

Royal Botanical Gardens Hall Interior Renos
680 Plains Road W, Burlington, Ontario
ADDENDUM NO. 2
2025.03.14

Page **1** of **20**

The following additional instructions shall apply to and govern the tender documents.

AMENDMENT NO. 1 – REVISIONS TO SPECIFICATIONS

- 1.1 ADDED...** Specification Section 12522 Motorized Rolling Shades. Refer to attached for details.
- 1.2 REVISED...** Specification Section 000200 Instructions to Bidders, #1 Tender Time - Table, **Tender Closing – March 21, 2025, 2:00:00 p.m.** Refer to attached updated.
- 1.3 REVISED...** Specification Section 000200 Instructions to Bidders, #2 Bid Closing Date & Time, 2.3 - All Bids shall be irrevocable and shall remain open for acceptance, at the prices quoted, for up to **forty-five (45) business days** from the Bid Submission Deadline. Refer to attached updated.
- 1.4 REVISED...** Specification Section 000200 Instructions to Bidders, #11 Bid Bond, 11.1 The tenderer agrees that, if they withdraw this tender within **45 days** after the closing date, the deposit made with this tender shall be forfeited to the Owner. Refer to attached updated.

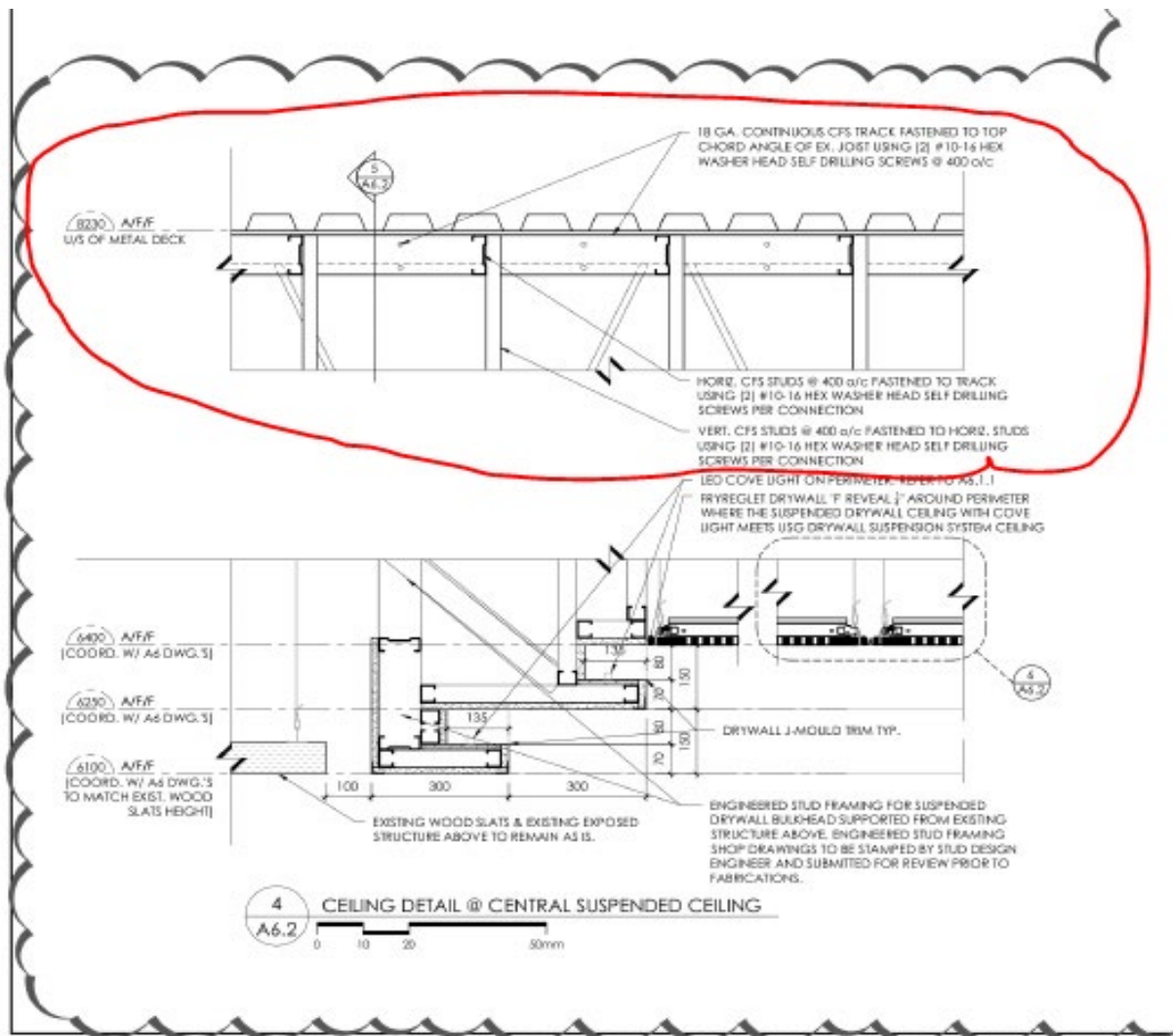
QUESTIONS & ANSWERS

- Q1** Please confirm the Audio-Visual scope of work will be completed by the Owner, and GCs are only responsible for the rough in?
- A1** Confirmed

Royal Botanical Gardens Hall Interior Renos
680 Plains Road W, Burlington, Ontario
ADDENDUM NO. 2
2025.03.14

Page **2** of **20**

- Q2** Can you please clarify if this stud framing is directly above new GWB ceilings and to be HG studs?
- A2** Yes, this stud framing is directly above the new suspended drywall ceiling ACDW as shown on drawing 1/A6.1.1.
Yes, to be HG stud as engineered by the trades engineer.



Royal Botanical Gardens Hall Interior Renos
680 Plains Road W, Burlington, Ontario
ADDENDUM NO. 2
2025.03.14

Page **3** of **20**

- Q3** Can you confirm which lighting plan and lighting schedule takes precedence as there are differences between architectural and electrical? Electrical lighting schedule does not show type RM3 down light and product number for the track light heads (TH1) are different between the two drawings as well as number of heads shown on the drawings. (Arch. show 82 heads. Elect. show 67 heads)
- A3** For RM3 downlight, please refer to A6 series Architectural drawings.
