



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Travaux publics et Services gouvernementaux
Canada

Place Bonaventure,
800 rue de la Gauchetière Ouest
Voir aux présentes - See herein
Montréal

Québec
H5A 1L6

FAX pour soumissions: (514) 496-3822

SOLICITATION AMENDMENT MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Travaux publics et Services gouvernementaux Canada
Place Bonaventure,
800 rue de la Gauchetière Ouest
Voir aux présentes - See herein
Montréal
Québec
H5A 1L6

Title - Sujet Upgrade electrical grid, SADP	
Solicitation No. - N° de l'invitation EF236-180540/A	Amendment No. - N° modif. 005
Client Reference No. - N° de référence du client R.068409.100	Date 2017-09-06
GETS Reference No. - N° de référence de SEAG PW-\$MTC-775-14463	
File No. - N° de dossier MTC-7-40107 (775)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-09-19	
Time Zone Fuseau horaire Heure Avancée de l'Est HAE	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Aguilera, Maria Pia	Buyer Id - Id de l'acheteur mtc775
Telephone No. - N° de téléphone (514) 496-3573 ()	FAX No. - N° de FAX (514) 496-3822
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

AMENDMENT 005:

EXTENSION OF POSTING PERIOD

PLEASE NOTE THAT THE TIME LIMIT FOR THE RECEPTION OF TENDERS PREVIOUSLY SET FOR SEPTEMBER 12th, 2017 IS NOW SET TO **SEPTEMBER 19TH, 2017 AT 02:00 PM** (EASTERN DAYLIGHT TIME).

Herewith you will find attached:

- ADDENDUM No. 3: electrical

CLARIFICATIONS AND/OR MODIFICATIONS TO DRAWINGS

- **Drawing E100 – Single Line Diagram – Construction**
 - Clarification KA 600V panel in substation and manhole D removal of this plan.
- **Drawing E202 – Electrical room – Building A-5 Thermal Power Plant – Construction**
 - Adding clarification for temperature probe in substation and building A-5.
- **Drawing E213 – Electrical Conduit Bank Routing – Building Purification – Construction 2 of 2**
 - Adding of the manhole L which did not appear on this plan.
- **Drawing E850 – Detail 1 of 2 and panels**
 - Adding clarification of the opening on manhole.

- This addendum is an integral part of the invitation to tender -

ELECTRICAL NETWORK UPGRADE SAINTE-ANNE-DES-PLAINES

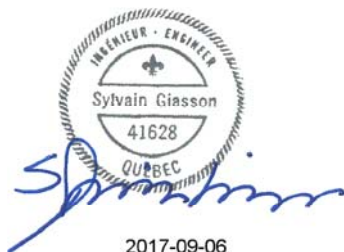
PWGSC Ref.: R.068409.001

SNC-Lavalin Ref.: 640005

**ELECTRICAL
ISSUED FOR ADDENDUM No. 3
SEPTEMBER 6, 2017**

*THIS DOCUMENT SHOULD
NOT BE USED FOR
CONSTRUCTION PURPOSES*

Prepared by:



2017-09-06

**Sylvain Giasson, Eng.
(Electrical)**

This addendum becomes part of the tender documents as originally specified. Its content prevails over tender documents issued to date.

All specifications issued with this **ADDENDUM No. 3** shall be considered part of the bidding documents. Modifications to sections of the tender documents are listed below and included hereafter.

1. ELECTRICAL

1.1 CLARIFICATIONS AND/OR MODIFICATIONS TO DRAWINGS

- **Drawing E100 – Single Line Diagram – Construction**
 - Clarification KA 600V panel in sub station and manhole D removal of this plan.
- **Drawing E202 – Electrical room – Building A-5 Thermal Power Plant - Construction**
 - Adding clarification for temperature probe in substation and building A-5.
- **Drawing E213 – Electrical Conduit Bank Routing – Building Purification – Construction 2 of 2**
 - Adding of the manhole L which did not appear on this plan.
- **Drawing E850 – Detail 1 of 2 and panels**
 - Adding clarification of the opening on manhole.

