



**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des
soumissions - TPSGC**
11 Laurier St. / 11, rue Laurier
Place du Portage, Phase III
Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Electrical & Electronics Products Division
11 Laurier St./11, rue Laurier
7B3, Place du Portage, Phase III
Gatineau, Québec K1A 0S5

| | |
|---|---|
| Title - Sujet Audio Video Supply Install Montreal | |
| Solicitation No. - N° de l'invitation E0272-182099/A | Date 2017-12-06 |
| Client Reference No. - N° de référence du client 20182099 | |
| GETS Reference No. - N° de référence de SEAG PW-\$\$HN-331-73898 | |
| File No. - N° de dossier hn331.E0272-182099 | CCC No./N° CCC - FMS No./N° VME |
| Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-12-21 | Time Zone Fuseau horaire Eastern Standard Time EST |
| 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: Turner, Louie | Buyer Id - Id de l'acheteur hn331 |
| Telephone No. - N° de téléphone (873) 469-3342 () | FAX No. - N° de FAX () - |
| Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF PUBLIC WORKS AND GOVERNMENT SERVICES CANADA 7300 800, RUE DE LA GAUCHETIERE O. MONTREAL Quebec H5A1L6 Canada | |

Instructions: See Herein

Instructions: Voir aux présentes

| | |
|--|--|
| Delivery Required - Livraison exigée 2018-02-01 | 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 |



| Item Article | Description | Dest. Code Dest. | Inv. Code Fact. | Qty Qté | U. of I. U. de D. | Destination | Unit Price/Prix unitaire FOB/FAM | Plant/Usine | Delivery Req. Livraison Req. | Del. Offered Liv. offerte |
|-----------------|---|------------------------|-----------------------|------------|----------------------|-------------|-------------------------------------|--------------|---------------------------------|------------------------------|
| 1 | Materiel informatique Montreal 201 8 Public Works Government Services Canada (PWGSC) has a requirement to supply and install fully functional Audio Video Systems as per Annex A Audio Video Installation - Statement of Work, Annex B....., Appendix A - Room Lists, Appendix B - Contract Data Requirement List, Appendix C - General Installation and Performance Requirements, Appendix D - Evaluation Criteria/Technical Evaluation, Appendix E - Drawings Floor Plan, Appendix F - Pricing • All prices must be submitted in Annex F | E0272 | E0272 | 1 | Each | \$ | XXXXXXXXXXXX | XXXXXXXXXXXX | 2018-02-01 | |

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Solicitation No. - N° de l'invitation
E0272-182099/A
Client Ref. No. - N° de réf. du client
E0272-182099

Amd. No. - N° de la modif.
File No. - N° du dossier
hn331.E0272-182099

Buyer ID - Id de l'acheteur
hn331
CCC No./N° CCC - FMS No./N° VME

Attachments:

Annex A – Audio Video Installation – Statement of Work
Appendix A – Room List
Appendix B – Contract Data Requirement List
Appendix C – General Installation and Performance Requirements
Appendix D – Mandatory Requirement/Evaluation Criteria
Appendix E – Floor Plan Drawing
Appendix F - Pricing

PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement associated with the requirement.

1.2 Statement of Work/Requirement

The contractor must provide the goods and services in accordance with the technical requirements stated herein.

1.2.1 Delivery Requirement

The delivery requirement is mandatory and must be completed by February 1, 2018. (Refer to Annex A, note 24 for scheduled requirements)

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.4 Trade Agreements

The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA).

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The [2003](#) (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days
Insert: 90 days

2.1.1 SACC Manual Clauses

| SACC Reference | Section | Date |
|------------------------|-----------------------|------------|
| A9033T | Financial Capability | 2012-07-16 |
| B1000T | Condition of Material | 2014-06-26 |

2.2 Submission of Bids

Bids must be submitted ONLY TO THE BID RECEIVING UNIT by the date, time and place indicated on page 1 of the bid solicitation. Do not send proposal directly to the Contracting Officer. Email proposal not accepted.

PWGSC Bids Receiving Unit
11 Laurier Street
Place du Portage, Phase 3, Core 0B2
Gatineau, Québec, K1A 0S5
Tel.: 819-420-7201
Fax: 819-997-9776

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

2.5 Mandatory Site Visit

It is mandatory that the Bidder or a representative of the Bidder visit the work site. Arrangements have been made for the following:

Mandatory site visit will be held at 800 de la Gauchetière West (south east tower) on December 13, 2017 at 11:00 am. Meeting point will be at the lounge in front of Press Café.
Contact: Amy Lee Gonye (514-496-3339) or Ron George (613-716-2426).

Note that in order to be granted access to the site, both hard hats and steel toe or closed toe shoes are mandatory.

Bidders will be required to sign an attendance form at the required site visit. Bidders should confirm in their bids that they have attended the site visit. Bidders who do not attend or send a representative to the site visit will not be given an alternative appointment and their bids will be rejected as non-compliant.

The onus is on the bidders to arrive at the site visit in a timely manner. Bidders arriving late may not be permitted to attend the site visit. The Bidder must have at least one attendee at the site visit.

To apply for the site visit, contact the Contracting Authority: louie.turner@pwgsc-tpsgc.gc.ca
The request must be submitted no later than December 12, 2017 by 4:00 pm

Bidders are requested to clearly identify the name of the participant(s), the name of the company they represent, telephone number, facsimile number and e-mail address.

Bidders are advised that any clarifications or changes resulting from the site visit shall be included as an amendment to the bid solicitation document.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (3 hard copies and 2 soft copies on USB Memory Stick, CD or DVD)

Section II: Financial Bid (1 hard copy)

Section III: Certifications (1 hard copy)

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

3.1.1 Equivalent Product

- 1. Products that are equivalent in form, fit, function and quality to the item(s) specified in the bid solicitation will be considered where the Bidder designates the brand name and model and/or part number and NCAGE of the substitute product;
- 2. Products offered as equivalent in form, fit, function and quality will not be considered if:
 - (a) the bid fails to provide all the information requested to allow the Contracting Authority to fully evaluate the equivalency of each substitute product; or
 - (b) the substitute product fails to meet or exceed the mandatory performance criteria specified in the bid solicitation for that item.

3. In conducting its evaluation of the bids, Canada may, but will have no obligation to, request bidders offering a substitute product to provide technical information demonstrating the equivalency (e.g. Drawing, specifications, engineering reports and/or test reports), or to demonstrate that the substitute product is equivalent to the item specified in the bid solicitation, at the sole cost of bidders, within two (2) business days of the request. If the bidder fails to provide the requested information within the specified timeframe, Canada may declare the bid non-responsive.

3.1.1.1 Equivalent Products - Samples

If the Bidder offers an equivalent product, Canada reserves the right to request a sample from the Bidder in order to determine its equivalency in form, fit, function, quality and performance to the item specified in the bid solicitation.

The Bidder must, upon request from the Contracting Authority, provide a sample to the Technical Authority, transportation charges prepaid, and without charge to Canada, within three (3) calendar days from the date of request. The sample submitted by the Bidder will remain the property of Canada and will not be considered as part of the deliverables in any resulting contract. If the sample does not meet the requirements of the bid solicitation or the Bidder fails to comply with the request of the Contracting Authority, the bid will be declared non-responsive.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

Bid prices must include all costs associated with all requirements of the solicitation to provide fully functional rooms. These costs must be included in the price of each room. The miscellaneous equipment list and the 2 annual visits are to be priced separate from the price per room (Refer to Appendix F – Price)

3.1.2.1 Exchange Rate Fluctuation

The requirement does not offer exchange rate fluctuation risk mitigation. Requests for exchange rate fluctuation risk mitigation will not be considered. All bids including such provision will render the bid non-responsive.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

3.1.4 Delivery Offered

While delivery is requested as indicated above, the best delivery that could be offered is_____.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

You are reminded that this solicitation requires the compliance and/or completion of requirements attached as an Annex and forming part of this document.

4.1 Evaluation Procedures

- a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

All bids must be completed in full and provide all of the information requested in the bid solicitation to enable full and complete evaluation.

In the case where a bidder proposes to supply an alternate or equivalent item, the onus is on the bidder to prove that the alternative/equivalent item is actually an equivalent or better than the brand name.

4.1.1.1 Mandatory Technical Criteria

The following Mandatory requirements must be submitted with the bid for evaluation

- Technical compliance herein;
- Appendix D are mandatory requirements and will be used as the Mandatory evaluation criteria

4.1.1.2 Mandatory Criteria

- Requirements specified in the solicitation documents using the word "must" are mandatory.

4.1.2 Financial Evaluation

Bids will be evaluated by the total price of the bid. The total price of the bid will be determined by the sum of:

each room type (10 total room types) x number of rooms of each type, plus:
miscellaneous equipment list - each item (10 items total) x the quantity for each item, plus:
total price of two annual visits

4.1.2.1 Pricing Basis

The bidder must quote firm unit prices in Canadian dollars DDP Delivered Duty Paid (Place Bonaventure, Portail Sud-Est, 800 De La Gauchetiere St W Bureau 7), Applicable Taxes extra, as applicable. Freight charges to destination and all applicable Custom duties and Excise taxes must be included.

4.2 Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the "lowest evaluated price on an aggregate basis" will be recommended for award of a contract.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the Forms for the Integrity Regime website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the Ineligibility and Suspension Policy (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 General Environmental Criteria Certification

The Bidder must select and complete one of the following two certification statements.

- A) The Bidder certifies that the Bidder is registered or meets ISO 14001.

Bidders' Authorized Representative Signature

Date

or

- B) The Bidder certifies that the Bidder meets and will continue to meet throughout the duration of the contract, a minimum of four (4) out of six (6) criteria identified in the table below.

The Bidder must indicate which four (4) criteria, as a minimum, are met.

| Green Practices within the Bidders' organization | Insert a checkmark for each criterion that is met |
|--|--|
| Promotes a paperless environment through directives, procedures and/or programs | |
| All documents are printed double sided and in black and white for day to day business activity unless otherwise specified by your client | |
| Paper used for day to day business activity has a minimum of 30% recycled content and has a sustainable forestry management certification | |
| Utilizes environmentally preferable inks and purchase remanufactured ink cartridges or ink cartridges that can be returned to the manufacturer for reuse and recycling for day to day business activity. | |
| Recycling bins for paper, newsprint, plastic and aluminum containers available and emptied regularly in accordance with local recycling program. | |
| A minimum of 50% of office equipment has an energy efficient certification. | |

Bidders' Authorized Representative Signature

Date

5.2.3 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969)" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969) website (http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969)" list at the time of contract award.

PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

6.1.1 There is no security requirement applicable to this Contract.

6.2 Statement of Work/Requirement

The contractor must provide the goods and services in accordance with the technical requirements stated herein.

6.2.1 SACC Manual Clauses

| SACC Reference | Section | Date |
|------------------------|----------------------|------------|
| B1501C | Electrical Equipment | 2006-06-16 |
| B7500C | Excess Goods | 2006-06-16 |

6.3 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

[2010A \(2016-04-04\), General Conditions - Goods \(Medium Complexity\)](#), apply to and form part of the Contract.

And

[2010C \(2016-04-04\), General Conditions - Services \(Medium Complexity\)](#) sections 2010C 16 and 2010C 17 apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Delivery Date

All the deliverables must be received on or before _____ (Delivery as offered and as accepted will be inserted at contract award).

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:
Louie Turner, Supply Specialist
Public Works and Government Services Canada - Acquisitions Branch
Logistics, Electrical, Fuel and Transportation Directorate - "HN" Division
7B3, Place du Portage, Phase III, 11 Laurier Street, Gatineau, QC, K1A 0S5
Telephone: (873) 469-3342 Facsimile: (819) 953-4944
E-mail address: louie.turner@pwgsc-tpsgc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Project Authority

The Project Authority for the Contract is: (will be inserted at contract)
Name:
Title:
Telephone: (xxx) xxx-xxxx Facsimile: (xxx) xxx-xxxx
E-mail:

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority; however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Technical Authority

The Technical Authority for the Contract is: (will be inserted at contract)
Name:
Title:
Telephone: (xxx) xxx-xxxx Facsimile: (xxx) xxx-xxxx
E-mail:

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority; however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.4 Contractor's Representative

Name and telephone number of the person responsible for: (will be inserted at contract)

General enquiries

Name: _____
Telephone: _____
E-mail: _____

Facsimile: _____

Delivery follow-up

Name: _____
Telephone: _____
E-mail: _____

Facsimile: _____

6.6 Payment

6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid firm unit prices as specified in the contract (Annex F) for a cost of \$ _____ (insert the amount at contract award). Customs duties are included and Applicable Taxes are extra.

6.6.2 Limitation of Price

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.3 Single Payment or Multiple Payments

SACC Manual clause H1001C (2008-05-12) Multiple Payments

6.6.4 SACC Manual Clauses

| SACC Reference | Section | Date |
|----------------|-----------|------------|
| <u>G1005C</u> | Insurance | 2016-01-28 |

6.7 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
 - (a) The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

- (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.
Department of Public Works and Government Services - "HN" Division
7B3 Place du Portage, Phase III, 11 Laurier Street, Gatineau, QC, K1A 0S5
Attention: Louie Turner

6.8 Certifications

6.8.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing additional information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the additional information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____. (Insert the name of the province or territory as specified by the Bidder in its bid, if applicable)

6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions 2010A (2016-04-04), General Conditions - Goods (Medium Complexity), and 2010C (2016-04-04), General Conditions - Services (Medium Complexity) sections 2010C 16 and 2010C 17;
- (c) Statement of Work/Requirement;
- (d) the Contractor's bid dated _____, as clarified on _____" **or** "as amended on _____"

6.11 SACC Manual Clauses (Delivery)

| SACC Reference | Section | Date |
|----------------|-----------------------|------------|
| <u>D9002C</u> | Incomplete Assemblies | 2007-11-30 |

6.11.1 Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and delivered:

- (a) Delivered Duty Paid (DDP) Place Bonaventure, Portail Sud-Est, 800 De La Gauchetiere St W Bureau 7 Inco terms 2000 for shipments from a commercial contractor.