For Track headlights (TH1) refer to the lighting schedule in Electrical drawings. We are also open to suggestion for track heads which can be best suitable as per existing wood slat conditions.
For the number of Track heads, please refer to A6 series Architectural drawings.
- Q4** Can you confirm if track light heads require a longer pendant arm in order for the heads to be below the wood slats?
- A4** Confirmed

End of Addendum #2

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TENDERS

1. TENDER TIME-TABLE

Tender Issue	March 10, 2025
Mandatory Site Visit	March 12, 2025 5:30:00 p.m..
Deadline for Questions	March 19, 2025, 4:00:00 p.m.
Tender Closing	March 21, 2025, 2:00:00 p.m.

2. BID CLOSING DATE AND TIME:

- .1 **ELECTRONIC BID SUBMISSIONS ONLY, tender forms** shall be received **via email** by the **Owner, before 2:00:00 p.m. Eastern local time, on March 21st, 2025.**

Bid submissions to be email to:
Joe Tavares jtavares@rbg.ca

- .2 **Note that hard copy bid submissions will not be accepted.**
- .3 All Bids shall be irrevocable and shall remain open for acceptance, at the prices quoted, for up to **forty-five (45) business days** from the Bid Submission Deadline. In submitting a Bid, each Proponent agrees that, notwithstanding anything to the contrary, the Owner may notify the Successful Proponent at any time within the Bid validity period that their Bid has been awarded.
- .4 Late Proposals shall not be accepted.

3. BID SUBMISSIONS

- .1 Complete electronic bid submissions shall include:
- .1 Complete Tender Form and Supplementary Tender Form, signed, sealed and dated; and
 - .2 Bid Bond; and
 - .3 Consent of Surety/Agreement to Bond; and
 - .4 Proof of Insurance as noted in this Section; and
 - .5 WSIB Certificate of good standing.
- .2 Tenders must be submitted on the Tender Form and Supplementary Tender Form issued with Tender Documents.
- .3 All blanks on Tender Form and Supplementary Tender Form must be filled in. Failure of a Bidder to insert a value for any Value or Unit Price shall be deemed to be a "zero dollar" (\$0) value.
- .4 Tenders shall not be qualified by any condition without express written consent of the Consultant clarified by an Addendum only prior to submission of Tender.
- .5 All requirements of the Tender Form and Supplementary Tender Form must be completed.
- .6 Bidders shall be solely responsible for delivery of Tender in the manner and time prescribed.
- .7 Bidders shall be solely responsible for verifying they have received all of the Addenda issued.