1.2 SECTIONS LIST OF SPECIFICATIONS ISSUED

On each revised page of a given section, the revisions connected to present addendum are identified by a triangle to indicate a partial revision, whereas it is located next to the section number if an entire page was added or revised in the scope of the addendum.

The following section is issued with this addendum:

Section n°	Number of pages
26 13 19	1 page
33 65 73	2 pages

2. TENDER SCHEDULE

2.1 CLARIFICATIONS AND/OR MODIFICATIONS TO SPECIFICATIONS

- Adding lines for manhole in the electrical section in French.




5. Metal enclosure : Mounted on base, dismantlable with door.
6. Standards : Load interrupter to ANSIC37.71 and C37.72; bushings to ANSI/IEEE 386; SF6 gas to ASTM D-2472; vacuum circuit breaker (RFI) to ANSI 37.60; enclosure to ANSI C37.72 and C57.12.28.
7. Standard voltage : 24,940 V.
8. Maximum voltage : 27,000 V.
9. Bus Bars : 600 A, tinned copper, designed for 65°C temperature rise.
10. Phases : 3
11. Frequency : 60
12. Dielectric voltage (c.a.) : 60 kV/1 minute
13. Dielectric voltage (c.c.), load interrupter : 78 kV/15 minutes
14. Dielectric voltage (c.c.), vacuum circuit breaker : 78 kV/15 minutes
15. BIL impulse voltage (1,2/50 μ s) : 125 kV
16. BIL impulse voltage at beginning of arc, load interrupter : 125 kV
17. BIL impulse voltage at beginning of arc, vacuum circuit breaker : 125 kV
18. Corona voltage discharge : 19 kV
19. Short-circuit capacity, load interrupter : ~~45~~-12.5 kA sym/1 sec.
20. Short-circuit capacity, vacuum circuit breaker : ~~45~~-12.5 kA sym/1 sec.
21. Momentary breaking capacity, load interrupter : 25 kA asym.
22. Momentary breaking capacity, vacuum circuit breaker 200 A or 600 A : 25 kA asym.



2.2 PVC DUCT FITTINGS

- .1 PVC duct fittings:
 - .1 Rigid PVC fittings, force-insert, flared ends, with all plugs, caps and adapters required for installation.
 - .2 Expansion joints required for conduit entry into pull boxes located on outdoor wall of each building.
 - .3 Rigid PVC angle fittings to create a minimum radius of 1,500 mm.
- .2 Related materials:
 - .1 Plastic separators.
 - .2 Treated wood plank, 19 mm thick, length as required.
- .3 Treated plywood, 19 mm, to separate telecommunications ducts and 28 kV power supply ducts within the same trench.
- .4 Pull cords:
 - .1 Polypropylene pull cords, 6 mm diameter, 5 kN tensile strength for all empty conduits.

2.3 MANHOLES

- .1 Medium-voltage manholes:
 - .1 Precast reinforced concrete manholes for cable pulling.
 -  .2 Interior dimensions: ~~3,500~~**3,962** mm (length) x ~~2,000~~**1,981** mm (width) x 2,300 mm (height).
 - .3 Elastomeric seals at section joints.
 -  .4 Entry bell for conduits (16 x 129 mm Ø **or 115 mm Ø) according to the electrical conduit bank**) on all four sides. Holes centred on walls. Install plugs in all unused holes.
 - .5 Precast reinforced concrete shafts. Shafts 1,040 mm in diameter.
 - .6 Access cover:
 - .1 With inscription “ÉLECTRICITÉ”.
 -  ~~.2 Hinge mounted with 304 stainless steel lifting key.~~
 - ~~.3 Doors, frame and structure in stainless steel, 304 or 316.~~



- ~~.4 308 stainless steel securing bolts and screws.~~
- ~~.5 Préal model MH30FD or approved equivalent.~~
- .7 Cable hangers installed directly opposite underground conduit entry point.
- .8 Accepted product: L'Écuyer PA-161623CP manhole or approved equivalent from Boisclair et fils.
- .9 The Contractor shall prove, beyond a doubt, that manholes comply with the aforementioned requirements. To do so, the Successful Bidder shall provide shop drawings signed and sealed by a structural engineer who is a member in good standing with the Ordre des ingénieurs du Québec.
- .10 Manhole grounding in accordance with drawings. Include all holes required for grounding cables.