6.11.2 Shipping - Scheduling

The Contractor must deliver the goods to Place Bonaventure, Montreal. All deliveries, installation and project requirements must be coordinated with (To be complete at Contract award)

Appendix F – Pricing

| <u>Description</u> | <u>Quantity</u> | <u>Price</u> |
|--|------------------------|---------------------------------|
| Meeting Room - Type 6 | 1 | _____ (each room) |
| Meeting Room - Type 7 | 1 | _____ (each room) |
| Meeting Room - Type 8 | 1 | _____ (each room) |
| Meeting Room - Type 9 | 2 | _____ (each room) |
| Meeting Room - Type 10 | 1 | _____ (each room) |
| Meeting Room - Type 11 | 3 | _____ (each room) |
| Meeting Room - Type 12 | 2 | _____ (each room) |
| Meeting Room - Type 13 | 1 | _____ (each room) |
| Meeting Room - Type 14 | 1 | _____ (each room) |
| Meeting Room - Type 15 | 1 | _____ (each room) |
| Miscellaneous Equipment – for rooms | See Table below | Complete in Table |
| Annual Visits – to be priced each visit (Refer Annex A, Article 18) | 2 visits | _____ (all 14 rooms each visit) |

Solicitation No. - N° de l'invitation
E0272-182099/A
Client Ref. No. - N° de réf. du client
E0272-182099

Amd. No. - N° de la modif.
File No. - N° du dossier
hn331.E0272-182099

Buyer ID - Id de l'acheteur
hn331
CCC No./N° CCC - FMS No./N° VME

Miscellaneous Equipment list – prices to be priced as each.

| Description | Manufacturer | Model | Qty | PRICE |
|--|-----------------------|----------------------|-----|-------|
| Room c712 - TH84EF1U - 84" Full HD LED LCD Display (1920 x 1080, 350 | Panasonic | TH84EF1U | 1 | ----- |
| Room c712 - Security SmartMount® Universal Flat Mount For 46in to 90in TV`s | Peerless | SF670 | 1 | ----- |
| Room 703 - Saros® Sound Bar 200, Powered, Black | Crestron | SAROS SB-200-P-B | 1 | ----- |
| Room 704 - Saros® Sound Bar 200, Powered, Black | Crestron | SAROS SB-200-P-B | 1 | ----- |
| LIBERTY APPLICATION OF DL-AR | LIBERTY | T10PD-LIBE-AVA-T10PD | 4 | ----- |
| Room c712 - Table cubby with data Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby | 500 or equivalent | 1 | ----- |
| Room c712 - Table cubby with 25' HDMI retractable, data and voice Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby | 700 or equivalent | 1 | ----- |
| Room c703 - Table cubby with data Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby | 500 or equivalent | 1 | ----- |
| Room c703 - Table cubby with 25' HDMI retractable, data and voice Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby | 700 or equivalent | 1 | ----- |
| Room s733 - Table cubby with 10' HDMI retractable, data Indirectly connected with plug, 2AC, 2USB | Extron Cable Cubby | 700 or equivalent | 1 | ----- |

ANNEX A: STATEMENT OF WORK

Audio Visual Installation

Public Services and Procurement Canada

Project Montreal 2018

800 de la Gauchetière (South-West Tower), 7th floor

Montreal, QC

INTRODUCTION

Background. The Client is moving into newly constructed facilities located at 800 de la Gauchetière, Montreal, Quebec. As part of this move, there is a requirement to deliver presentation and video conferencing systems for the building. These systems must share common components and function as local presentation systems, audio voice lift or video conferencing.

Scope. The work includes: equipment, engineering, design, project management, fabrication, assembly, software programming, installation, documentation, training, and warranty of the audiovisual systems.

Requirement. Public Services and Procurement Canada (PSPC) has a requirement to outfit a numerous rooms with audio video systems in a newly refitted floor (South-West Tower) space at 800 de la Gauchetière, Montréal QC.

PROJECT AUTHORITY

The PSPC Project Authority is (to be completed at contract award).

UNDERSTANDING AND INSTRUCTIONS

1. The contractor must provide the following local presentation, voice lift or video conferencing rooms. Details of each room type can be found in the corresponding tab of Appendix A – Room Type list:
 - a. One (1) Type 6 Rooms;
 - b. One (1) Type 7 Room;
 - c. One (1) Type 8 Room;
 - d. Two (2) Type 9 Rooms;
 - e. One (1) Type 10 Room;
 - f. One (3) Type 11 Room;
 - g. One (2) Type 12 Room;
 - h. One (1) Type 13 Room;
 - i. One (1) Type 14 Room;
 - j. One (1) Type 15 Room;
 - k. Misc Items;

NOTE: Room types 1 through 5 are not applicable for this project.

2. The Contractor must provide all system engineering and design necessary to develop the complete systems described herein. Engineering and design must include preparation of all electronic schematics, hardware drawings, systems diagrams, schedules and lists as per CDRL. These documents must be provided in both hard copy (paper) and soft copy (USB drive) at the time of bid. Data file formats must be in PDF and AutoCAD Version 2015.

3. The Contractor must provide all necessary project management and supervisory personnel required to assure the accurate, professional and timely implementation of the project.
4. The Contractor must procure and assemble all hardware and equipment and any additional materials, as required, to produce completely functioning systems. The Contractor must test its installation work with the PSPC laptops to be issued by the Project Authority.
5. The Contractor must perform all control systems software programming on site required to develop a complete operational system in accordance with these specifications, including all control logic and graphical user interface programming. The Contractor must revisit the site, up to 90 days from the acceptance date, if minor changes are required to the touch panel layout and operation.
6. The Contractor must install all GFE provided equipment, including but not limited to videoconference camera and codec.
7. The Contractor must install all equipment, cables, wiring, connectors, plates and other material at the Montreal facility and provide a fully functioning audio video solutions.
8. The Contractor must provide integrated AV racks and connectivity within the 2 designated areas.
9. The Contractor must follow all installation and performance requirements as outlined in Appendix C.
10. Before acceptance tests are scheduled, the Contractor must perform its own system revision. The Contractor must furnish all required test equipment and must perform all work necessary to determine and/or modify performance of the system to meet the requirements of the statement of work. When these initial tests and adjustments are completed, the Contractor must notify the Project Authority that the systems are in compliance with the specifications and are ready and complete for acceptance tests.
11. The Contractor must provide technical training to users as outlined in CDRL.
12. The Contractor must provide users reference guides in both official languages.
13. The Contractor must provide warranty coverage and support services as per PSPC standard clauses and must include the following:
 - a. response time (call back) for warranty service no longer than 4 hours from time of request for servicing;
 - b. a warranty period that is automatically extended by the duration of any period or periods where the systems are unavailable for use or cannot be used because of a defect or non-

conformance during the original warranty period. This warranty applies to any part of the systems replaced, repaired or corrected, for the greater of:

- i. The warranty period remaining, including the extension; or
- ii. Ninety (90) days or such other period as may be specified for that purpose by agreement between the Contractor and Project Authority.

14. For the duration of the warranty, the Contractor must provide two (2) annual visits, to be scheduled at PSPC's discretion, to perform operational checks of the equipment, to clean equipment or equipment parts, as required to maintain optimum system performance.
15. The Contractor must obtain any permits required for the installation of the audio-visual system.
16. The Contractor must respect all deadlines of the overall project schedule.
17. The Contractor must update and deliver to the Project Authority the Weekly Checklist below. The report is due every Tuesday by noon for the duration of the contract via email (email address to be provided at contract award).

| Weekly Checklist | | | |
|------------------|--|----------------|----------|
| | Report Items | Date Completed | Comments |
| 1 | Contract awarded | | |
| 2 | Contract received | | |
| 3 | Contractor site review completed | | |
| 4 | Identification of all critical dimensions | | |
| 5 | Detailed AV project schedule | | |
| 6 | Detailed Acceptance Test | | |
| 7 | Provide preliminary screen shots of the touch panel layout depicting "Look and Feel" | | |
| 8 | Weekly progress summary | | |
| 9 | Schedule percentage complete | | |
| 10 | Identified schedule pressures | | |
| 11 | Installation complete | | |
| 12 | Acceptance testing complete | | |

| | | | |
|----|------------------------------------|--|--|
| 13 | Documentation delivered | | |
| 14 | Training | | |
| 15 | Final deliverables received (CDRL) | | |
| 16 | Project sign off | | |

18. The Contractor must ensure supplied equipment can be transported from the loading area, to the installation area.
19. The Contractor must protect the structures and furniture within the building contracted work area.
20. The security of any equipment and/or tools provided by the Contractor for the purpose of installing this system remains the responsibility of the Contractor.
21. The contractor must coordinate secure on-site storage for all equipment with the Project Authority.
22. Five (5) days prior to the commencement of on-site work, the Contractor must have completed the following items:
 - a. a review of all relevant project documentation, including HVAC requirements, electrical power and grounding/earth connection;
 - b. a visit to the project site to ensure familiarity with physical conditions of the project affecting the work conditions;
 - c. a finalized detailed project schedule to the Project Authority; and
 - d. preliminary screen shots of the touch panel layout depicting “Look and Feel” for Project Authority concept acceptance.
23. At project completion, the Contractor must deliver the following items:
 - a. System Operating Handbook in both official languages describing the basic operation of the AV system by end users and technical support staff. This document must be graphical and written in non-technical terminology for ease of use. It must include a principle of operation for all components of the system;
 - b. Manufacturers Operating/User Manuals for each piece of equipment installed;

- c. Complete system design documentation including electronic schematics, hardware drawings, system diagrams schedules and lists for approval by the Project Authority as specified in CDRL;
- d. Maintenance Warranty Report.

24. The Contractor must deliver rooms to the Project Authority in the order listed below no later than February 1st, 2018. Any work conducted post January 12th, 2018 must be completed Monday to Friday between 16:00hrs - 06:00hrs and weekends.

| Priority | Room ID | Room Type |
|----------|---------------------|--|
| 1 | Room A-701a | Type 14 |
| 2 | Room C-700b | Type 15 |
| 3 | Room A-703 | Type 11 |
| 4 | Room A-704 | Type 11 |
| 5 | Room A-705 | Type 11 |
| 6 | Room A-708 | Type 8 |
| 7 | Room A-709 | Type 6 |
| 8 | Room C-709 | Type 10 |
| 9 | Room C-714 | Type 12 |
| 10 | Room C-716 | Type 12 |
| 11 | Room C-717 | Type 13 |
| 12 | Room A-710 | Type 7 |
| 13 | Room C-702 | Type 9 |
| 14 | Room E-704 | Type 9 |
| 15 | All other equipment | Misc Items tab of Appendix A - Room Type list |

The AV design for 800 de la Gauchetiere (South-West Tower), 7th floor will revolve around individual room architecture where audio, video and control signals will be routed directly to the displays or through local switchers located in two LAN rooms. Below is the detailed description of the rooms by room type. The equipment presented represents the expected standard and quality as described in the SOW and associated documents.

Montreal 2018

Type 6 - (1 room) - Meeting room - a709

Description: This room will be used for presentations and videoconferencing meetings. Meeting room to seat 12 participants at a table. The system must be terminated in the floor monuments and extended up to the table boxes. The Bidder must provide all cabling from the floor boxes up to the table boxes in a finished flexible sleeve ("Sock").

Replacement for display devices shall meet the following specifications:

- Same specs or better;
- Display size listed plus or minus 3" in size; and
- No WiFi capability

APPENDIX A

| Item | Description | Manufacturer | Model |
|--|---|--------------------|--------------------------------------|
| Display Devices (and related accessories) | | | |
| 1 | | | |
| 2 | 75in Full HD LED LCD Display 1920 x 1080, 350cd/m ² with HDMI x 2, DVI-D, Composite, PC, RS232C, LAN | Panasonic | TH75EF1U or equivalent |
| 3 | Security SmartMount® Universal Tilt Mount | Peerless | ST680 or equivalent |
| 4 | | | |
| Video Devices (and related accessories) | | | |
| 5 | AV Presentation switcher | Creston DMPS3 | DMPS3-300-C or equivalent |
| 6 | PC (GFE) | GFE | |
| 7 | Receiver (Rx) (Behind displays) | Creston DM | DM-RMC-4k-Scaler-C or equivalent |
| 8 | | | |
| Audio Devices (and related accessories) | | | |
| 9 | Saros® Sound Bar 200, Powered, Black | Creston | SAROS SB-200-P-B or equivalent |
| 10 | Ceiling microphones, white | Shure | MXA910W or equivalent |
| 11 | | | |
| Control Devices (and related accessories) | | | |
| 12 | TesiraFORTÉ DSP fixed I/O server with 12 anal | Biamp | TesiraFORTE DAN TI or equivalent |
| 13 | 3-Series Control System | Creston | CP3N or equivalent |
| 14 | Touch Screen 10", black smooth | Creston | TSW-1060-B-S or equivalent |
| 15 | Universal mounting bracket for touch screen | Creston | TSW-UMB-60 or equivalent |
| 16 | | | |
| Miscellaneous (and related accessories) | | | |
| 17 | Creston certified HDMI Interface cable - 12 ft | Creston | CBL-HD-12 or equivalent |
| 18 | Creston certified VGA Interface cable/with audio - 12 ft | Creston | CBL-VGA-AUD12 or equivalent |
| 19 | Wall Plate 4K DigitalMedia 8G+® Transmitter 100, Black Textured | Creston | DM-TX-4K-100-C-1G-B-T or equivalent |
| 20 | Wall Plate DigitalMedia 8G+® Transmitter 200, Black Textured | Creston | DM-TX-200-C-2G-B-T or equivalent |
| 21 | Wall Plate 4K DigitalMedia 8G+® Receiver Room Controller 100, Black Textured | Creston | DM-RMC-4K-100-C-1G-B-T or equivalent |
| 22 | 16-Port Managed PoE Switch | Creston | CEN-SWPOE-16 or equivalent |
| 23 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 6 ft | Creston | CBL-HD-6 or equivalent |
| 24 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 3 ft | Creston | CBL-HD-3 or equivalent |
| 25 | Table cubby with data Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby | 500 or equivalent |
| 26 | Table cubby with 25' HDMI retractable, data and voice Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby | 700 or equivalent |
| 27 | LIBERTY DIGITALINX HDMI ADAPTER RING. Includes: Base security clamp(DL-CL), Adapter Cable USB "C"(m)-HDMI, DP-HDMI, mini HDMI "C"(m)-HDMI "A", Mini DP-HDMI | LIBERTY DIGITALINX | or equivalent |
| 28 | Clickshare CS100 | Barco | Clickshare CS100 (no substitution) |
| 29 | All cables and misc small parts not listed above for a complete and functional turn-key system | | |
| 30 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | | |

Montreal 2018

Type 7 - (1 room) - meeting room - A710

APPENDIX A

Description: This room will be used for presentations meetings. The system must be terminated in the floor monuments and extended up to the table boxes. The Bidder must provide all cabling from the floor boxes up to the table boxes in a finished flexible sleeve ("Sock"). Replacement for display devices shall meet the following specifications:

- Same specs or better;
- Display size listed plus or minus 3" in size; and
- No WiFi capability

| Item | Description | Manufacturer | Model | Qty |
|--|---|--------------------|------------------------------------|-----|
| Display Devices (and related accessories) | | | | |
| 1 | | | | |
| 2 | .75in Full HD LED Display 1920 x 1080, 350cd/m² with HDMI x 2, DVI-D, Composite, PC, RS232C, LAN | Panasonic | TH75EF1U or equivalent | 1 |
| 3 | Security SmartMount® Universal Tilt Mount For 46in to 90in TV | Peerless | ST670 or equivalent | 1 |
| 4 | | | | |
| 5 | | | | |
| Video Devices (and related accessories) | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| Audio Devices (and related accessories) | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| Control Devices (and related accessories) | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| Miscellaneous (and related accessories) | | | | |
| 19 | Decora Wall Plate HDMI F/F White | Cables to Go (C2G) | 39710 or equivalent | 1 |
| 20 | 10ft SELECT IN WALL HDMI HS W ETHER CBL | Cables to Go (C2G) | 50628 or equivalent | 1 |
| 21 | 15ft SELECT IN WALL HDMI HS W ETHER CBL | Cables to Go (C2G) | 50630 or equivalent | 1 |
| 22 | Table cubby with data | Extron Cable Cubby | 500 or equivalent | 1 |
| | Table cubby connected with marettes, 2AC, 2USB | Extron Cable Cubby | 700 or equivalent | 1 |
| 23 | Table cubby with 25' HDMI retractable, data and voice | | | |
| | Directly connected with marettes, 2AC, 2USB | | | |
| | LIBERTY DIGITALINX HDMI ADAPTER RING. Includes: Base security clamp(DL-CL), Adapter Cable USB "C"(m)- | LIBERTY DIGITALINX | or equivalent | 1 |
| 24 | HDMI, DP-HDMI, mini HDMI "C"(m)-HDMI "A" ,Mini DP-HDMI | | Clickshare CS100 (no substitution) | 1 |
| 25 | Clickshare CS100 | Barco | | 1 |
| 26 | | | | |
| 27 | All cables and misc small parts not listed above for a complete and functional turn-key system | | | 0 |
| 28 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | | | 0 |

Montreal 2018

APPENDIX A

Type 8 - (1 room) - meeting room a708

Description: This room will be used for presentations meetings. The system must be terminated in the floor monuments and extended up to the table boxes. The Bidder must provide all cabling from the floor boxes up to the table boxes in a finished flexible sleeve ("Sock").