4. WITHDRAWAL/AMENDMENT OF SUBMISSION

- .1 Bidders may amend or withdraw their submission prior to the closing time and date. However, it is the Bidders responsibility to:
 - .1 Withdrawal - Ensure the submission is **withdrawn** before the time of closing, on the bid closing date;
 - .2 Amendment – Ensure the re-submitted bid is **received** before the time of closing, on the bid closing date.

5. INFORMAL OR UNBALANCED TENDERS

- 1. Tenders which are incomplete, conditional, illegible or obscure, or that contain reservations, erasures, alterations, or irregularities of any kind may be rejected as informal.

6. QUESTIONS, OMISSIONS, DISCREPANCIES AND INTERPRETATIONS

- .1 All tender documents are complimentary and must be read together to ascertain a complete description of the Work.
- .2 Examine Tender Documents for completeness, discrepancies or omissions. Should a Bidder find omissions or discrepancies in any part of this Tender or should the Bidder be in doubt as to the meaning of any part of such documents, notify the Owner's designee of discrepancies or omissions as noted in .3 below.
- .3 All Inquiries concerning this Tender are to be directed in writing via email and addressed to:
Priyanka Shukla
pshukla@plusvg.com
- .4 Inquiries shall not be directed to any other of the Owner's employees or Consultants. No inquiries will be accepted by telephone. Inquiries made by telephone, fax, or verbally will not be accepted or answered and will not form a part of the tender documents.
- .5 The Owner and Architect shall not be held liable for any errors or omissions in any part of this Tender. While the Owner and Architect have used considerable efforts to ensure an accurate representation of information in this document, the information contained herein is supplied solely as a guideline for Bidders. The information is not guaranteed or warranted to be accurate by the Owner and Architect, nor is it necessarily comprehensive or exhaustive. Nothing in the documents is intended to relieve the Bidder from forming their own opinions and conclusions with respect to the matters addressed in this Call for Bid document.
- .6 The Owner and Consultants shall not be bound by any verbal instruction, amendment, clarification, informative advice or suggestion from any of the Owner's personnel, Trustees or agents or consultants to the Owner.

- .7 Provide notification at once of discrepancies found in, or omissions from the drawings, specifications or other documents or if in doubt as to their meaning; A written instruction through an Addendum will be sent to all Bidders. If a discrepancy exists, an addendum will be issued to all Bidders to clarify or correct such discrepancies.
- .8 Neither Owner, Consultants nor Architect will be responsible for any verbal instructions.
- .9 Should any discrepancies or omissions go unreported during tendering period, the proper interpretation of the bid documents shall be at the discretion of the Architect.

7. ADDENDA

- .1 Addenda may be issued during the Tender period. All addenda will be issued by the Architect via email in PDF format.
- .2 All addenda become part of the Tender Documents. Include costs arising from addenda. Confirm the completeness of all addenda.
- .4 Proponents shall acknowledge receipt of any addenda when submitting their bid.
- .5 Addendum/Addenda will be issued, typically no less than forty-eight (48) Hours prior to Bid Closing Time and Date.
- .6 It is the responsibility of the Proponent to have received all Addenda that have been issued. Proponents should check they have received/included all addenda prior to submitting their Bid and up until Bid closing time and date in the event additional addenda are issued.
- .7 The Owner encourages Bidders to not submit their Bid forty-eight (48) hours prior to the Bid Closing Time and Date, in the event that an addendum is issued.

8. TENDERING COSTS

- .1 All costs associated with the preparation and delivery of a tender shall be paid by the Bidder.
- .2 The Owner is not responsible for compensation of tendering costs under any circumstances.

9. AWARD OF CONTRACT

1. FACTORS AFFECTING CONTRACT AWARD

A Bidder's experience in this type of work, past performance, organization, proposed subcontractors, equipment, ability to perform and complete this Contract in the manner and within the time specified, together with the amount of

the Tender, will be vital elements considered in the award of the Contract.

1. The Owner reserves the sole discretionary right to accept or reject any or all bids received.

2. The Owner will evaluate the bids received and identify the offer which represents "best value", as interpreted in its own best interest by the Owner in its sole and absolute discretion; this may not be the lowest priced tender.

3. The Owner reserves the right to award the contract based on the base bid price only or any combination of base bid, alternate prices, separate prices, and relevant experience which are deemed to be to the advantage of the Owner at the time of award at their sole discretion.

2. AWARD OR REJECTION OF TENDER

The Owner reserves the right to reject any or all tenders and to waive any irregularity therein the lowest tender may not necessarily be accepted.

3. ACCEPTANCE OF TENDER

No Bidder shall be considered under Contract after the opening and reading of Tenders until the AGREEMENT is signed and compliance therewith has been made.