PART 3. EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 INSTALLATION

- .1 After excavation and prior to duct group construction, install a bare tinned 4/0 gauge ground along the entire duct bank.
- .2 Install underground duct banks including formwork.
- .3 Build duct bank on undisturbed soil or on well compacted granular fill not less than 150 mm thick, compacted to 95% of maximum proctor dry density.
- .4 Open trench completely between manholes before ducts are laid and ensure that no obstructions will necessitate change in grade of ducts.
- .5 Install ducts at elevations and with slope as indicated and minimum slope of 1 to 400.
- .6 Install base spacers at maximum intervals of 2 m levelled to grades indicated for bottom layer of ducts.
- .7 Lay PVC ducts with configuration and reinforcing as indicated with preformed interlocking, rigid plastic intermediate spacers to maintain spacing between ducts at not less than 75 mm horizontally and vertically.
- .8 Stagger joints in adjacent layers at least 150 mm and make joints watertight.
- .1 Encase duct bank with 100 mm thick concrete cover.

BORDEREAU DE SOUMISSION
 ÉMIS POUR ADDENDA NO 3 - R01 - 2017-09-06
PROJET : TPSGC, SCC, Sainte-Anne-Des-Plaines
APPEL D'OFFRES NO : _____
TITRE : Reamenagement du reseau électrique

SECTION E
ÉLECTRICITÉ

Colonne 1 Poste no	Colonne 2 Section du devis	Colonne 3 Catégorie de travail, d'outillage ou de matériaux	Colonne 4 Unité de mesure	Colonne 5 Prix unitaire	Colonne 6 Quantité totale estimative	Colonne 7 Prix total estimatif
Travaux dans les batiments						
E.1	Centrale thermique		forfaitaire		100,00%	- \$
E.2	Archambault		forfaitaire		100,00%	- \$
E.3	A25		forfaitaire		100,00%	- \$
E.4	CRR		forfaitaire		100,00%	- \$
E.5	USD		forfaitaire		100,00%	- \$
E.6	Usine		forfaitaire		100,00%	- \$
Equipement extérieure						
E.7	Poste principale de distribution		forfaitaire		100,00%	- \$
E.8	IDC		forfaitaire		100,00%	- \$
E.9	Puits de tirage		forfaitaire		100,00%	- \$
E.10	Transformateurs		forfaitaire		100,00%	- \$
E.11	Cablage 25kV		forfaitaire		100,00%	- \$
E.12	Cablage 600V		forfaitaire		100,00%	- \$
Général						
E.13	MALT		forfaitaire		100,00%	- \$
Génératrice						
E.13	Generatrice temporaire		forfaitaire		100,00%	- \$
Démolition						
E.14	Enlevement des distribution existante		forfaitaire		100,00%	- \$
Aménagements Extérieurs						
E.16	Approche des massifs et montée sur batiment		forfaitaire		100,00%	- \$
E.17	Massif de béton armé de 2 conduits		forfaitaire		100,00%	- \$
E.18	Massif de béton armé de 4 conduits		forfaitaire		100,00%	- \$
E.19	Massif de béton armé de 6 conduits		forfaitaire		100,00%	- \$
E.20	Réalisation des essais de tous les équipements installés		forfaitaire		100,00%	- \$
*Total de la Section E de l'Estimation, excluant TPS et TVQ						- \$

*Le total de la Section E de l'Estimation doit être reporté à l'onglet "RÉSUMÉ"