Replacement for display devices shall meet the following specifications:

- Same specs or better;
- Display size listed plus or minus 3" in size; and
- No WiFi capability

| Item | Description | Manufacturer | Model |
|--|---|--------------|--------------------------------------|
| Display Devices (and related accessories) | | | |
| 1 | | | |
| 2 | 75in Full HD LED LCD Display 1920 x 1080, 350cd/m² with HDMI x 2, DVI-D, Composite, PC, RS232C, LAN | Panasonic | TH75EF1U or equivalent |
| 3 | 65in full,HD display | Panasonic | TH65EF1U or equivalent |
| 4 | Security SmartMount® Universal Tilt Mount For 60in to 95in TV's | Peerless | ST680 or equivalent |
| 5 | Security SmartMount® Universal Tilt Mount For 46in to 90in TV's | Peerless | ST670 or equivalent |
| 6 | | | |
| 7 | | | |
| Video Devices (and related accessories) | | | |
| 8 | HDBaseT® Certified 4K DigitalMedia 8G+® Input Card for DM® Switchers | Creston | DMC-4K-C-HDCP2 or equivalent |
| 32 | Wall Plate 4K DigitalMedia 8G+® Transmitter 100, Black Textured | Creston | DM-TX-4K-100-C-1G-B-T or equivalent |
| 33 | Wall Plate DigitalMedia 8G+® Transmitter 200, Black Textured | Creston | DM-TX-200-C-2G-B-T or equivalent |
| 34 | Wall Plate 4K DigitalMedia 8G+® Receiver Room Controller 100, Black Textured | Creston | DM-RMC-4K-100-C-1G-B-T or equivalent |
| 9 | 4K HDMI® Input Card for DM® Switchers | Creston | DMC-4K-HD-HDCP2 or equivalent |
| 10 | 2-Channel 4K Scaling HDMI® Output Card for DM® Switchers | Creston | DMC-4K-HDO or equivalent |
| 11 | 16-Port Managed PoE Switch | Creston | CEN-SWPOE-16 or equivalent |
| 12 | 8x8 DigitalMedia™ Switcher | Creston | DM-MD8X8 or equivalent |
| 13 | 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Card for DM® Switchers | Creston | DMC-4K-CO-HD-HDCP2 or equivalent |
| 14 | | | |
| 15 | | | |
| Audio Devices (and related accessories) | | | |
| 16 | | | |
| 17 | Saros® Sound Bar 200, Powered, Black | Creston | SAROS SB-200-P-B or equivalent |
| 18 | Tesira DSP server | Biamp | Tesira SERVER-IO or equivalent |
| 19 | Tesira 4 chnl mic/line input card | Biamp | Tesira SEC-4 or equivalent |
| 20 | Tesira 4 chnl mic/line output card | Biamp | Tesira SOC-4 or equivalent |
| 21 | Tesira 2 line POTS phone interface card | Biamp | Tesira STC-2 or equivalent |
| 22 | Tesira 64x64 Dante mod for use in SERVER or SERVER-IO chassis | Biamp | Tesira DAN-1 or equivalent |
| 23 | Ceiling microphones, white | Shure | MXA910W or equivalent |
| 24 | | | |
| Control Devices (and related accessories) | | | |
| 25 | | | |
| 26 | 4K DigitalMedia 8G+® Receiver Room Controller w/Scaler | Creston | DM-RMC-4K-SCALER-C or equivalent |
| | | | |
| 28 | 10.1" Touch Screen, Black Smooth | Creston | TSW-1060-B-S or equivalent |
| 29 | Universal Mounting Bracket for TSW-560, TSW-760, TSW-1060 | Creston | TSW-UMB-60 or equivalent |
| 30 | | | |
| 31 | | | |
| Miscellaneous (and related accessories) | | | |
| 35 | DigitalMedia 8G™ Cable, plenum, 500 ft spool | Creston | DM-CBL-8G-P-SP500 or equivalent |

Montreal 2018**Type 8 - (1 room) - meeting room a708****APPENDIX A**

| | | | |
|----|---|--------------------|------------------------------------|
| 36 | Connectors for DM-CBL DigitalMedia™ Cable DM-CBL-ULTRA DigitalMedia Ultra Cable, 20-Pack | Creston | DM-CONN-20 or equivalent |
| 37 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 6 ft 1.8 m | Creston | CBL-HD-6 or equivalent |
| 38 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 3 ft 0.91 m | Creston | CBL-HD-3 or equivalent |
| 39 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 12 ft 3.6 m | Creston | CBL-HD-12 or equivalent |
| 40 | Creston® Certified Computer VGA Interface Cable w/Audio, 12 ft | Creston | CBL-VGA-AUD-12 or equivalent |
| 42 | Table cubby with 25' HDMI retractable, data and voice Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby | 700 or equivalent |
| 43 | LIBERTY DIGITALINX HDMI ADAPTER RING. Includes: Base security clamp(DL-CL), Adapter Cable USB "C" (m)- HDMI, DP-HDMI, mini HDMI "C"(m)-HDMI "A",Mini DP-HDMI | LIBERTY DIGITALINX | or equivalent |
| 44 | Clickshare CS100 | Barco | Clickshare CS100 (no substitution) |
| 45 | | | |
| 19 | All cables and misc small parts not listed above for a complete and functional turn-key system | | |
| 20 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | | |

| Qty |
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Montreal 2018

Type 9 - (2 rooms) Lounge areas C-702 & E-704

APPENDIX A

Description: These rooms will be used as lounge areas and the system will be used for audio and visual presentations and events.

Replacement for display devices shall meet the following specifications:

- Same specs or better;
- Display size listed plus or minus 3" in size; and
- No WiFi capability

| Item | Description | Manufacturer | Model | Qty |
|--|--|--------------------|---|-----|
| Display Devices (and related accessories) | | | | |
| 1 | | | | |
| 2 | TH84EF1U - 84" Full HD LED LCD Display | Panasonic | TH84EF1U or equivalent | 1 |
| 3 | Security SmartMount® Universal Flat Mount For 46in to 90in TV's | Peerless | SF670 or equivalent | 1 |
| 4 | | | | |
| Video Devices (and related accessories) | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| Audio Devices (and related accessories) | | | | |
| 10 | | | | |
| 11 | Format-A Two-Pair Audio Sndr | RDL | FP-TPS4A or equivalent | 1 |
| 12 | 6.5" 2-Way Surface Mount Media Presentation Speaker, White. Single must be ordered in multiples of 2 | Crestpm | FS6-W-EACH or equivalent | 4 |
| | 4 channel, 60W half-rack amplifier with mounting bracket | Biamp | AMP-A460H or equivalent | 1 |
| | TesiraFORTE DSP fixed I/O server with 12 anal | Biamp | TesiraFORTE AI or equivalent | 1 |
| | In-line antenna signal amplifier for WMS 4500 system BNC connector - 470 to 952 MHz. | AKG | AB4000 EW or equivalent | 1 |
| | Tesira PoE Ethernet dtri in-wall mount | Biamp | Tesira TEC-1i or equivalent | 1 |
| | Antenna cable for Wireless systems for connecting external antennas, antenna boosters, antenna booster supplies, antenna power splitter and receivers; RG 58 cable 50 Ohms, length 5m, gold plated BNC connectors on both ends. | AKG | MKA 5 or equivalent | 2 |
| | Wireless microphone system that supports the use of rechargeable batteries, includes: 1 x SR 420 stationary receiver, 1 x HT 420 handheld transmitter. Freq: 614,100 - 629,900MHz - 614,100 - 629,900MHz | AKG | WMS 420 Vocal Set Band U2 or equivalent | 1 |
| | Remote antenna, omni-directional, dipole, active 18dB amplifier - diversity system require two antennas - 470 to 952 MHz. | AKG | RA4000 B/EW or equivalent | 1 |
| | Antenna cable for Wireless systems, 20m length, BNC connectors for connecting external antennas, antenna boosters, antenna booster supplies, antenna power splitter and receivers; RG 58 cable 50 Ohms, length 20m, gold plated BNC connectors on both ends. | AKG | MKA20 or equivalent | 2 |
| 13 | | | | |
| Control Devices (and related accessories) | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| Miscellaneous (and related accessories) | | | | |
| 18 | | | | |
| 19 | 25ft HDMI High Speed Plenum M/M Cable | Cables to Go (C2G) | 41191 or equivalent | 1 |
| 20 | 15ft UNIVERSAL POWER CORD | Cables to Go (C2G) | 9482 or equivalent | 1 |
| 21 | USB over Ethernet Extender with Routing, Host Module | Creston | USB-EXT-DM-LOCAL or equivalent | 1 |
| 22 | USB over Ethernet Extender with Routing, 4-Port Device Module | Creston | USB-EXT-DM-REMOTE or equivalent | 1 |
| 23 | 24 Vdc Switching Power Supply, | RDL | PS-24AS or equivalent | 1 |
| 24 | Passive Sgl-Pair Sndr | RDL | D-TPS7A or equivalent | 1 |
| 25 | Active Three-Pair Rcvr - Twstd Pair Format-A | RDL | D-TPR3A or equivalent | 1 |
| 26 | Sgl Plate - stainless steel | RDL | CP-1S or equivalent | 1 |
| 27 | 5-Port PoE Switch | Creston | CEN-SW-POE-5 or equivalent | 1 |
| 28 | Decora Wall Plate HDMI F/F White | Cables to Go (C2G) | 39710 or equivalent | 1 |

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Type 9 - (2 rooms) Lounge areas C-702 & E-704

APPENDIX A

| | | | | |
|----|---|--------------------|------------------------------------|---|
| 29 | 15ft SELECT IN WALL HDMI HS W ETHER CBL | Cables to Go (C2G) | 50630 or equivalent | 1 |
| | DigitalMedia 8G™ Cable, plenum, 500 ft spool | Crestion | DM-CBL-8G-P-SP500 or equivalent | 1 |
| | Connectors for DM-CBL DigitalMedia™ Cable DM-CBL-UL TRA DigitalMedia Ultra Cable, 20-Pack | Crestion | DM-CONN-20 or equivalent | 1 |
| | 2m USB 2.0 A MALE/A MALE CBL BLK | Cables to Go (C2G) | 28106 or equivalent | 1 |
| 30 | HALF RACK UNIVERSAL SHELF | Middle Atlantic | UTR1 or equivalent | 1 |
| | Rear rack rail Mntng kit for any TX series Mod | RDL | TX-RRB1 or equivalent | 1 |
| | Ceiling Plate For 8inx8in Unistrut® and Structural Ceiling | Peerless | CMJ310 or equivalent | 1 |
| | 5' Fixed Extension Column | Peerless | EXT105 or equivalent | 1 |
| | Remote antenna power supply unit for large-scale antenna distribution or small antenna systems where no PS4000 W is in use. Provides necessary power for up to three active antenna elements RA4000 B, SRA2 B, AB4000 via antenna cable. WITHOUT POWER SUPPLY | AKG | ASU 4000 BNC/hone or equivalent | 1 |
| | Remote antenna, omni-directional, dipole, passive - diversity system require two antennas - 470 to 952 MHz. | AKG | RA4000 EW or equivalent | 1 |
| | 1.1 Belden Not Listed 20.83% 6300UE SPK cable 18AWG, 2cond, 7stand | 1.1 Belden | 6300UE or equivalent | 1 |
| 31 | Clickshare CS100 | Barco | Clickshare CS100 (no substitution) | 1 |
| 32 | | | | |
| 33 | All cables and misc small parts not listed above for a complete and functional turn-key system | | | 1 |
| 34 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | | | 1 |

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Type 10 - (1 room) - C709

APPENDIX A

Description: This room will be used for presentations meetings. The system must be terminated in the floor monuments and extended up to the table boxes. The Bidder must provide all cabling from the floor boxes up to the table boxes in a finished flexible sleeve ("Sock"). Replacement for display devices shall meet the following specifications:

- Same specs or better;
- Display size listed plus or minus 3" in size; and
- No WiFi capability

| Item | Description | Manufacturer | Model | Qty |
|--|--|--------------------|--------------------------------------|-----|
| Display Devices (and related accessories) | | | | |
| 1 | | | | |
| 2 | 80in Full HD Interactive LED LCD Display 1920 x 1080, 350cd/m ² with HDMIx2, DVI-D, Component, Composite, PC IN/OUT, Digital Link, SLOT2.0 and RS232C / LAN Control | Panasonic | TH84EF1U or equivalent | 2 |
| 3 | 65in full HD display | Panasonic | TH65EF1U or equivalent | 2 |
| 4 | Security SmartMount® Universal Tilt Mount For 60in to 95in TV's | Peerless | ST680 or equivalent | 2 |
| 5 | Security SmartMount® Universal Tilt Mount For 46in to 90in TV's | Peerless | ST670 or equivalent | 2 |
| Video Devices (and related accessories) | | | | |
| 7 | Wall Plate 4K DigitalMedia 8G+ @ Transmitter 100, Black Textured | Creston | DM-TX-4K-100-C-1G-B-T or equivalent | 3 |
| 8 | DigitalMedia 8G+@ Transmitter 201 | Creston | DM-TX-201-C or equivalent | 1 |
| 9 | Wall Plate DigitalMedia 8G+ @ Transmitter 200, Black Textured | Creston | DM-TX-200-C-2G-B-T or equivalent | 1 |
| 20 | Wall Plate 4K DigitalMedia 8G+ @ Receiver Room Controller 100, Black Textured | Creston | DM-RMC-4K-100-C-1G-B-T or equivalent | 3 |
| 11 | 5-Port PoE Switch | Creston | CEN-SW-POE-5 or equivalent | 1 |
| 12 | 16-Port Managed PoE Switch | Creston | CEN-SWPOE-16 or equivalent | 1 |
| 13 | 8x8 DigitalMedia™ Switcher | Creston | DM-MD8X8 or equivalent | 1 |
| 14 | HDBaseT® Certified 4K DigitalMedia 8G+@ Input Card for DM@ Switchers | Creston | DMC-4K-C-HDCP2 or equivalent | 2 |
| 15 | 4K HDMI@ Input Card for DM@ Switchers | Creston | DMC-4K-HD-HDCP2 or equivalent | 2 |
| 16 | 2-Channel 4K Scaling HDMI@ Output Card for DM@ Switchers | Creston | DMC-4K-HDO or equivalent | 1 |
| 17 | 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+@ Output Card for DM@ Switchers | Creston | DMC-4K-CO-HD-HDCP2 or equivalent | 2 |
| 18 | 4K DigitalMedia 8G+ @ Receiver Room Controller w/Scaler | Creston | DM-RMC-4K-SCALER-C or equivalent | 4 |
| 19 | | | | |
| Audio Devices (and related accessories) | | | | |
| 21 | Saros® Sound Bar 200, Powered, Black | Creston | SAROS SB-200-P-B or equivalent | 3 |
| 22 | Tesira DSP server | Blamp | Tesira SERVER-IO or equivalent | 1 |
| 23 | Tesira 4 chnl mic/line input card | Blamp | Tesira SEC-4 or equivalent | 4 |
| 24 | Tesira 4 chnl mic/line output card | Blamp | Tesira SOC-4 or equivalent | 3 |
| 25 | Tesira 2 line POTS phone interface card | Blamp | Tesira STC-2 or equivalent | 1 |
| 26 | Tesira 64x64 Dante mod for use in SERVER or SERVER-IO chassis | Blamp | Tesira DAN-1 or equivalent | 1 |
| 27 | Ceiling microphones, white | Shure | MXA910W or equivalent | 2 |
| Control Devices (and related accessories) | | | | |
| 28 | | | | |
| 29 | 3-Series Control System® | Creston | CP3N or equivalent | 1 |
| 30 | 10.1" Touch Screen, Black Smooth | Creston | TSW-1060-B-S or equivalent | 1 |
| 31 | Universal Mounting Bracket for TSW-560, TSW-760, TSW-1060 | Creston | TSW-UMB-60 or equivalent | 1 |
| 32 | | | | |
| Miscellaneous (and related accessories) | | | | |
| 33 | | | | |
| 34 | DigitalMedia 8G™ Cable, plenum, 500 ft spool | Creston | DM-CBL-8G-P-SF500 or equivalent | 2 |
| 35 | Connectors for DM-CBL DigitalMedia™ Cable DM-CBL-ULTRA DigitalMedia Ultra Cable, 20-Pack | Creston | DM-CONN-20 or equivalent | 1 |
| 36 | Creston® Certified HDMI @ Interface Cable, 18 Gbps, 6 ft 1.8 m | Creston | CBL-HD-6 or equivalent | 10 |
| 37 | Creston® Certified HDMI@ Interface Cable, 18 Gbps, 3 ft 0.91 m | Creston | CBL-HD-3 or equivalent | 6 |
| 38 | Creston® Certified HDMI @ Interface Cable, 18 Gbps, 12 ft 3.6 m | Creston | CBL-HD-12 or equivalent | 1 |
| | Ceiling Plate For 8inx8in Unistrut® and Structural Ceiling | Peerless | CMJ310 or equivalent | 2 |
| | 5'Fixed Extension Column | Peerless | EXT105 or equivalent | 2 |
| 39 | Creston® Certified Computer VGA Interface Cable w/Audio, 12 ft | Creston | CBL-VGA-AUD-12 or equivalent | 1 |
| 40 | Table cubby with data Indirectly connected with plugs, 2AC, 2USB | Extron Cable Cubby | 500 or equivalent | 4 |

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Type 10 - (1 room) - C709

APPENDIX A

| | | | | |
|----|--|--|------------------------------------|---|
| 41 | Table cubby with 25' HDMI retractable, data indirectly connected with plugs, 2AC, 2USB | Extron Cable Cubby | 700 or equivalent | 2 |
| 42 | Table cubby with data and vox | Extron Cable Cubby | 500 or equivalent | 1 |
| 43 | Indirectly connected with plugs, 2AC, 2USB | LIBERTY DIGITALINX HDMI ADAPTER RING. Includes: Base security clamp(DL-CL), Adapter Cable USB "C" (m)-HDMI, DP-HDMI, mini HDMI "C"(m)-HDMI "A", Mini DP-HDMI | or equivalent | 2 |
| 44 | Clickshare CS100 | Barco | Clickshare CS100 (no substitution) | 2 |
| 45 | All cables and misc small parts not listed above for a complete and functional turn-key system | | | 1 |
| 46 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | | | 1 |

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APPENDIX A

Type 11 - (1 room) - Integrated setup of training rooms a703-a704-a705, that can be opened into one large room

Description: This room consists of three (3) training rooms between which dividers can be removed to form one large training room. The system must enable usage of each room individually, or usage as one system when dividers are removed between rooms.

Replacement for display devices shall meet the following specifications:

- Same specs or better;
- Display size listed plus or minus 3" in size; and

| Item | Description | Manufacturer | Model | Qty |
|--|--|--------------|--------------------------------------|-----|
| Display Devices (and related accessories) | | | | |
| 1 | | | | |
| 2 | TH84EF1U - 84" Full HD LED LCD Display | Panasonic | TH84EF1U or equivalent | 1 |
| 3 | 75in Full HD LED LCD Display 1920 x 1080, 350cd/m ² with HDMI x2, DVI-D, Composite, PC, RS232C, LAN | Panasonic | TH75EF1U or equivalent | 2 |
| 4 | Security SmartMount® Universal Tilt Mount For 60in to 95in TV's | Peerless | ST680 or equivalent | 1 |
| 5 | Security SmartMount® Universal Tilt Mount For 46in to 90in TV's | Peerless | ST670 or equivalent | 2 |
| 6 | | | | |
| Video Devices (and related accessories) | | | | |
| 7 | | | | |
| 8 | Wall Plate 4K DigitalMedia 8G+® Transmitter 100, Black Textured | Creston | DM-TX-4K-100-C-1G-B-T or equivalent | 3 |
| 9 | Wall Plate DigitalMedia 8G+® Transmitter 200, Black Textured | Creston | DM-TX-200-C-2G-B-T or equivalent | 3 |
| 10 | Wall Plate 4K DigitalMedia 8G+® Receiver Room Controller 100, Black Textured | Creston | DM-RMC-4K-100-C-1G-B-T or equivalent | 3 |
| 11 | 5-Port PoE Switch | Creston | CEN-SW-POE-5 or equivalent | 1 |
| 12 | 8x8 DigitalMedia™ Switcher | Creston | DM-MD8X8 or equivalent | 1 |
| 13 | 16-Port Managed PoE Switch | Creston | CEN-SWPOE-16 or equivalent | 1 |
| 14 | HDBaseT® Certified 4K DigitalMedia 8G+® Input Card for DM® Switchers | Creston | DMC-4K-C-HDCP2 or equivalent | 3 |
| 15 | 4K HDMI® Input Card for DM® Switchers | Creston | DMC-4K-HD-HDCP2 or equivalent | 2 |
| 16 | 2-Channel 4K Scaling HDMI® Output Card for DM® Switchers | Creston | DMC-4K-HDO or equivalent | 1 |
| 17 | 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Output Card for DM® Switchers | Creston | DMC-4K-CO-HD-HDCP2 or equivalent | 2 |
| 18 | 4K DigitalMedia 8G+® Receiver Room Controller w/Scaler | Creston | DM-RMC-4K-SCALER-C or equivalent | 5 |
| 19 | | | | |
| Audio Devices (and related accessories) | | | | |
| 20 | | | | |
| 21 | Saros® Sound Bar 200, Powered, Black | Creston | SAROS SB-200-P-B or equivalent | 3 |
| 22 | Tesira DSP server | Biamp | Tesira SERVER-IO or equivalent | 1 |
| 23 | Tesira 4 chnl mic/line input card | Biamp | Tesira SEC-4 or equivalent | 6 |
| 24 | Tesira 4 chnl mic/line output card | Biamp | Tesira SOC-4 or equivalent | 3 |
| 25 | Tesira 2 line POTS phone interface card | Biamp | Tesira STC-2 or equivalent | 2 |
| 26 | Tesira 64x64 Dante mod for use in SERVER or SERVER-IO chassis | Biamp | Tesira DAN-1 or equivalent | 1 |
| 27 | Ceiling microphones, white | Shure | MXA910W or equivalent | 3 |
| 28 | | | | |
| Control Devices (and related accessories) | | | | |
| 29 | 3-Series Control System® | Creston | CP3N or equivalent | 1 |
| 30 | 10.1" Touch Screen, Black Smooth | Creston | TSW-1060-B-S or equivalent | 3 |
| 31 | Universal Mounting Bracket for TSW-560, TSW-760, TSW-1060 | Creston | TSW-UMB-60 or equivalent | 3 |
| 32 | | | | |
| 33 | | | | |
| 34 | | | | |
| Miscellaneous (and related accessories) | | | | |
| 35 | | | | |
| 36 | DigitalMedia 8G™ Cable, plenum, 500 ft spool | Creston | DM-CBL-8G-P-SP500 or equivalent | 2 |

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APPENDIX A

Type 11 - (1 room) - Integrated setup of training rooms a703-a704-a705, that can be opened into one large room

| | | | | |
|----|---|--------------------|------------------------------------|----|
| 37 | Connectors for DM-CBL DigitalMedia™ Cable DM-CBL-ULTRA DigitalMedia Ultra Cable, 20-Pack | Creston | DM-CONN-20 or equivalent | 1 |
| 38 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 6 ft 1.8 m | Creston | CBL-HD-6 or equivalent | 10 |
| 39 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 3 ft 0.91 m | Creston | CBL-HD-3 or equivalent | 6 |
| 40 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 12 ft 3.6 m | Creston | CBL-HD-12 or equivalent | 3 |
| 41 | Creston® Certified Computer VGA Interface Cable w/Audio, 12 ft | Creston | CBL-VGA-AUD-12 or equivalent | 3 |
| 42 | 24 Vdc Switching Power Supply. | RDL | PS-24AS or equivalent | 1 |
| 43 | Cresnet® Partition Sensor | Creston | GLS-PART-CN or equivalent | 2 |
| 44 | Dual Bal/Unbal Line Amp: -12 to 20 dB Gain | RDL | STA-1 or equivalent | 1 |
| 45 | Cresnet® Control Cable, Plenum-Rated, Teal, 500 ft 152 m spool | Creston | CRESNET-P-TL-SP500 or equivalent | 1 |
| 46 | LIBERTY DIGITALINX HDMI ADAPTER RING. Includes: Base security clamp(DL-CL), Adapter Cable USB "C"(m)-HDMI, DP-HDMI, mini HDMI "C"(m)-HDMI "A", Mini DP-HDMI | LIBERTY DIGITALINX | or equivalent | 3 |
| 47 | Clickshare CS100 | Barco | Clickshare CS100 (no substitution) | 3 |
| 48 | All cables and misc small parts not listed above for a complete and functional turn-key system | | | 1 |
| 49 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | | | 1 |

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APPENDIX A

Type 12 - (1 room) - Integrated setup of contiguous rooms c714-c716, that can be opened to have one large boardroom

Description: Two (2) contiguous boardrooms that can be used as one (1) integrated boardroom. The room will be used for presentations and videoconferencing meetings in both official languages. The system must be terminated in the floor monuments and extended up to the table boxes. The Bidder must provide all cabling from the floor boxes up to the table boxes in a finished flexible sleeve ("Sock").

