu'un recouvrement en cuivre 20 oz. sur le dessus du parapet en pierre, tel que dessiné à la feuille A-409a. Se référer aux sections 07 61 00 et 07 62 00 du devis.

Provide and install new 20oz. copper flashings and counterflashings around the entire perimeter of the balcony floor, where a composition PL3 is provided, and a 20oz copper covering on top of the stone parapet, as illustrated on sheet A-409a. Refer to sections 07 61 00 and 07 62 00 of the specifications.

2. **A-720** **Tableau des portes / Door Schedule**

- .1 Prenez note des modifications suivantes / *Note the following modifications*
- .1 Portes 103-02A et 103-02B : changer le type de panneau pour du P1 - la case « vitrage » devient vide / *Doors 103-02A and 103-02B : change panel type for P1 – « glazing » type eliminated.*
 - .2 Portes 103-14 et 103-15 : changer le type de panneau pour du P1 - la case « vitrage » devient vide. Changer l'épaisseur du panneau pour 57 mm. / *Door 103-14 and 103-15 : change panel type for P1 – « glazing » type eliminated. Change panel width for 57 mm.*
 - .3 Portes 201-07, 201-08, 201-10B et 201-27 : changer le type de panneau pour du P1 - la case « vitrage » devient vide. L'imposte latéral de la porte 201-08 demeure inchangé / *Doors 201-07, 201-08, 201-10B and 201-27: change panel type for P1 – « glazing » type eliminated Side-light for door 201-08 remains.*
 - .4 Portes 201-04A, 201-04B, 201-04C, 201-28, 301-02, 301-03, 301-15, 402-05: changer le type de panneau pour du P1 - la case « vitrage » devient vide / *Doors 201-04A, 201-04B, 201-04C, 201-28, 301-02, 301-03, 301-15, 402-05: change panel type for P1 – « glazing » type eliminated.*



FIN DE L'ADDENDA No7 – A07

Projet / Project n° :	R.035921.300 (TPSGC)
Projet / Project :	Reconstruction du Manège militaire de la Grande-Allée de Québec <i>Reconstruction of the Grande Allée Armoury in Québec</i>
Date :	2015-03-03

Les informations qui suivent complètent, modifient ou remplacent, selon le cas, les documents du dossier d'appel d'offres émis le 13 janvier 2015.

The following information supplements, modifies and/or supersedes the bid documents issued on January 13, 2015.

Devis / Specifications :

Sans objet.
Not Used.

Dessins / Drawings :

Électricité / Electrical

- E-002 Dans la liste des luminaires, les modifications suivantes sont effectuées (plan non émis) :
- Pour le type A, ajouter le modèle équivalent suivant :
 - LC6LED-120-DM/DALI-6LCLED-740-8-WH-B24 de Prescolite.
 - Pour le type AA, ajouter le modèle équivalent suivant :
 - 11-BA10BKL-840M-D1200 de Basic-A1.
 - Pour le type B, ajouter le modèle équivalent suivant :
 - D2LED-2D9LED-12L-40K-9-XX-MFC-BL-WT de Prescolite.
 - Pour le type F1, ajouter le modèle équivalent suivant :
 - 4124D1STL8ADS-7-1-DALI de Ledalite.
 - Pour le type F1A, ajouter le modèle équivalent suivant :
 - 4124D1STL8ACS-7-1-DALI de Ledalite.
 - Pour le type F1B, ajouter le modèle équivalent suivant :
 - 4124D1STL8ADS-7-1-DALI/DRY WALL KIT TRIM MOUNT de Ledalite.
 - Pour le type F1C, ajouter les deux modèles équivalents suivants :
 - LLT24-40LWG-FSA19F-DALI120 de Columbia Lighting.
 - 2LTG40L840-4-19-UNV-DIM-DALI de Day-Brite (Philips).
 - Pour le type F2, ajouter le modèle équivalent suivant :
 - 4122D1STL8AES-7-1-DALI de Ledalite.
 - Pour le type F2A, ajouter le modèle équivalent suivant :
 - 4122D1STL8AES-7-1-DALI/DRY WALL KIT TRIM MOUNT de Ledalite.
 - Pour le type F3, ajouter le modèle équivalent suivant :
 - 4114D1STL8CES-7-1-DALI de Ledalite.
 - Pour le type F3A, ajouter les deux modèles équivalents suivants :
 - LLT14-40HLG-FSA19F-DALI120 de Columbia Lighting.
 - 1LTG34L840-4-19-UNV-DIM-DALI de Day-Brite (Philips).
 - Pour le type F4, ajouter le modèle équivalent suivant :
 - NLS-4-1-28-120-PRS de Peerless Electric.
 - Pour le type F4a, ajouter le modèle équivalent suivant :
 - NLS-3-1-21-120-PRS de Peerless Electric.