4. DISPOSITION OF BONDS

Within seven days of opening of the tender, all bid bonds other than the securities from the two proponents deemed to offer "Best Value" shall be returned to the applicable bidders.

10. DELETION OF WORK UNDER THE CONTRACT

1. WORK DELETED FROM THE CONTRACT

The Owner reserves the right to delete any or all work from the contract.

The contract amount will be the tender amount plus or minus the amounts of separate and alternate prices accepted to as determined by the owner and Architect.

11. BID BOND

1. Every tender shall be accompanied by a Bid Bond (with a recognized Guarantee or Insuring company - approved by the Canadian Construction Association) in the amount of **10% of the Tender Sum** being quoted which may be forfeited. The tenderer agrees that, if they withdraw this tender within **45 days** after the closing date, the deposit made with this tender shall be forfeited to the Owner.

12. BONDS

1. PERFORMANCE BOND

An Agreement to Bond for **50%** of the Tender amount must accompany each tender and the tenderers shall include for the cost to provide a **50%** Performance Bond in their Tender Amount. Refer to CCDC Document 2 (Revised 2020). The format must conform to CCDC Document 2 (Revised 2020) General Conditions and as amended in the Supplementary General Conditions. The issuing company of the Bond must be approved by the Canadian Construction Association.

NOTE: At Substantial Performance of the contract, this bond shall be converted to cover the warranty period and shall remain in force for a period of **24 months** after the date of substantial performance.

2. LABOUR AND MATERIAL BOND

An Agreement to Bond for **50%** of the Tender amount must accompany each Tender and the Tenderers shall include for the cost to provide a **50%** Labour and Material Bond in their Tender Amount. Refer to CCDC Document 2 (Revised 2020). The format must conform to CCDC Document 2 (Revised 2020) General Conditions and as amended in the Supplementary General Conditions. The issuing company of the Bond must be acceptable to the Owner and approved by the Canadian Construction Association.

3. Both Performance Bonds and Labour and Materials Bonds are to be provided within seven (7) days of award of tender, after receiving notification of acceptance of their quotation from the Owner or forfeit the amount of the Bid Bond enclosed with the tender.

13. CONTRACT

1. The successful tenderer shall execute the said formal contract as called for, within 7 days after notification of the acceptance of their tender or forfeit the amount of the Bid Bond enclosed with the tender.
2. The successful tenderer will be required to execute a "Canadian Standard Form of Construction Contract to a Stipulated Sum" (Revised 2020) CCDC Document No. 2, including Amendments thereto as set out in the Supplementary General Conditions.

14. CLIENT / OWNER

1. The Client is Royal Botanical Gardens, 680 Plains Road West, Burlington, Ontario L7T 4H4.

15. CONSULTANTS

1. The Architect is: +VG - The Ventin Group Ltd., Architects
50 Dalhousie Street
Brantford, Ontario N3T 2H8

2. The Structural Engineer is: Structures +VG
50 Dalhousie Street
Brantford, Ontario N3T 2H8
3. The Mechanical/
Electrical Engineer is: Jain Sustainability Consultants Inc.
7405 East Dnabro Crescent
Mississauga, ON Canada, L5N 6P8

16. DOCUMENTS

1. The Documents shall consist of all drawings, specifications and addenda.
2. Drawings and specifications are the property of the Owner.
3. Contractor to pay for all their own printing of documents for Tender and Bidding.

17. EXAMINATION

1. There is a **Mandatory site visit** on March 11th, 2025 at 10:00 am at Royal Botanical Gardens, 680 Plains Road West, Burlington Ont. Bidders who elect not to attend shall not be eligible to submit tender for this project. Note that this applies to General Contractors and NOT to sub-trades although they are welcome to attend.
2. The site shall be accepted by the Contractor in its present condition. The Contractor will be held to have visited the site and to have carefully examined all conditions affecting the work to be done there on, including the location of all services which may have to be protected, removed or relocated. The Contractor shall accept sole responsibility for any error or neglect on their part in this respect. Submission of Tender shall be deemed confirmation that tenderer has inspected site and is thoroughly conversant with existing conditions. No claims for extra payment will be considered for extra work, expense or difficulties encountered due to conditions on each site which were visible upon or reasonably inferable from an examination of the said site prior to the closing of tenders.
3. Examine the specifications and drawings thoroughly. Report in writing to Architect all ambiguities, discrepancies, omissions, errors, departures from Building Code, By-Laws, or from good practice, discovered during examination as early in the tender period as possible to allow clarification by addenda to be issued to all bidders. No claims for extra payment will be considered for work, expense or difficulties which are reasonably inferable from an examination of the documents prior to the closing of tenders.
4. The drawings and specifications complement each other and neither is to be considered alone. Hence, any item omitted in one, but mentioned or implied in the other, must be provided.