Replacement for display devices shall meet the following specifications:

- Same specs or better;

| Item | Description | Manufacturer | Model |
|--|---|--------------|--------------------------------------|
| Display Devices (and related accessories) | | | |
| 1 | | | |
| 2 | 65in full,HD display | Panasonic | TH65EF1U or equivalent |
| 3 | 75in Full HD LED LCD Display 1920 x 1080, 350cd/m² with HDMI x 2, DVI-D, Composite, PC, RS232C, LAN | Panasonic | TH75EF1U or equivalent |
| 4 | Security SmartMount® Universal Tilt Mount For 60in to 95in TV's | Peerless | ST680 or equivalent |
| 5 | Security SmartMount® Universal Tilt Mount For 46in to 90in TV's | Peerless | ST670 or equivalent |
| 6 | | | |
| 7 | | | |
| Video Devices (and related accessories) | | | |
| 8 | | | |
| 9 | 2-Channel 4K Scaling HDMI® Output Card for DM® Switchers | Creston | DMC-4K-HDO or equivalent |
| 10 | 2-Channel HDBaseT® Certified 4K DigitalMedia 8G+® Input Card for DM® Switchers | Creston | DMC-4K-C-HDCP2 or equivalent |
| 11 | 4K DigitalMedia 8G+® Receiver Room Controller w/Scaler | Creston | DM-RMC-4K-SCALER-C or equivalent |
| 12 | Wall Plate 4K DigitalMedia 8G+® Transmitter 100, Black Textured | Creston | DM-TX-4K-100-C-1G-B-T or equivalent |
| 13 | Wall Plate DigitalMedia 8G+® Transmitter 200, Black Textured | Creston | DM-TX-200-C-2G-B-T or equivalent |
| 14 | Wall Plate 4K DigitalMedia 8G+® Receiver Room Controller 100, Black Textured | Creston | DM-RMC-4K-100-C-1G-B-T or equivalent |
| 15 | 16-Port Managed PoE Switch | Creston | CEN-SWPOE-16 or equivalent |
| 16 | 8x8 DigitalMedia™ Switcher | Creston | DM-MD8X8 or equivalent |
| 17 | HDBaseT® Certified 4K DigitalMedia 8G+® Input Card for DM® Switchers | Creston | DMC-4K-C-HDCP2 or equivalent |
| 18 | 4K HDMI® Input Card for DM® Switchers | Creston | DMC-4K-HD-HDCP2 or equivalent |
| 19 | | | |
| Audio Devices (and related accessories) | | | |
| 20 | Saros® Sound Bar 200, Powered, Black | Creston | SAROS SB-200-P-B or equivalent |
| 21 | Tesira DSP server | Biamp | Tesira SERVER-IO or equivalent |
| 22 | Tesira 4 chnl mic/line input card | Biamp | Tesira SEC-4 or equivalent |
| 23 | Tesira 4 chnl mic/line output card | Biamp | Tesira SOC-4 or equivalent |
| 24 | Tesira 2 line POTS phone interface card | Biamp | Tesira STC-2 or equivalent |
| 25 | Tesira 64x64 Dante mod for use in SERVER or SERVER-IO chassis | Biamp | Tesira DAN-1 or equivalent |
| 26 | Ceiling microphones, white | Shure | MXA910W or equivalent |
| 27 | | | |
| Control Devices (and related accessories) | | | |
| 28 | 3-Series Control System® | Creston | CP3N or equivalent |
| 29 | 10.1" Touch Screen, Black Smooth | Creston | TSW-1060-B-S or equivalent |
| 30 | Universal Mounting Bracket for TSW-560, TSW-760, TSW-1060 | Creston | TSW-UMB-60 or equivalent |
| 31 | | | |
| 32 | | | |
| 33 | | | |
| Miscellaneous (and related accessories) | | | |
| 34 | DigitalMedia 8G™ Cable, plenum, 500 ft spool | Creston | DM-CBL-8G-P-SP500 or equivalent |
| 35 | Connectors for DM-CBL DigitalMedia™ Cable DM-CBL-ULTRA DigitalMedia Ultra Cable, 20-Pack | Creston | DM-CONN-20 or equivalent |
| 36 | Creston® Certified HDMI® Interface Cable, 18 Gbps, 6 ft 1.8 m | Creston | CBL-HD-6 or equivalent |

Montreal 2018**APPENDIX A****Type 12 - (1 room) - Integrated setup of contiguous rooms c714-c716, that can be opened to have one large boardroom**

| | | | |
|----|---|--------------------|------------------------------------|
| 37 | Crestron® Certified HDMI® Interface Cable, 18 Gbps, 3 ft 0.91 m | Crestron | CBL-HD-3 or equivalent |
| 38 | Crestron® Certified HDMI® Interface Cable, 18 Gbps, 12 ft 3.6 m | Crestron | CBL-HD-12 or equivalent |
| 39 | Crestron® Certified Computer VGA Interface Cable w/Audio, 12 ft | Crestron | CBL-VGA-AUD-12 or equivalent |
| 43 | Cresnet® Partition Sensor | Crestron | GLS-PART-CN or equivalent |
| 41 | Table cubby with data Indirectly connected with plugs, 2AC, 2USB | Extron Cable Cubby | 500 or equivalent |
| 42 | Table cubby with 25' HDMI retractable, data, vox Indirectly connected with plugs, 2AC, 2USB | Extron Cable Cubby | 700 or equivalent |
| 43 | LIBERTY DIGITALINX HDMI ADAPTER RING. Includes: Base security clamp(DL-CL), Adapter Cable USB "C"(m)-HDMI, DP-HDMI, mini HDMI "C"(m)-HDMI "A", Mini DP-HDMI | LIBERTY DIGITALINX | or equivalent |
| 44 | Clickshare CS100 | Barco | Clickshare CS100 (no substitution) |
| 45 | | | |
| 46 | All cables and misc small parts not listed above for a complete and functional turn-key system | | |
| 47 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | | |

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Type 13 - (1 room) - Boardroom - C717

Description: The room will be used for presentations and videoconferencing meetings in both official languages and extended up to the table boxes. The Bidder must provide all cabling from the floor boxes up to the table. Replacement for display devices shall meet the following specifications:

- Same specs or better;
- Display size listed plus or minus 3" in size; and
- No WiFi capability

| Item | Description |
|--------------------------------------|---|
| Display Devices (and related) | |
| 1 | |
| 2 | 75in Full HD LED LCD Display 1920 x 1080, 350cd/m² with HDMI x 2, DVI-D, Composite, PC, RS232C, LAN |
| 3 | Security SmartMount® Universal Tilt Mount For 60in to 95in TV's |
| 4 | |
| 5 | |
| 6 | Video Devices (and related) |
| 7 | |
| 8 | Wall Plate 4K DigitalMedia 8G+® Transmitter 100, Black Textured |
| 9 | Wall Plate DigitalMedia 8G+® Transmitter 200, Black Textured |
| 10 | Wall Plate 4K DigitalMedia 8G+® Receiver Room Controller 100, Black Textured |
| 11 | 16-Port Managed PoE Switch |
| 12 | Audio Devices (and related) |
| 13 | Saros® Sound Bar 200, Powered, Black |
| 14 | Ceiling microphones, white |
| 15 | Control Devices (and related) |
| 16 | 3-Series Control System® |
| 17 | 10.1" Touch Screen, Black Smooth |
| 18 | Universal Mounting Bracket for TSW-560, TSW-760, TSW-1060 |
| 19 | |
| 20 | |
| 21 | Miscellaneous (and related) |
| 22 | DigitalMedia 8G™ Cable, plenum, 500 ft spool |
| 23 | Connectors for DM-CBL DigitalMedia™ Cable DM-CBL-ULTRA DigitalMedia Ultra Cable, 20-Pack |
| 24 | Crestron® Certified HDMI® Interface Cable, 18 Gbps, 6 ft 1.8 m |
| 25 | Crestron® Certified HDMI® Interface Cable, 18 Gbps, 3 ft 0.91 m |
| 26 | Crestron® Certified HDMI® Interface Cable, 18 Gbps, 12 ft 3.6 m |
| 27 | Crestron® Certified Computer VGA Interface Cable w/Audio, 12 ft |
| 28 | Table cubby with data Directly connected with marettes, 2AC, 2USB |
| 29 | Table cubby with 25" HDMI retractable, data and voice Directly connected with marettes, 2AC, 2USB |
| 30 | LIBERTY DIGITALINX HDMI ADAPTER RING. Includes: Base security clamp(DL-CL), Adapter Cable USB "C"(m)-HDMI, DP-HDMI, mini HDMI "C"(m)-HDMI "A", Mini DP-HDMI |
| 31 | Clickshare CS100 |
| 32 | |
| 33 | All cables and misc small parts not listed above for a complete and functional turn-key system |
| 34 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) |

APPENDIX A

ages. The system must be terminated in the floor monuments
e boxes in a finished flexible sleeve ("Sock").

| Manufacturer | Model | Qty |
|----------------------------|--------------------------------------|-----|
| <u>accessories)</u> | | |
| Panasonic | TH75EF1U or equivalent | 2 |
| Peerless | ST680 or equivalent | 2 |
| | | |
| | | |
| <u>accessories)</u> | | |
| Crestron | DM-TX-4K-100-C-1G-B-T or equivalent | 3 |
| Crestron | DM-TX-200-C-2G-B-T or equivalent | 2 |
| Crestron | DM-RMC-4K-100-C-1G-B-T or equivalent | 4 |
| Crestron | CEN-SWPOE-16 or equivalent | 1 |
| <u>accessories)</u> | | |
| Crestron | SAROS SB-200-P-B or equivalent | 1 |
| Shure | MXA910W or equivalent | 1 |
| <u>accessories)</u> | | |
| Crestron | CP3N or equivalent | 1 |
| Crestron | TSW-1060-B-S or equivalent | 1 |
| Crestron | TSW-UMB-60 or equivalent | 1 |
| | | |
| | | |
| <u>accessories)</u> | | |
| Crestron | DM-CBL-8G-P-SP500 or equivalent | 1 |
| Crestron | DM-CONN-20 or equivalent | 1 |
| Crestron | CBL-HD-6 or equivalent | 6 |
| Crestron | CBL-HD-3 or equivalent | 4 |
| Crestron | CBL-HD-12 or equivalent | 1 |
| Crestron | CBL-VGA-AUD-12 or equivalent | 1 |
| Extron Cable Cubby | 500 or equivalent | 1 |
| Extron Cable Cubby | 700 or equivalent | 1 |
| LIBERTY DIGITALINX | or equivalent | 1 |
| Barco | Clickshare CS100 (no substitution) | 1 |
| | | |
| | | 1 |
| | | 1 |

Montreal 2018**APPENDIX A****Type 14 - (1 AV Rack Storage closet) - A701a****Description:** The room will be used as a rack storage closet.

| Item | Description | Manufacturer |
|------|--|-----------------|
| 1 | <u>Hardware accessories</u> | |
| 2 | BGR CASTER KIT W/ HDWARE | Middle Atlantic |
| 3 | 24 OUTLET HIGH-DENSITY POWER STRIP,15A W/CORD | Middle Atlantic |
| 4 | BGR 276CFM FAN TOP W/FC | Middle Atlantic |
| 5 | 9 OUTLET, SINGLE 15 AMP CIRCUIT, SURGE/ SPIKE | Middle Atlantic |
| 6 | 2 SPACE 3 1/2in FLANGED ALUMINUM BLANK PANEL | Middle Atlantic |
| 7 | inLin SHAPED LACING BAR, 4 PACK | Middle Atlantic |
| 8 | 1 Sp UM Shelf, 5.5inD | Middle Atlantic |
| 9 | 1 Sp UM Shelf, 11.5inD | Middle Atlantic |
| 10 | 18in IEC POWER CORD | Middle Atlantic |
| 11 | 1 SPACE 1 3/4in FLANGED ALUMINUM BLANK PANEL | Middle Atlantic |
| 12 | 41SP27D MULTIBAY BGR RACK | Middle Atlantic |
| 13 | CAT6+ Unshielded Cabling System Category 6.plenum | Others |
| 14 | | |
| 15 | All cables and misc small parts not listed above for a complete and functional turn-key system | |
| 16 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | |

| | Model | Qty |
|--|----------------------------|-----|
| | | |
| | CBS-BGR or equivalent | 1 |
| | PD-2415SC-NS or equivalent | 1 |
| | BGR-276FT-FC or equivalent | 1 |
| | PD-915R or equivalent | 1 |
| | PBL-2 or equivalent | 4 |
| | LB-1A-4PK or equivalent | 2 |
| | UMS1-5.5 or equivalent | 4 |
| | UMS1-11.5 or equivalent | 1 |
| | IEC-18X4 or equivalent | 1 |
| | PBL-1 or equivalent | 8 |
| | BGR-4127 or equivalent | 1 |
| | AV6UP or equivalent | 1 |
| | | |
| | | 1 |
| | | 1 |

Montreal 2018**APPENDIX A****Type 15 - (1 AV Rack Storage closet) - c700b****Description:** The room will be used as a rack storage closet.

| Item | Description | Manufacturer | Model |
|------|--|-----------------|-------------------|
| | | | |
| 1 | <u>Hardware accessories</u> | | |
| 2 | BGR CASTER KIT W/ HDWARE | Middle Atlantic | CBS-BGR or equ |
| 3 | 24 OUTLET HIGH-DENSITY POWER STRIP, 15A W/CORD | Middle Atlantic | PD-2415SC-NS c |
| 4 | BGR 276CFM FAN TOP W/FC | Middle Atlantic | BGR-276FT-FC c |
| 5 | 9 OUTLET, SINGLE 15 AMP CIRCUIT, SURGE/ SPIKE | Middle Atlantic | PD-915R or equiv |
| 6 | 70Hin, 3-1/4inW SLOT LACER | Middle Atlantic | LACE-40-OP or e |
| 7 | inLin SHAPED LACING BAR, 4 PACK | Middle Atlantic | LB-1A-4PK or equ |
| 8 | 1 Sp UM Shelf, 5.5inD | Middle Atlantic | UMS1-5.5 or equi |
| 9 | 1 Sp UM Shelf, 11.5inD | Middle Atlantic | UMS1-11.5 or equ |
| 10 | 18in IEC POWER CORD | Middle Atlantic | IEC-18X4 or equi |
| 11 | 500 PC 10/32 PHILLIPS RACKSCREW WITH WASHER | Middle Atlantic | HP500 or equival |
| 12 | 1 SPACE 1 3/4in FLANGED ALUMINUM BLANK PANEL | Middle Atlantic | PBL-1 or equivale |
| 13 | 41SP27D MULTIBAY BGR RACK | Middle Atlantic | BGR-4127 or equ |
| 14 | 22 AWG, 2 Pair, Individually Shielded, plenum | Others | 1325A or equivale |
| 15 | | | |
| 16 | All cables and misc small parts not listed above for a complete and functional turn-key system | | |
| 17 | Documentation (Cut Sheets, Owner's Manual, Control System Manual) | | |

| | |
|--|-----|
| | Qty |
| | |

| | |
|---------------|---|
| ivalent | 1 |
| or equivalent | 1 |
| or equivalent | 1 |
| alent | 1 |
| equivalent | 1 |
| ivalent | 2 |
| ivalent | 4 |
| ivalent | 1 |
| alent | 1 |
| ent | 1 |
| ent | 8 |
| ivalent | 1 |
| ent | 1 |
| | |
| | 1 |
| | 1 |

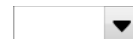
Montreal 2018**Miscellaneous additional items****APPENDIX A**

Description: This lists areas where a small number of items are required. The system must be terminated in the extended up to the table boxes. The Bidder must provide all cabling from the floor boxes up to the table boxes in ("Sock").