- Pour le type F6, ajouter les deux modèles équivalents suivants :
 - HP-2 D-4-HO-4000K-120DALI-FA-SC-CX de Finelite.
 - MQ01LAGFN-4-7-1-E-C-DALI de Lightolier (Philips).
 - Pour le type F6A, ajouter le modèle équivalent suivant :
 - 11-LG3OEL-840M-L2350-QS de Ledalite (Philips).
 - Pour le type F6B, ajouter les deux modèles équivalents suivants :
 - HP-2 SM-4-HO-4000K-120DALI-C4-SC de Finelite.
 - MQ11LAGFN-4-7-1-E-C-DALI de Lightolier (Philips).
 - Pour le type F6C, ajouter les deux modèles équivalents suivants :
 - HP-2 D-6-HO-4000K-120DALI-FA-SC-CX de Finelite.
 - MQ01LAGCN-6-7-1-E-C-DALI de Lightolier (Philips).
 - Pour le type F6D, ajouter les deux modèles équivalents suivants :
 - HP-2 D-8-HO-4000K-120DALI-FA-SC-CX de Finelite.
 - MQ01LAGCN-8-7-1-E-C-DALI de Lightolier (Philips).
 - Pour le type F7, ajouter les deux modèles équivalents suivants :
 - S16LED-ID-DCO-8-2E-HO-4000K-OPEN-SC-120DALI-FA-FE-CX-OBB de Finelite.
 - 7406LACQG-8-7-1-E-W-DALI de Ledalite (Philips).
 - Pour le type F7A, ajouter les deux modèles équivalents suivants :
 - S16LED-ID-DCO-12-2E-HO-4000K-OPEN-SC-120DALI-FA-FE-CX-OBB de Finelite.
 - 7406LACQG-12-7-1-E-W-DALI de Ledalite (Philips).
 - Pour le type F8, ajouter le modèle équivalent suivant :
 - CSW48-4740UDZTZO-DALI de Day-Brite (Philips).
 - Pour le type F9, ajouter le modèle équivalent SUIVANT :
 - AP2-W-4-2-32-ACLR-LSS-HT-MB-120DALI de Peerless Electric.
 - Pour le type F11, ajouter les deux modèles équivalents suivants :
 - LAW-4-40-ML-EDALI-U de Columbia Lighting.
 - OWL440L840UNIVDSIM-DALI de Day-Brite (Philips).
 - Pour le type F12, ajouter les deux modèles équivalents suivants :
 - CSR4-232-M4RU-DALI120 avec grillage de Columbia Lighting.
 - T232-UNV-1/2-EBD-PHIMK7-DALI/FKR-126/FKR-173/TSS-4 de Day-Brite (Philips).
 - Pour le type F14, ajouter le modèle équivalent suivant :
 - NSL-4-1-54-120-PRS de Peerless Electric.
 - Pour le type F15, ajouter le modèle équivalent suivant :
 - 1201LAEQE-4-7-1-E-W-DALI de Ledalite (Philips).
 - Pour le type F16, ajouter les deux modèles équivalents suivants :
 - HP-2 R-4-HO-4000K-120DALI-SC-C3F de Finelite.
 - 39S1LAGQS3-4-7-1-E-DALI de Ledalite (Philips).
 - Pour le type F16A, ajouter les deux modèles équivalents suivants :
 - HP-2 R-6-HO-4000K-120DALI-SC-C3F de Finelite.
 - 39C1LAGQS3-6-7-1-E-DALI de Ledalite (Philips).
 - Pour le type F17, ajouter les deux modèles équivalents suivants :
 - AP-2-W-4-2-32-ACLR-LSS-HT-MB-120DALI de Peerless Electric.
 - V2WAE232-UNV-1/2-EB-OPTIS/WBK de Day-Brite (Philips).
 - Pour le type H, ajouter le modèle équivalent suivant :
 - 05-4395-BLK-M1U de LEDS-C4.
- In the list of luminaires, the following modifications are effected (drawing not issued):*
- *For type A, add the following equivalent model:*
 - *LC6LED-120-DM/DALI-6LCLED-740-8-WH-B24 of Prescolite.*