5. All changes to the contract documents which result in an extra or a credit to the contract amount are not to be executed until written instructions have been received and the extra or credit agreed to in writing by all parties to the contract.
6. The Contractor shall execute variations, alterations and substitutions which do not affect the contract amount as instructed by the Architect or the Owner.
7. Bidders finding discrepancies or omissions in the drawings or specifications shall at once notify the Architect in writing who shall send written instructions through an Addendum to all bidders. Bidders may, during the tender period, be advised by addenda of any additions, alterations or deletions to the specifications and drawings. All such changes shall be covered by the tender and become part of the contract documents.
8. If any person submitting a bid on this project is in doubt as to the true meaning and intent of any part of the specifications or other documents, they must submit a question in writing to the Architect requesting an interpretation by the Architect. If such a question is not submitted and an interpretation is not requested, the bids will be presumed to be based on the interpretation or directions that may be subsequently given by the Architect after award of the Contract, in accordance with the provisions of the Contract.
9. Prior to the closing date of tenders, any and all necessary clarifications of the specifications or other Tender documents will be in the form of written Addenda. The Architect, Consultants and Owner will **NOT** be responsible for verbal instructions or explanations or interpretation of Drawings and Specifications.
10. No questions concerning this project will be accepted during the day of the tender closing date. The final date for questions to be submitted is noted above.

18. UNIT PRICES

- 1 At time of submission include in the tender form all the unit prices in accordance with the Supplementary Tender Form. These unit prices will be included in the agreement.
- 2 Unit prices shall include labour, material and applicable taxes , overhead and profit, and other relative charges, but shall be exclusive of HST. Any work done on the basis of unit prices shall be carried out generally in accordance with the specifications for similar work and shall be to the Architect's approval.
- 3 The Owner reserves the right to accept or reject any or all of the Unit Prices prior to entering in the construction contract. The owner reserves the right to negotiate these unit prices rejected or proposed and to renegotiate prices for any proposed changes.

21. BASE BID TENDERS

1. Materials and equipment are specifically described and named in this specification to establish a standard of materials and workmanship to which the

tenderers shall strictly adhere. Where manufacturer's trade names are used, the first named or specified by catalogue numbers meets specifications in all respects regarding performance, quality of material and workmanship, and is acceptable to the Architect.

2. Where the contractor uses equivalent products (either identified in the specifications or added after review by addendum) other than the first named, on which the design is based, they shall be responsible for all details of installation including product size, arrangement, fit, colour, etc. and maintenance of all required clearances. Contractor shall prepare and submit revised layouts to indicate arrangement of all affected surrounding equipment, etc. Failure by Contractor to provide such drawings may be considered indication that original arrangements, and space allocations are adequate. All additional costs associated with equivalent products such as revisions to surrounding architectural finishes, structural components, or the need for larger motor starters, larger power feeders, space revisions to associated product, equipment, controls, etc. shall be provided by the General Contractor and be included in Bid price.
3. Tenders may include with their lump sum tenders, alternative proposals based on the use of alternative material equivalent to the materials or equipment specified, in quality and performance, provided clearances and dimensions shown on the drawings are maintained. For all such alternative proposals, the tenderer shall include such proposals and the following information, in a letter accompanying their tender, for consideration by the Owner and Architect at the time of opening tenders. Under no circumstances shall the bid for an alternative material or equipment be included in the tender amount.
 1. Manufacturer's name and supplier's name.
 2. Change in price, if any.
 3. Reason for proposing alternative.
 4. Detailed description of alternative.
 5. Statement assuming full responsibility that any equipment shall not exceed the space requirement allocated on the drawings. This contractor shall be responsible for any additional installation cost resulting from the acceptance of a substitute piece of equipment or product.
4. Under no circumstances will alternatives submitted after the closing of tenders, be considered.
5. The Architect reserves the right to accept or reject proposed alternatives as the Architect sees fit, and also to claim for the Owner, the financial benefit of a substitution, if a substitute is accepted. A rejection by the Architect does not become obligated to give any reason for their action.