Replacement for display devices shall meet the following specifications:

- Same specs or better;
- Display size listed plus or minus 3" in size; and
- No WiFi capability

| Item | Description | Manufacturer |
|------|--|--------------------|
| 1 | <u>Display Devices (and related accessories)</u> | |
| 2 | Room c712 - TH84EF1U - 84" Full HD LED LCD Display (1920 x 1080, 350 | Panasonic |
| 3 | Room c712 - Security SmartMount® Universal Flat Mount For 46in to 90in TV`s | Peerless |
| 5 | | |
| 6 | <u>Audio Devices (and related accessories)</u> | |
| 7 | Room e703 - Saros® Sound Bar 200, Powered, Black | Crestron |
| 8 | Room e704 - Saros® Sound Bar 200, Powered, Black | Crestron |
| 9 | | |
| 10 | <u>Miscellaneous (and related accessories)</u> | |
| 11 | LIBERTY APPLICATION OF DL-AR | LIBERTY |
| 12 | Room c712 - Table cubby with data Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby |
| 13 | Room c712 - Table cubby with 25' HDMI retractable, data and voice Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby |
| 14 | Room c703 - Table cubby with data Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby |
| 15 | Room c703 - Table cubby with 25' HDMI retractable, data and voice Directly connected with marettes, 2AC, 2USB | Extron Cable Cubby |
| 16 | Room s733 - Table cubby with 10' HDMI retractable, data Indirectly connected with plug, 2AC, 2USB | Extron Cable Cubby |
| 17 | | |



floor monuments and
a finished flexible sleeve

| Model | Qty |
|-------|-----|
|-------|-----|

| | |
|------------------------|---|
| TH84EF1U or equivalent | 1 |
| SF670 or equivalent | 1 |
| | |

| | |
|--------------------------------|---|
| SAROS SB-200-P-B or equivalent | 1 |
| SAROS SB-200-P-B or equivalent | 1 |
| | |

| | |
|--------------------------------------|---|
| T10PD - LIBE-AVA-T10PD or equivalent | 4 |
| 500 or equivalent | 1 |
| 700 or equivalent | 1 |
| 500 or equivalent | 1 |
| 700 or equivalent | 1 |
| 700 or equivalent | 1 |
| | |

APPENDIX B

Contract Data Requirements List (CDRL)

Contract Data Requirements List

Appendix B

CONTRACT DATA REQUIREMENTS LIST

| ITEM No. | TITLE/SOW PARA | QTY | DELIVER TO | DUE DATE | REMARKS |
|----------|---|--------------------------------|---------------------|---|--|
| 01 | Acceptance Test Plan | 1 | Technical Authority | Acceptance plan due 5 days prior to room testing and acceptance | Electronic copy |
| 02 | Acceptance Tests | 3 | Technical Authority | Acceptance test results due 3 days following sign-off from the Technical Authority | Hardcopies (qty 2) and electronic copy |
| 03 | System Operating Materials | 1 per type of room | Technical Authority | Draft materials due 20 days prior to room testing and acceptance. Final materials due 30 days following room testing and acceptance | Hardcopies (qty 2) and electronic copy |
| 04 | Training | 12 hours | Technical Authority | 8 hours end user training 4 hours technical training | |
| 05 | Manufacturer Data Sheets/User Manuals | 1 | Technical Authority | Data Sheets and User Manuals due 3 days following sign-off from Project Authority | Hardcopy and/or electronic copy |
| 06 | As-Built Drawings / Equipment Inventory | 1 set per type of room | Technical Authority | Draft drawings and inventory due 5 days prior to room testing and acceptance. As-Built drawings and inventory due 30 days following room testing and acceptance | Hardcopies (qty 2) and electronic copy |
| 07 | Programming Source and DSP Code | 1 set per room (as applicable) | Technical Authority | Due 30 days following room testing and acceptance | Electronic copies |

| DATA ITEM DESCRIPTION | |
|---|--|
| TITLE: Acceptance Testing SUBTITLE: Acceptance Test Plan Hardware and System | |
| | |

DESCRIPTION/PURPOSE

1. The Acceptance Test Plan must include the procedures on how to perform the tests that will be used by the Contractor to demonstrate the complete integration and proper operation of the hardware and system software. It will describe the general procedures terms and conditions governing the planning, preparation and completion of acceptance tests covering the system submitted for acceptance.
2. The Contractor must submit an outline of a sample acceptance test plan with the bid. Outline must contain sufficient detail to understand sequence and timing.

PREPARATION OF THE ACCEPTANCE TEST PLAN

3. The Contractor must prepare and submit an Acceptance Test Plan. It must include step-by-step procedures on how each test will be performed. The tests procedures must be in a table format. The table must contain columns for the following information:
 - a. System/sub-system name scope of the test;
 - b. Control parameters;
 - c. Test equipment provided by Contractor to perform the test(s);
 - d. Results: Pass/Fail; and
 - e. Spaces/columns at each test for Contractor and Project Authority signatures.
4. Test Parameters – The Contractor must perform end-to-end testing of all signal flows to verify proper functionality. The testing must adhere to the suggested manufacturer testing protocol.
5. Cable Testing – All Contractor-fabricated cables must be tested and results submitted to the Project Authority:
 - a. Continuity tests;
 - b. Short tests; and
 - c. Wiremap tests.
6. The audiovisual system must be tested in accordance to the InfoComm International Standard for Audiovisual Systems performance verification (ANSI/INFOCOMM 10:2013).
 - a. As part of ANSI/INFOCOMM 10:2013, the functional categories to be tested must include the following:
 - (1) Audio System Performance;
 - (2) Video System Performance;
 - (3) Audio/Video System Performance:

Contract Data Requirements List

Appendix B

- (4) Cable Management, Termination and Labeling:
- (5) Control System Performance;
- (6) System and record Documentation:
- (7) Electrical:
- (8) Information Technology;
- (9) Operations and Support;
- (10) Physical Environment;
- (11) Physical Installation; and
- (12) Serviceability.

| DATA ITEM DESCRIPTION | |
|--|--|
| TITLE: Documentation SUBTITLE: System Operating Materials | |
| | |

DESCRIPTION/PURPOSE

1. The purpose of the System Operating Materials is to show the users how to set-up, use and operate the presentation and audio conferencing systems as well as basic troubleshooting procedures.

PREPARATION OF SYSTEM OPERATING MATERIALS

2. The Contractor must submit to the Project Authority for his review and approval a manual titled System Operating Materials. These materials must contain the required information for a novice user to set-up the presentation or make an audio call. Use of block diagrams, laminated "cheat sheets" and cross-references to the Manufacturer Operating Manuals shall be included in the technical section of the materials. One copy of the quick reference guides "cheat sheets" (final version) must be left in each room. One copy, in handbook form, must be delivered to the Project Authority.

3. As a minimum, the handbook must include the following information:

- a. Overview of the local presentation, audio conferencing, video conferencing and annotating components;
- b. How to set-up, adjust and use all the features of all the components procured or installed;
- c. Pictorial representation of the steps needed to start, connect and present using the different equipment installed within each room. Written verbiage to accompany each step in the process.
- d. The technical section of the System Operating Materials must contain:
 - I. A complete list of all the settings for the equipment used, including a snap shot or screen capture of each configuration page.
 - II. A troubleshooting guide section that contains sufficient information to allow a technician to pinpoint which equipment has failed in case of problems, and to ensure that the problem is not due to a bad set up or connection;
 - III. It shall also include directions on how to bypass the video and audio switching equipment in case of failure to allow the conference or local presentation to be conducted by manually switching the audio and video sources;
 - IV. Provide a description of each module used in the local presentation installation, unless this information is contained somewhere else in the off-the-shelf documentation. In this case, it must provide a reference to this information;
- e. If necessary, the Materials must make reference to sections of the documentation contained in the Off-the-Shelf Equipment Operating Manuals.

4. The System Operating Materials must be prepared in English and French.

5. The System Operating Materials must also be provided on USB media, in Microsoft Word format, version 2010 or later to the Departmental Representative.

Note: The technical section of the System Operating Materials must be included with the As-Built/Installed Drawings.

| DATA ITEM DESCRIPTION | |
|--|--|
| TITLE: Training SUBTITLE: Training Syllabus | |
| | |

DESCRIPTION/PURPOSE

1. To provide detailed training sessions to end users and technical staff.

PREPARATION OF TRAINING SYLLABUS

The Contractor must provide on-site training to end users and technical staff instructing them on the AV systems capabilities, maintenance and troubleshooting. Specific structure and scheduling of training must be established in cooperation with Project Authority prior to the completion of the installation. The Contractor must provide a total of 8 hour of end user training and 4 hours of technical training. The Project Authority will create the training schedule and allocate the number of training hours based on the room complexity.

As the rooms can accommodate a large number of end users and technical staff, the number of participants attending the training session will not be limited.

1. The training syllabus must be centered on content of the System Operating Handbook and must cover system set-up, functions, operations, and instructions.
2. The training must teach end users with no previous experience:
 - a. How to set-up and display a local presentation;
 - b. How to set-up a teleconference call;
 - c. How to use voice lift system;
 - d. How to set-up a video conference call; and
 - e. How to set-up, adjust and use all of the system features.
3. In addition to the end user syllabus, the technical staff training must cover:
 - a. Determine which equipment has failed and determine the cause of the problem;
 - b. Steps to bypass the video and audio switching equipment; and
 - c. Review the as-built drawings including schematics, rack layouts and floorplans.
4. Training must take place at the Project location using the equipment as a training aid.
5. Training must be available in English or French. Coordinate with Technical Authority.

Contract Data Requirements List

Appendix B

| DATA ITEM DESCRIPTION | |
|---|--|
| TITLE: Drawing SUBTITLE: As-Built Drawings and Equipment Inventory | |
| | |

DESCRIPTION/PURPOSE

1. The as-built drawings must indicate the location of all major components of each system and how these components are interconnected.

PREPARATION OF AS-BUILT DRAWINGS AND EQUIPMENT INVENTORY

As-Built Drawings

2. The Contractor must supply drawings pertinent to those components, systems, and work supplied under the contract.
3. The as-built drawings must include a schematic comprising of video, audio and control interconnectivity, rack layout and floor plan of each room.
4. The as-built drawings must be submitted to the Project Authority for his review and approval no later than 15 days after site testing and acceptance.
5. Two (2) copies of all as-built drawings must be delivered to the Project Authority.
6. An electronic version of all as-built drawings must be provided to the Project Authority on a USB drive (AutoCAD 2015 and PDF).

Equipment Inventory

7. The Contractor must provide a spreadsheet itemizing the make, model number, serial number, location, and warranty information of all installed equipment.
8. The spreadsheet must be provided to the Project Authority on a USB drive (Microsoft Excel 2010).

APPENDIX C

GENERAL INSTALLATION AND PERFORMANCE REQUIREMENTS

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GENERAL INSTALLATION**INSTALLATION**

1. Installation must include the following:
 - a. Uncrating, setting in place, fastening to walls, floors, ceilings, counters, or other structures where required of all equipment except as otherwise noted;
 - b. Interconnect wiring of the components of the system;
 - c. Equipment alignment and adjustment; and
 - d. All other work whether or not expressly required herein which is necessary to result in a completely tested and operating system.
2. All equipment must be firmly secured in place unless requirements of portability dictate otherwise. Fastenings and supports must be adequate to support their loads.
3. All boxes, equipment, etc. must be plumb and square.

CONTRACTOR PERFORMANCE

4. All assembly and material cutting must be limited to a working area specifically designated for this purpose.
5. Cable and wire stripping scrap and conductor strands must be kept away from sensitive electronic equipment such that loose pieces do not become lodged inside equipment.
6. All racks, consoles, connection boxes and other equipment enclosures must be degreased and vacuum cleaned prior to installation of equipment or panels.
7. The Contractor must take measures to protect all cabinets, casework, finished flooring, wall coverings, equipment, etc. from damage resulting from its work. This must include, but not limited to, the installation of temporary protective coverings. Any such damage must be corrected by the Contractor at no additional cost to the Client.
8. All equipment racks and sub-assemblies must be substantially constructed at the Contractor's premises. This will include, but not be limited to, wiring, labeling, dressing, supports, and ventilation.
9. All spaces must be cleaned as an ongoing activity. The Contractor must vacuum clean all work areas and remove all debris, scrap and waste at least daily and after any substantial debris accumulation. At the conclusion of the work in a given room area, a final vacuum cleaning of all such access spaces must be performed. All loose items, including those which were existing at the start of the project must be removed. Wet mopping must be performed on flooring only when other dry cleaning methods are insufficient. No brushing or wet cleaning of equipment must be permitted.
10. The Contractor must generate any additional drawings or information required for fabrication, installation and wiring of the system.

11. The Contractor must be responsible for the proper alignment, adjustment and calibration of all audiovisual equipment and must provide all personnel and test equipment for the system test and adjust.
12. The Contractor must be responsible for verifying the compatibility of all equipment and related hardware with related work performed by others. This includes, but is not limited to, electrical, mechanical, structural, and all finish work.
13. The Contractor must furnish all software necessary to operate software controlled audiovisual equipment or sub-systems (e.g. remote control system, audio DSP). Whether produced by the Contractor or supplied by a software manufacturer, all software will be installed and tested prior to the delivery of equipment to the site.

EQUIPMENT RACKS

14. The Contractor must use equipment racks of required height to mount all necessary equipment.
15. Equipment mounting must conform to the industry standards of 1-3/4" rack units.
16. The Contractor must only use rack rails that are tapped for #10-32 screws (no clip nuts shall be used). A #10-32 x 3/4" inch black truss head Philips rack screw with nylon washer must be utilized throughout the facility.
17. The Contractor must implement a general ventilation scheme for all racks in the systems.
18. All racks must be vacuumed and wiped clean prior to new equipment installation.
19. All racks must be inspected carefully prior to installation of equipment. All rough or sharp edges that may cause injury to personnel or damage equipment or cabling must be deburred or a permanent protective covering applied.
20. Provide blank rack panels in all rack openings not occupied by equipment. Blank filler panels must not exceed three rack units in size. Panel color must be matte black. Perforated panels may be used to aid in proper ventilation.
21. Allow sufficient space for installation of all owner furnished equipment such as notebooks, etc.
22. Allow some space for future expansion where possible. All devices within equipment racks must be mounted to the equipment rack. No devices shall be resting atop (monitor excepted) or mounted to other devices within the equipment racks unless otherwise noted.
23. Devices will be mounted in the racks in logical order. Generally, signal flow should move from the top of the rack to bottom. Heavier devices should be mounted in the lower portion to ensure that the assembly is not too top heavy. Frequently used devices will be mounted at the optimal elevation for operator use.