- For type AA, add the following equivalent model:
 - 11-BA10BKL-840M-D1200 of Basic-A1.
- For type B, add the following equivalent model:
 - D2LED-2D9LED-12L-40K-9-XX-MFC-BL-WT of Prescolite.
- For type F1, add the following equivalent model:
 - 4124D1STL8ADS-7-1-DALI of Ledalite.
- For type F1A, add the following equivalent model:
 - 4124D1STL8ACS-7-1-DALI of Ledalite.
- For type F1B, add the following equivalent model:
 - 4124D1STL8ADS-7-1-DALI/DRY WALL KIT TRIM MOUNT of Ledalite.
- For type F1C, add the following two equivalent models:
 - LLT24-40LWG-FSA19F-DALI120 of Columbia Lighting.
 - 2LTG40L840-4-19-UNV-DIM-DALI of Day-Brite (Philips).
- For type F2, add the following equivalent model:
 - 4122D1STL8AES-7-1-DALI of Ledalite.
- For type F2A, add the following equivalent model:
 - 4122D1STL8AES-7-1-DALI/DRY WALL KIT TRIM MOUNT of Ledalite.
- For type F3, add the following equivalent model:
 - 4114D1STL8CES-7-1-DALI of Ledalite.
- For type F3A, add the following two equivalent models:
 - LLT14-40HLG-FSA19F-DALI120 of Columbia Lighting.
 - 1LTG34L840-4-19-UNV-DIM-DALI of Day-Brite (Philips).
- For type F4, add the following equivalent model:
 - NLS-4-1-28-120-PRS of Peerless Electric.
- For type F4a, add the following equivalent model:
 - NLS-3-1-21-120-PRS of Peerless Electric.
- For type F6, add the following two equivalent models:
 - HP-2 D-4-HO-4000K-120DALI-FA-SC-CX of Finelite.
 - MQ01LAGFN-4-7-1-E-C-DALI of Lightolier (Philips).
- For type F6A, add the following equivalent model:
 - 11-LG3OEL-840M-L2350-QS of Ledalite (Philips).
- For type F6B, add the following two equivalent models:
 - HP-2 SM-4-HO-4000K-120DALI-C4-SC of Finelite.
 - MQ01LAGFN-4-7-1-E-C-DALI of Lightolier (Philips).
- For type F6C, add the following two equivalent models:
 - HP-2 D-6-HO-4000K-120DALI-FA-SC-CX of Finelite.
 - MQ01LAGCN-6-7-1-E-C-DALI of Lightolier (Philips).
- For type F6D, add the following two equivalent models:
 - HP-2 D-8-HO-4000K-120DALI-FA-SC-CX of Finelite.
 - MQ01LAGCN-8-7-1-E-C-DALI of Lightolier (Philips).
- For type F7, add the following two equivalent models:
 - S16LED-ID-DCO-8-2E-HO-4000K-OPEN-SC-120DALI-FA-FE-CX-OBB of Finelite.
 - 7406LACQG-8-7-1-E-W-DALI of Ledalite (Philips).
- For type F7A, add the following two equivalent models:
 - S16LED-ID-DCO-12-2E-HO-4000K-OPEN-SC-120DALI-FA-FE-CX-OBB of Finelite.
 - 7406LACQG-12-7-1-E-W-DALI of Ledalite (Philips).
- For type F8, add the following equivalent model:
 - CSW48-4740UDZTZO-DALI of Day-Brite (Philips).

- For type F9, add the following equivalent model:
 - AP2-W-4-2-32-ACLR-LSS-HT-MB-120DALI of Peerless Electric.
- For type F11, add the following two equivalent models:
 - LAW-4-40-ML-EDALI-U of Columbia Lighting.
 - OWL440L840UNIVDSIM-DALI of Day-Brite (Philips).
- For type F12, add the following two equivalent models:
 - CSR4-232-M4RU-DALI120 with wireguard of Columbia Lighting.
 - T232-UNV-1/2-EBD-PHIMK7-DALI/FKR-126/FKR-173/TSS-4 of Day-Brite (Philips).
- For type F14, add the following equivalent model:
 - NSL-4-1-54-120-PRS of Peerless Electric.
- For type F15, add the following equivalent model:
 - 1201LAEQE-4-7-1-E-W-DALI of Ledalite (Philips).
- For type F16, add the following two equivalent models:
 - HP-2 R-4-HO-4000K-120DALI-SC-C3F of Finelite.
 - 39S1LAGQS3-4-7-1-E-DALI of Ledalite (Philips).
- For type F16A, add the following two equivalent models:
 - HP-2 R-6-HO-4000K-120DALI-SC-C3F of Finelite.
 - 39C1LAGQS3-6-7-1-E-DALI of Ledalite (Philips).
- For type F17, add the following two equivalent models:
 - AP-2-W-4-2-32-ACLR-LSS-HT-MB-120DALI of Peerless Electric.
 - V2WAE232-UNV-1/2-EB-OPTIS/WBK of Day-Brite (Philips).
- For type H, add the following equivalent model:
 - 05-4395-BLK-M1U of LEDS-C4.

Clarifications / Clarification :**Électricité / Electrical**

Toutes les notes indiquées dans la colonne des remarques dans la liste des luminaires s'appliquent sur les modèles équivalents mentionnés dans cet addenda.

All notes indicated in the remarks column of the luminaires list are applicable to the equivalent models mentioned in this addendum.