22. PROCEDURES AND SUPPLY OF CRITICAL MATERIALS

1. Submission of a tender shall constitute the Tenderer's agreement that they will commence work immediately upon award of the Contract, and that they will execute the same without interruption until completion, including the furnishing of all necessary supplies and equipment for winter operations. Contractor shall assure themselves before submitting a tender that they are in a position to furnish adequate supplies of all materials, critical or otherwise, at such times necessary to

ensure immediate commencement of the work and continuous operation without delays on the project. The Contractor shall include in their tender amount, sufficient sums for the purchase of critical materials from any source available. The contractor shall include in their bid any costs related to storage of materials delivered to the site prior to the work being ready for their installation. After award of the contract, the Owner will not grant increases to the tender amount to obtain critical materials at premium prices, nor will delays or interruption of the work be tolerated.

23. LAWS, CODES AND REGULATIONS

The tenderer is assumed to have made themselves familiar with and abide by the Federal National Authorities, Provincial, Municipal and local laws, rules and regulations which in any manner affect those engaged or employed in the work, or in any way affect the work, and no plea of misunderstanding will be considered on account of ignorance thereof. If the Bidder shall discover any provisions in the drawings, specifications or contract which are contrary to or inconsistent with any law, rule of regulation, Contractor shall at once report it in writing through Bids and Tenders.

24. PERMITS

1. The Owner will be applying and paying for Building Permit and the Contractor shall expedite receiving and picking it up from the Building Department. The Contractor shall be responsible for expediting, obtaining, paying for and picking up all other necessary permits, relative inspection fees, licences, notices, certificates of inspection, approval required to carry out work and provide the Owner with proof of same.
2. It is the responsibility of this Contractor to expedite and obtain the required building permit prior to commencing the work. Contractor must allow for time to obtain all required permits within the project completion schedule.
3. Proof of issue of Building Permit must be submitted before any progress payments can be released for the project.

25. STATUTORY HOLDBACK

1. A holdback of 10% of the contract price shall be held by the Owner for a period of 60 days after substantial performance and approval of the work as per specifications. Pursuant to the requirements of the Construction Act, the holdback will be released after the expiration of 60-day lien waiting period, provided no liens are then registered. The date of advertisement in a construction trade newspaper shall commence the lien period.
2. At the end of 60 days waiting period, the Contractor will submit to the Owner and Architect, an invoice for the amount of the 10% holdback, at which time affidavits will be submitted to the Owner ensuring there are no liens against the job at that time.

26. INSURANCE

1. All Risk Property Insurance, including fire insurance, to be provided by the General Contractor and shall be in joint names of the Owner, Architect and Consultants.
2. The Contractor shall provide a minimum of \$10,000,000.00 Public Liability Insurance.

The Contractor shall indemnify and save harmless the Owner, The Ventin Group Ltd., Architects, their Consultants, and their officers and agents from all claims relating to labour, materials and equipment furnished for the work and to inventions, patents or patent rights used in doing the work. The Contractor shall be responsible for any and all damages or claims for damages or injuries or accidents done to or caused by them or their employees or relating to the prosecution of the works, or any of their operations or caused by reason of the existence or location or condition of any materials, plant or machinery used there on, or which may happen by reason thereof, or arising from any failure, neglect or omissions on their part, or on the part of any of their employees to do or perform any or all of the several acts or things required to be done by them under and by these conditions and covenants and agrees to hold the Owner, The Ventin Group Ltd., Architects and Consultants, harmless and indemnified for all such damages and claims for damages.

3. Automobile Liability Insurance and Contractor's Equipment Insurance and all other insurances shall be provided by the General Contractor and shall be in joint names of the Contractor, the Owner, the Architect, and Consultants.
4. Proof of Insurances and the named insured showing the Owner as an additional named insured for the project shall be submitted to the Owner upon execution of the Contract. Insurance Certificate shall provide that the insuring company will give 60 days' notice to the Owner of an intention to cancel.

27. WORKPLACE SAFETY AND INSURANCE

1. Submit proof of Workplace Safety and Insurance coverage. The contractor shall provide the owner with written documentation that all Workplace Safety and Insurance and Employment Insurance payments are up to date and in order.

28. IMPERIAL/METRIC DIMENSIONS

1. Where both imperial and metric dimensions are given in this specification, the metric dimensions apply for this project.

29. SITE ACCESS

1. Contractor to remove all debris from site daily.
2. Location of all trailers, storage container units, and construction fences by

contractor shall be reviewed and approved by the Owner and Architect at a preliminary site meeting prior to contractor moving on to site.

3. Parking for construction workers shall be on site.
4. Site access for construction to be confirmed at first site meeting.
5. Construction Site must be closed and locked after hours.