24. Contractor rack logo panels shall not be accepted.

CABLE DRESS

25. In general, cable dressing must be considered from a maintenance standpoint. Suitable service loops must be provided to allow removal of equipment, or to extend equipment that is mounted in the rack on rack slides. Where there is no rear access to the rack mounted equipment, this requirement must be carefully addressed, and cabling must be of sufficient length to enable the removal and replacement of any individual piece of equipment with all others in place.
26. It is expected that the Contractor will fabricate some portions of the system off-site. Pre-wiring is acceptable provided that the pre-wired assembly can easily be transported to its final location without complication, and without risk of cable or equipment damage.
27. The Contractor must be responsible for determining the proper length of all cables whether manufactured on or off the job site.
28. The Contractor must determine the desired method of securing cables. All of the following requirements must be met by the system:
- a. Velcro cable ties are the preferred method of cable lacing. Lay-in systems are not acceptable except as applied to a horizontal cable tray;
 - b. Wires and cables must be installed in a neat and orderly fashion, with like cable types following similar paths. Groups of cables must be neatly combed and harnessed. Harnessed groups of cables must be anchored at suitable intervals to reduce and relieve wire strain, especially strain on connections. Adequate service loops must be provided at all cable endpoints;
 - c. Some rack-mounted equipment utilizes slide assemblies for front extension while in operation. For this type of mounting, additional, carefully dressed service loops on all cables must be provided and installed with spring operated cable retractor assemblies to gather and recoil the service loop;
 - d. For all schemes of cable routing, no point in the path shall be subjected to a bend radius of less than eight (8) times the cable diameter, or minimum cable bend radius specified by the manufacturer;
 - e. Captive cables must not be laced in such a manner as to prevent removal of the equipment to which they are captive;
 - f. Wires and cables must be segregated according to signal type. In addition, audio cable must be subdivided into three (3) classes: microphone level circuits, line level circuits, and speaker level circuits;
 - g. Microphone level audio circuits must be kept at least three inches (3") from any other type of parallel signal circuits and at least six inches (6") from any parallel AC power circuits;
 - h. Speaker level audio circuits must be kept a minimum of three inches (3") from line level audio and AC power circuits. All other signal circuits must be kept at least three inches (3") away from any parallel AC power circuits;
 - i. Where circuits of different types must cross, they must do so at right angles and then return to the above required separations in as short a distance as possible;
 - j. Conductors, wires, and cables must be continuous between termination points. Splices are not acceptable; and
-

- k. Rack mounting rails must not be used for cable lacing. Lacing bars and/or tie mount bases mounted to cabinets or console must be provided where appropriate.

CABLE TYPES

- 29. All cables installed must meet appropriate governing codes and standards.
- 30. The Contractor is encouraged to suggest alternate cable types where a significant cost savings may be realized without any loss of quality, reliability and performance. Alternates must be approved by the Departmental Representative prior to use.
- 31. The Contractor must determine building and other regulating authority requirements for cables installed as part of the AV scope of the Project. This requirement applies to cables in return air plenums as well as other areas. If the cable type indicated does not comply with these requirements, the Contractor shall propose alternate cable types, and/or encasement in complying raceways or conduits. All cabling not in conduit must be plenum-rated.

POWER CORDS

- 32. All equipment power cords must terminate in a standard plug that must be wired in compliance with governing codes and standards.
- 33. The power cord connector type at the equipment must be provided by the manufacturer. Custom field terminated power connectors must not be ordered. If the manufacturer provides a choice, a removable power cord that attaches to the equipment with an IEC 320/CEE 22 connector is preferred. The use of factory manufactured custom length cables are acceptable.
- 34. The power cord may be laced to the rack as long as the cord is removable at the power connector on the piece of equipment. This is to allow removal of the equipment without undoing the cable lacing. Power cords must not be laced in the same bundle with signal or control cables. If the power cord is an active component of the equipment, the cable must be dressed separately from all other cables terminating at the equipment to facilitate easy removal of the equipment. All power cords must be plugged into an AC power distribution strip which will be pre-wired into the rack prior to delivery to site.

CABLE TERMINATION

- 35. Wire and cable termination must be performed in accordance with industry standards and the guidelines of generally accepted installation practices.
- 36. With respect to audio equipment interconnects, the Contractor must make every effort to use equipment with balanced inputs and outputs. When this is not possible, such as the case to meet specification, the following are recommended (in order of preference):

-
- a. An electronic balancing device (professional interface) or balancing transformer should be utilized;
 - b. In the case of an unbalanced output driving a balanced input, forward referencing should be utilized; and
 - c. An active-balanced to unbalanced interconnect is not recommended.
 37. It is ultimately the Contractor's responsibility to choose the best wiring practices to achieve maximum sonic quality.
 38. Wire and cable termination must include all aspects of equipment connection, including, but not limited to, the following:
 - a. Wire and cable length;
 - b. Protective jacket removal;
 - c. Conductor separation, dressing and trimming;
 - d. Conductor stripping; and
 - e. Connector device installation including, but not limited to, the following:
 - i. Conductor termination;
 - ii. Shell assembly;
 - iii. Strain relief installation; and
 - iv. Locking/latching device installation.
 39. Cable designation installation on each distinct wire or cable, except where the color code or pair number of individuals of pairs of a multi-pair eliminates the need for this.
 - a. These must be installed within two inches of connectors, unless this interfered with disassembly of the connector.
 - b. These must be installed in such a manner as to be visible without unlacing any harnesses.
 40. Continuity affirmation.
 41. Mating of connecting devices to equipment.
 42. All cables and patch points on input panels shall be labelled to denote their source device or input panel location, cable number and destination device.
 - a. The cable shall be individually identified with a cable designator, which shall be clearly indicated on the engineering drawings;
 - b. Label both ends of each cable;
 - c. The label shall be a Panduit Self Laminating Ink Jet or Laser Labels (e.g. LJSLS-Y3-2.5 for small diameter cables and LJSLS11-Y3-1 for larger diameter Video, VGA and RGBHV). Cables lettering shall be a minimum of 3/32 inch (2.5 mm) high and shall be black ink on a white background; and
 - d. Cable Numbering shall start with the Upper Case A for Audio Cables, C for Control Cables, N for Network Cable, P for Remote Power Cables and V for Video, S-Video, VGA or HDMI. Cables followed by a three digit numeric designation (e.g. V015, C001, etc). Hand Lettered Labels or PAN Code tm Tape style markers will not be accepted.
-

43. It is the responsibility of the Contractor to determine and affirm the type and extender of all required mating connectors. Since manufacturers of equipment may exercise their right to make changes in connector types and wiring, it must remain the responsibility of the Contractor to verify this aspect of the design prior to cable fabrication and installation.
44. Exposed portions of shield must be protected with PVC heat shrinkable sleeving. Exposed ends of outer jackets on shielded cables must be insulated with sleeves to eliminate the possibility of portions of the cut off foil shielded touching adjacent shields or metal. Either rubber "Kellerman" type sleeves or heat shrink sleeves must be used. Bare shield drain wires must be insulated with small diameter clear Teflon or PVC heat shrink (as appropriate) from under the sleeve to within 0.125 inch of the point of termination.
45. Conductors and/or cables interconnecting assemblies shall be formed into a bundled harness and dressed to preclude damage from adjacent surfaces and sharp edges,
46. Cabling required in pedestrian areas such as hallways, shall be contained in conduit and conform to the vertical and horizontal directions of the walls and ceilings;
47. Cable runs shall be continuous, without splices or adapters from terminal to terminal;
48. Primary power and electronic wiring shall not be co-located in conduit;
49. Marett type connectors are not permitted, nor is the use of nail rings or staples to secure cable harnesses to structures.

CABLE AND CONDUCTOR PREPERATION

50. All cables must be prepared in such a way that the individual conductors, shield or their insulation are not nicked or cut in any way. The cable outer jacket must be cut square.
51. Insulation must be removed from conductor in such a manner that conductor strands must be nicked to the extent that base metal shows through the plating and wire strands remain in the original lay, and are not combed out. The conductor's insulation must be cut square within $\frac{1}{4}$ " of the outer diameter of the insulated conductor. If required, the conductor must be tinned with a minimum amount of 60-40 or 63-37 solder (tin/lead with resin flux).

CONNECTORS

52. Only premium quality cable connectors shall be used. All cable mounted connectors must be covered by a metal shell connector hood or must have crimp ferrules which securely grasp the cable outer jacket to provide protection to the rear connections made on the connector and provide strain relief for the cable. All connectors must have incorporated a mechanical means of attaching the connector to its mate to assure that a connector will not fall off unless intentionally removed.
53. Audio Connector Requirements - Circular (XLR type): These must be premium quality connectors with tarnish resistant contact surfaces. No connection must be made to the shell unless specifically called out in the drawings.

- 54. Video Connector Requirements: Only connectors with tarnish resistant contact surfaces must be used. Kings TRS finish ("bright nickel") or equal is recommended. The CENTRE conductor pin and socket must be captive and finished with gold or silver surfaced over nickel. All connectors must be specified by the manufacturer as to be acceptable with the specific cable being used. Kings crimp BNC connectors or approved alternate must be used.
- 55. Panel Mounted Connectors: Care must be taken to insure that the sleeves of panel mount connectors to not make contact with the mounting panel.
 - a. Audio (microphone, line level): Locking XLR type;
 - b. Audio (speaker level): locking/latching "Speakon" type;
 - c. Audio (line level): ¼" diameter locking/latching, tip/ring/sleeve;
 - d. Video: HDMI or DVI type;
 - e. Serial Data: DB-9 or DB-25, metal shell; and
 - f. Video/Audio: Shielded Cat cable from Manufacturer of Video extenders (Tx / Rx).

SOLDER CONNECTIONS

- 56. Only the finest quality 60-40 or 63-37 solder (tin/lead) with rosin flux must be used. The solder must be as manufactured by Kester, Ersin, or approved alternate, and must be designed for electronic use. Solder fillets must wet and flow around conductor and terminal. In no case shall the general outline of the conductor be visible in excessive solder. The insulation must not be charred, melted or burned by the soldering operation. There must be no evidence of either lead or terminal contamination. The final solder joint must be bright and shiny and must show no evidence of being a "cold" joint.
- 57. Mechanical connections made to terminals prior to soldering must be the minimum required to reliably retain wire, usually a simple bend around solder eyelet or post. Avoid practice of multiple wraps on solder terminals, as that practice makes conductor removal very difficult after soldering.

INSULATION DISPLACEMENT CONNECTIONS

- 58. Insulation displacement connections such as ribbon cables and the telephone connector technology must only be installed with termination tooling as specified by the connector manufacturer. If shown in the connector manufacturer's data, the controlled-cycle crimp tool must be selected. If the manufacturer has a multi-conductor mass-termination tool available, this must be selected for all connectors of ten pins or more.
 - 59. Individual conductors of cables installed on terminal blocks must not be stripped, and must be punched down with a spring loaded impact tool designed for this specific purpose. Bare cable conductors must be insulated with Teflon, PVC heat shrink or other insulating sleeve (as appropriate) prior to being punched down on terminal block. During the punch down process, the free end of the conductor must be cut off, and the installer must ascertain that this cut off end is not left within the block or block assembly.
 - 60. Only cables designed specifically for insulation displacement termination with the specific termination device employed must be used.
-

CRIMP CONNECTIONS

61. Where crimp connectors are utilized, they must be installed using the manufacturer recommended controlled cycle crimp tool that assures that the proper crimp pressure has been applied. The Contractor must develop a procedure to insure that the crimp tooling is properly checked for compliance with the manufacturer's standards, and that it is producing crimp-type connections within the required tolerances. The frequency of this depends on the usage and on the length of time a particular tool holds its calibration.
62. Only tooling recommended by the manufacturer must be used. Only pins and connectors of the proper size and design for the cable to which they are to be applied must be used. There must be no abnormal deformation of the contact during the crimping operation. There must be no damage to the contact during the crimping operation that could interfere with its retention in its shell or its mating. There must be no damage done to the conductor which either severs strands or exposes the individual strands base metal by the crimping operation.

SCREW CONNECTIONS

63. Only insulated crimp on spade terminals must be used for application to barrier strips. Multiple gang lugs or ring lugs are not acceptable for this purpose. This is only applicable to stranded conductor wires. It is suggested that stranded conductor wire be "double over" on the crimp end prior to crimping. Solid conductors may be attached directly to the barrier strip.
64. All conductors must be stripped prior to installation underneath screws on terminals. Unlike the stranded control cable, solid conductor wire does not require crimp lugs on individual conductors. All screw terminated solid connectors must be wrapped in the same direction as screw rotation during tightening.

GROUNDING PRACTICES

65. The audiovisual system will be serviced by the earthing conductor that is provided with the mains supply.
 - a. All devices in the audiovisual system racks will be serviced with a grounded AC outlet. Devices having two (2) prong power cords will also have a fourteen (14) gauge green copper wire connected from the chassis to the grounded copper buss bar mounted to the equipment rack frame. Under no circumstances will the prong of a three (3) prong power cord be removed;
 - b. Audio cables shield must be connected to ground at one point only. Exceptions may be made for phantom powered microphones and some ICM and IFB systems. This ground point must be at the system ground of the destination device, which must be strapped to the system ground in the rack. For intra-rack wiring this requires the shield to be connected at both ends, but grounded at only one end;
 - c. All video receptacles must be insulated from the mounting panel, outlet box, or wireway. Unless otherwise detailed, this must be accomplished by using insulated-from-panel type receptacles; and

- d. The Contractor should take care to consider ground references within each device and the grounding factors on site.

MATERIALS

- 66. General: Materials used in installations must be chosen with due consideration being given to the intended use, safety, durability, retention of appearance and avoidance of corrosion or other chemical effects.
- 67. Toxic Materials: Material capable of producing harmful toxic effects under operating conditions, equipment malfunction, or accidental other causes, must not be used.
- 68. Metals: Metals used must be corrosion-resistant or treated to resist corrosion in atmospheric conditions to which the installation will be subjected.
- 69. Plastics: Plastics must be durable and resistant to cracking, brittleness, discoloration, deformation or similar defects, upon ageing or when subjected to hot or cold thermal extremes.
- 70. Natural Rubber: The use of natural rubber is prohibited unless directly specified, or approved for its use is obtained from the Departmental Representative.

GENERAL PERFORMANCE REQUIREMENTS

STANDARDS

71. General Standards used in the design and installation of the audiovisual system must conform to the highest quality Broadcast Industry standards. The following list provides a general indication of the type of industry organizations with published technical standards, and is not intended to be all-inclusive.

- | | | |
|----|-------|--|
| a. | AVIXA | AudioVisual and Integrated Experience Association (Formally Infocomm) |
| b. | AES | Audio Engineering Society: Audio Standards |
| c. | EIA | Electronic Industry Association: Equipment mounting, construction, tooling |
| d. | IEEE | Institute of Electrical and Electronic Engineers: Electrical/ Signal Standards |
| e. | CEC | Canadian Electrical Code: Electrical Standards |
| f. | NCAC | National Council of Acoustical Consultants: Acoustic Standards |
| g. | ASTM | American Society for Testing and Materials: Test and materials Standards |
| h. | BICSI | Building Industry Consulting Service International |
| j. | CSA | Canadian Standards Association |

MAINTAINABILITY

72. The Contractor must provide a fully functioning system that is easily accessible for service while the system is operational. Where this is not practical due to mutually accepted circumstances, service functions will be designed to allow a minimal amount of equipment and support disassembly. The audiovisual system design, construction and installation will allow components to be accessible for inspection, maintenance and repair with a minimal disassembly of other components or surrounding equipment.

SAFETY

73. The audiovisual system will be inherently safe, when operated and maintained in compliance with the Contractor provided operations and maintenance / technical manuals. In addition, equipment will meet or exceed governing standards and requirements for safety. This must include provisions and installation of seismic bracing and restraints.

EQUIPMENT MODIFICATIONS

74. The audiovisual systems must be designed to utilize new “off the shelf” equipment. Every effort must be made to avoid the use of custom or modified equipment. However, some AV equipment may require modifications to accommodate installation, remote control or other integration requirements.
75. Where equipment must be modified to conform to system specifications and design parameters, the modifications made must in no way affect the performance of the equipment as published by the manufacturer. Equipment modifications may also be impacted by and must comply with the terms of other sections of this AV Specification.

EQUIPMENT SUBSTITUTION

76. Requests for use of alternate equipment to that recommended in the Equipment Specification will be considered on an item by item basis. Equipment substitutions will be considered in cases where a specific component of the system is no longer available, or where the alternate equipment is shown to provide equal or greater quality and performance.
77. All proposed equipment substitutions must be submitted to the Departmental Representative with the Contractor's bid. Proposed substitution submittals must include full information, specifications, and data sheets for the proposed alternative equipment. All equipment must be new and must meet or exceed the last published specifications of the manufacturer in all respects.
78. Equipment substitutions will be considered after commencement of work on the Project only where the contracted equipment becomes unavailable, where unanticipated lead times could delay the Project for other legitimate practical considerations. Equipment substitutions submitted after commencement of work on the Project must be approved by the DEPARTMENTAL REPRESENTATIVE in writing.
79. Approval of equipment substitutions must not imply release of Contractor responsibility for meeting all requirements and design objectives as outlined in this AV Specification.

CUSTOM / MODIFIED EQUIPMENT

80. It must be the responsibility of the Contractor to provide all appropriate design, engineering and fabrication in the provision of specified custom or modified equipment.
81. All specified custom or modified equipment must be included in the scope of the Contractor's work. No portion may be omitted from the scope of the Contractor's work. Bids excluding any portion of the custom or modified equipment will be deemed non-responsive.
 - a. Substitutions of "off the shelf" equipment for specified custom equipment will be considered when submitted per the procedures noted for Equipment Substitutions.

SYSTEM SOFTWARE AND SOFTWARE PROGRAMMING

82. The Contractor must be responsible for providing a complete and working system in the provision of software programming.
83. All software programming must be included in the scope of the Contractor's work and performed on site. No portion may be omitted from the scope of the Contractor's work. Bids excluding any portion of the software programming will be deemed non-responsive.
84. Contractor must supply system software as specified in the Assembly and Installation Requirements.
85. The Contractor must supply a complete set of system software, software programming code and documentation as follows
86. In the case of commercial software, a complete set of software including the license and documentation for all devices, utilities, and tools used in the operation and maintenance of the

audiovisual system.

87. In the case of non-commercial or custom software, a complete set of software is required, including license (if applicable) and documentation for all devices, utilities, and tools used in the operation and maintenance of the audiovisual system. Documentation must be presented in such a way as to allow the Client the ability to perform unassisted operation, maintenance, troubleshooting and programming.
88. All commercial software provided by the Contractor as part of the Project must be procured and transferred in full compliance with the publisher's copyright, licensing and other requirements of ownership and use. All software license agreements must be registered in Client's name.
89. Client must retain full rights to all custom software, programming, and software programming code developed by the Contractor as part of the project. This must include the right to use, reproduce and modify the software and software programming code as reasonably required to operate the audiovisual systems and to support their ongoing maintenance and development.

APPENDIX D
Montreal 2018

MANDATORY REQUIREMENTS CHECK LIST

1. Instructions to Bidders

In addition to the Bid Preparation Instructions stipulated in Part 2 of this RFP, the following information and instructions relate to the submission and evaluation of the mandatory evaluation criteria contained in this RFP.

- i. Simply stating a compliance to a criteria is insufficient. Bidders must present a clearly organized, printed (i.e. not handwritten) proposal that includes all necessary technical and descriptive information, in order to clearly demonstrate their compliance to all items presented in RFP- SOW-AV-Montreal 2018 and all related specifications and appendices. Responses will be evaluated on a simple, stringent pass/fail basis. Proposals not meeting each mandatory requirement will be considered non-responsive (non-compliant) and given no further consideration
- ii. PWGSC reserves the right to verify any information provided in the mandatory tables. This will be done by contacting the client contact using the contact information provided by the Bidder and providing this to the client. The client will then be asked to verify the information.
- iii. Technical proposal must not include any financial data or prices.
- iv. Technical proposal must comply with RFP- SOW-AV-Montreal2018 and related Appendices.

2. Mandatory Corporate Evaluation Criteria

Proposals will be evaluated in accordance with the mandatory evaluation criteria as detailed herein. Bidders are advised to address each requirement in sufficient depth to permit a complete requisite analysis and assessment by the evaluation team. Proposals failing to adequately respond to the mandatory evaluation criteria will be excluded from further consideration.

| Mandatory Requirements-As per references | | | | |
|--|---|---------------------------------|----|--------|
| Vendor | | | | |
| Reference | Description | Bidder Response location in bid | | Comply |
| | | Yes | No | |
| M.1 | The Bidder must include completed room data sheets for each room listed on spreadsheet in Appendix A (Appendix A - Montreal2018 Room Type List). Each room data sheet will list all equipment, including detailed list of all proposed equipment, display technology, control and cabling proposed for the room and detailed list of all proposed equipment. Bidder must submit room data sheets in the format outlined in Appendix A. Equivalent products and part numbers may be submitted, but bidder must clearly identify what equivalencies are being offered and submit specifications to clearly demonstrate the technical equivalency. Any equivalency not meeting the mandatory technical requirements will be considered as non-compliant. | | | |

Mandatory Requirements check list

Appendix D

2017-12-04

| M.2 | | <p>The Bidder must provide three separate and distinct reference contracts where they have delivered an Audio Visual system project of similar design and scope (or greater) within the last five year, one of which must be in a government facility (Federal, Provincial or Municipal) and a minimum value of \$1M.</p> <p>For each reference to be considered:</p> <ul style="list-style-type: none">i. The Bidder must fully complete the Corporate Reference Contract Table contained in Attachment 1A, including complete contact information;ii. The reference project must have been contracted directly with the Bidder; <p>The Bidder must provide CV for the Senior Project Manager who will be assigned to this project (max 5 pages) whom has at least 5 years project management experience.</p> | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|-------------|---|----------|---------|-----------|---|-------------|---------|---|-------------|---------|---|------------|---------|---|------------|---------|---|------------|---------|---|------------|--------|--|--|--|
| M.3 | | <p>The Bidder must provide CV for the Lead Technician / Onsite Installer / Implementation Manager who will be assigned to this project (max 5 pages).</p> <p>The Lead Technician / Onsite Installer / Implementation Manager must :</p> <ul style="list-style-type: none">i. Have a minimum of 10 years of relevant experienceii. Be certified to design, engineer and implement digital media platforms, mix minus matrix voice lift systems and touch panel control systems. <p>The Bidder must provide a detailed technical narrative and reference block diagrams / drawings describing the rational of the bidder's design concept that meets the functional requirements.</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| M.4 | | <p>The Bidder must provide CV for the Lead Technician / Onsite Installer / Implementation Manager who will be assigned to this project (max 5 pages).</p> <p>The Lead Technician / Onsite Installer / Implementation Manager must :</p> <ul style="list-style-type: none">i. Have a minimum of 10 years of relevant experienceii. Be certified to design, engineer and implement digital media platforms, mix minus matrix voice lift systems and touch panel control systems. <p>The Bidder must provide a detailed technical narrative and reference block diagrams / drawings describing the rational of the bidder's design concept that meets the functional requirements.</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| M.5 | | <p>The Bidder must provide a detailed technical narrative and reference block diagrams / drawings describing the rational of the bidder's design concept that meets the functional requirements.</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| M.6 | | <p>The Bidder must deliver rooms to the Project Authority in the order listed below no later than February 1st, 2018. Any work conducted post January 12th, 2018 must be completed Monday to Friday between 16:00hrs - 06:00hrs and weekends.</p> <table><tr><th>Priority</th><th>Room ID</th><th>Room Type</th></tr><tr><td>1</td><td>Room A-701a</td><td>Type 14</td></tr><tr><td>2</td><td>Room C-700b</td><td>Type 15</td></tr><tr><td>3</td><td>Room A-703</td><td>Type 11</td></tr><tr><td>4</td><td>Room A-704</td><td>Type 11</td></tr><tr><td>5</td><td>Room A-705</td><td>Type 11</td></tr><tr><td>6</td><td>Room A-708</td><td>Type 8</td></tr></table> | Priority | Room ID | Room Type | 1 | Room A-701a | Type 14 | 2 | Room C-700b | Type 15 | 3 | Room A-703 | Type 11 | 4 | Room A-704 | Type 11 | 5 | Room A-705 | Type 11 | 6 | Room A-708 | Type 8 | | | |
| Priority | Room ID | Room Type | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Room A-701a | Type 14 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Room C-700b | Type 15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Room A-703 | Type 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Room A-704 | Type 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Room A-705 | Type 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Room A-708 | Type 8 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | |
|----|---------------------|---|--|--|--|
| 7 | Room A-709 | Type 6 | | | |
| 8 | Room C-709 | Type 10 | | | |
| 9 | Room C-714 | Type 12 | | | |
| 10 | Room C-716 | Type 12 | | | |
| 11 | Room C-717 | Type 13 | | | |
| 12 | Room A-710 | Type 7 | | | |
| 13 | Room C-702 | Type 9 | | | |
| 14 | Room E-704 | Type 9 | | | |
| 15 | All other equipment | Misc Items tab of Appendix A - Room Type list | | | |

Attachment 1A – Corporate Reference Contract Response Table

NOTE: Please provide information for the two contracts in Table 1, 2 & 3.

Table 1 – Mandatory Criteria – Corporate Experience (Contract #1)

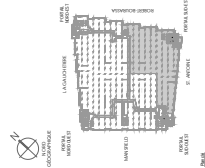
| Contract Reference, Contract # __ | |
|---|--------------------------------|
| | Bidder Company |
| Client Identification | Client Organization Name |
| | Project Title |
| | Client Address |
| | Client Contact Name |
| | Title |
| | Telephone No. or Email Address |
| | Contact Procedure |
| 1. Provide a brief description of the project delivered under this contract, including an overview of the Bidder's scope of work. | |
| 2. Value of project (\$) | |
| 3. Specify contract start and end date (mm/yyyy to mm/yyyy). | |
| 4. The reference contract was completed in the last five years. | |
| 5. The contract was with a government facility | |
| 6. If yes in question 4 – which level | |
| <input type="checkbox"/> Federal <input type="checkbox"/> Provincial <input type="checkbox"/> Municipal | |

Table 2 – Mandatory Criteria – Corporate Experience (Contract #2)

| Contract Reference, Contract # ____ | |
|---|--------------------------------|
| Bidder Company | |
| Client Identification | Client Organization Name |
| | Project Title |
| | Client Address |
| | Client Contact Name |
| | Title |
| | Telephone No. or Email Address |
| Contact Procedure | |
| 7. Provide a brief description of the project delivered under this contract, including an overview of the Bidder's scope of work. | |
| 8. Value of project (\$) | |
| 9. Specify contract start and end date (mm/yyyy to mm/yyyy). | |
| 10. The reference contract was completed in the last five years. | |
| 11. The contract was with a government facility | |
| 12. If yes in question 4 – which level | |
| <input type="checkbox"/> Federal <input type="checkbox"/> Provincial <input type="checkbox"/> Municipal | |

Table 3 – Mandatory Criteria – Corporate Experience (Contract #3)

| Contract Reference, Contract # ____ | | | | | | | | | | | | | | | | |
|--|--------------------------------|------------------------------|--------------------------|----------------|---------------|--|----------------|--|---------------------|--|-------|--|--------------------------------|--|-------------------|--|
| <table border="1"> <tr> <td rowspan="7">Client Identification</td> <td>Client Organization Name</td> <td>Bidder Company</td> </tr> <tr> <td>Project Title</td> <td></td> </tr> <tr> <td>Client Address</td> <td></td> </tr> <tr> <td>Client Contact Name</td> <td></td> </tr> <tr> <td>Title</td> <td></td> </tr> <tr> <td>Telephone No. or Email Address</td> <td></td> </tr> <tr> <td>Contact Procedure</td> <td></td> </tr> </table> | | Client Identification | Client Organization Name | Bidder Company | Project Title | | Client Address | | Client Contact Name | | Title | | Telephone No. or Email Address | | Contact Procedure | |
| Client Identification | Client Organization Name | | Bidder Company | | | | | | | | | | | | | |
| | Project Title | | | | | | | | | | | | | | | |
| | Client Address | | | | | | | | | | | | | | | |
| | Client Contact Name | | | | | | | | | | | | | | | |
| | Title | | | | | | | | | | | | | | | |
| | Telephone No. or Email Address | | | | | | | | | | | | | | | |
| | Contact Procedure | | | | | | | | | | | | | | | |
| 13. Provide a brief description of the project delivered under this contract, including an overview of the Bidder's scope of work. | | | | | | | | | | | | | | | | |
| 14. Value of project (\$) | | | | | | | | | | | | | | | | |
| 15. Specify contract start and end date (mm/yyyy to mm/yyyy). | | | | | | | | | | | | | | | | |
| 16. The reference contract was completed in the last five years. | | | | | | | | | | | | | | | | |
| 17. The contract was with a government facility | | | | | | | | | | | | | | | | |
| 18. If yes in question 4 – which level | | | | | | | | | | | | | | | | |
| <div> <input type="checkbox"/> Federal <input type="checkbox"/> Provincial <input type="checkbox"/> Municipal </div> | | | | | | | | | | | | | | | | |

[illegible]

| Sl | Date | Description | Part |
|-----|------------|-------------------------|------|
| 2.2 | 2017-06-26 | EWIS POUL CONSTRUCTION | S.C |
| 1 | 2017-05-18 | EWIS POUL ADDENDA ME-01 | S.R |
| 0 | 2017-05-05 | EWIS POUL SUBMISSION | S.C |



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suite 7800, Montréal, Québec

ÉLECTRICITÉ
SERVICES AUXILIAIRES
PROPOSÉ

| | | | |
|-------------------------------------|--------------|------------------|---------------------------|
| CHEQUOIL, Inc. | Date: | 2017-05-03 | FILE NO.: ER-03 |
| CHAMBERS, Inc. / BELLEY, Tech. Y | Exam #: | 1 : 150 | Reason : |
| | Dossier No : | NF P-02386-23-A0 | |