30. TAXES AND DUTIES

The Base Bid Price shall be exclusive of any value added taxes, i.e., HST.

1. The successful General Contractor will indicate on each application for payment **as a separate amount** the appropriate HST the Owner is legally obliged to pay.

31. GENERAL NOTES TO CONTRACTOR

1. The contractor will be required to keep and maintain a set of as-built drawings for each project. These drawings will be used for no other purpose than recording the exact location of buried or covered services and all changes to the contract documents. The as-built drawings will be submitted to the Architect along with guarantees, maintenance data, extra supplies, etc. at the substantial performance of the contract.
2. The contractor will turn over to the Architect at the completion of the contract all project close out documents, material, etc. These documents, material, etc. including occupancy permit, will be accepted only with a transmittal and at no other time than when submitting a written request for substantial performance of the contract. For purposes of determining a value of this work it will be considered as **\$5,000**. Note this amount is in addition to any values identified in the mechanical and electrical divisions.
2. Conform to the Ontario Building Code, CEC CSA C22, (latest Edition as currently amended) CAN3-B44, and CSA W59.1, where applicable, to the Canadian Code for Construction Safety, as currently amended, and to the Construction Safety Act, Ont. as currently amended, and to all other applicable codes and Building By-Laws hereinafter referred to as Codes; and to the requirements of the authorities having jurisdiction, including public utilities, referred to in the Contract Documents as the authorities.

32. ACCESS TO INFORMATION

1. All tenders, quotes and proposals are subject to the Municipal Freedom of Information and Protection of Privacy Act and will be disclosed where the Owner is required to do so for the purposes of complying with an Order of the Information and Privacy Commissioner.

33. WHMIS REQUIREMENTS

1. Contractors shall comply with WHMIS requirements in accordance with the Occupational Health and Safety Act (Ontario). Before commencement of work and during the full term of the Contract, the Contractor shall provide a list with current MSDS for all hazardous materials proposed for use on the Project. The Contractor shall label hazardous materials used and/or supplied on the Project in accordance with WHMIS requirements. The Contractor shall conform to the Environmental Protection Act for disposal and clean-up requirements. The Contractor shall obtain from the Owner, where applicable, a list and MSDS of hazardous materials that may be handled, stored or used by the Owner's employees and/or other contractors retained by the Owner at the location where work of this Contract will be performed. The Contractor shall ensure that those who handle and/or are exposed to, or are likely to handle or to be exposed to hazardous materials, are fully instructed and trained in accordance with WHMIS requirements.
2. Also refer to Section 01545 - Safety Requirements.

END OF SECTION

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

1. Division One - General Requirements is a part of this section and shall apply as if repeated here.

1.2 DESCRIPTION

1. Work included:
Provide included in the base bid amount, motorized rolling shade systems in the Auditorium/ Banquet Hall at all lower alcove locations as shown on the drawings. Provide all components as needed for a complete and proper installation.

1.3 RELATED WORK

1. Documents affecting work of this section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
2. Electrical – Refer to Electrical Sections

1.4 QUALITY ASSURANCE

1. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.5 SUBMITTALS

1. Product Data: Within 45 calendar days after the General Contractor has received the Owner's Notice to Proceed, submit:
 1. Materials list of items proposed to be provided under this Section.
 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 3. Shop Drawings in sufficient detail to show fabrication, installation, anchorage and interface of the work of this Section with the work of adjacent trades.
 4. Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the work.
2. Construct one complete light proof window shade with attachments and accessories for approval by the Architect.

1.6 WARRANTY

1. Three-year written warranty against mechanical and fabric failure (including fabric fading) under normal conditions.

1.7 ACCEPTANCE

1. All motorized shades remain the property of the supplier until accepted in place by the Architect.

1.8 SCOPE

1. Supply and install motorized black out rolling shades in the Auditorium/ Banquet Hall at all lower alcove locations as shown on the drawings.

PART2 PRODUCTS

2.1 MOTORIZED SHADE SYSTEM

1. ElectroShade motorized shading system. Specifications are based on products manufactured by:
Fabric color to be selected by Architect.
 1. Sun Project Canada Inc. – www.altex.com
500 Applewood Crescent
Vaughan, ON, Canada L4K 4B4
1.888.836.6980 | 905.660.3117
2. Approved equal product/manufacture is Solarfective Products Ltd & Mecho shade systems
3. Motorized Sunshades locations: Auditorium/ Banquet Hall at all lower alcove locations as shown on the drawings.

2.2 ELECTROSHADE MOTOR SYSTEM

1. Switches: Internal limit switches are adjusted by two external thumbscrews to allow exact setting of travel in both the raised and lowered positions. Micro switches provide circuit breaking at the end of the run. The limit-switch setting cannot be disturbed by the action of the roller tube.
2. Brake: A solenoid activated disc brake mechanism stops and holds in any position. The brake automatically disengages when the motor is operating.
3. Motor: An asynchronous motor with built-in reversible capacitor start-and-run is made to be operated with 95 to 125 V. A.C. at 60 hz., single phase, temperature Class-A (maximum temperature rating of 140 degrees

C.), thermally protected, totally enclosed, maintenance free with locking disconnect plug assembly furnished with each operator. Provide Electra tandem 105 120VAC where required for multiple blinds.

4. Gear Box: Three levels of satellite gears are provided for load distribution (planetary gears) and machined to close tolerance of tempered steel.
5. Installation: A single pin locks the drive end of the motor to the tube. A The notched section in the tube turns the ring which counts the turns and activates the limit switch. To interchange motors, the pin is pressed out of the tube and the motor slide out.
6. Sizes: The motors are available in torques of 35-435 in lbs. (lifting capacity), 12-30 r.p.m. speed, to meet specified requirements and shall not exceed 60 mm in diameter.
7. Warranty: The manufacturer provides a warranty that the motor is free of manufacturing defects for three (3) years from the date of installation. This warranty is void if the products have been improperly installed or subjected to improper care.

2.3 HARDWARE AND ACCESSORIES REQUIRED FOR A TOTAL INTEGRATED SYSTEM

1. Shade Roller: Extruded aluminum tube, 6063-ST6 alloy, 2.55 in. OD with internal keyway to receive tubular motor. The tube is extruded with two fabric-mounting channels designed so that the shade cloth does not disengage from the tube itself.
2. Mounting Spline: Extruded vinyl with asymmetrical locking channels and embossed fabric guide for use with 2.55 in. OD tube. Spline has sufficient capacity to hold shade and additional weight without disengaging from the tube.
3. End Brackets: Consist of 1/8" in. thick sheet steel. Wall, jamb or ceiling mounted as required and permanently installed.
4. Centre Support Brackets: supplied to meet span or weight requirements. Ceiling or wall mounted.
- e. Weights: Mill-finished aluminum, flat bars, single lengths for each shade panel.
5. Fascia: surface mounted application. No Fascia required. Fascia as built in millwork on site.
6. Recessed Housing: is specifically designed for acoustical or plaster ceilings with removable closure plate for access to the recessed and concealed roller system.
7. Finishes: All exposed aluminum parts have a clear anodized finish. Steel parts are either cadmium plated, satin finished or have been bonderized prior to painting with a baked enamel finish.

8. Exterior hembars shall be rectangular 6 mm x 37 mm, with internal grooves to accommodate a fabric guide carrier at each end.
9. Side channel shall be a heavy-duty two-piece Snap-On 75 x 22 side channel for inside or frontal mount.
10. Fabric shall be hot laser cut and reinforced at the edges with a high frequency thermoweld seal. Fabric is reinforced with heat sealed spring tempered stainless steel batten stiffeners positioned approximately every 900 mm insuring that fabric cannot escape or be pulled out of the side channel.

2.4 BLACKOUT SHADE FABRIC

1. Lightproof shades to be 100% opaque blackout flame retardant. Architect to choose colour when shop drawings are submitted. Seams shall be equally spaced vertically to form equal widths.

2.5 AUTOMATIC OPERATOR

1. 3 position remote control switch with "up", "down", and "stop" control. Mount operator in shade frame with control switch located where indicated. Include all components for proper unit operation. Control each shade in one room from individual control stations for each shade.

PART 3 EXECUTION

3.1 SURFACE CONDITIONS

1. Examine the areas and conditions under which work of this section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2 INSTALLATION

1. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interfaced with the work of this Section.
2. Install the work of this section in strict accordance with the original design, the approved Shop Drawings, pertinent requirements of government agencies having jurisdiction, and the manufacturer's recommended installation procedures as approved by the Architect, anchoring all components firmly into position for long life under hard use.
3. Install the work plumb, level, and in proper operating condition.
4. Upon completion of the installation, put each operating component through at least five complete cycles, adjusting as required to achieve optimum operation

and complete blackout at all edges (at blackout locations).

5. Touchup scratches and blemishes to be completely invisible to the unaided eye from a distance of five feet (1500 mm) or replace item.

END OF SECTION