

Project Manual for the
Construction of the
FRONTENAC P. S. - CLADDING REPLACEMENT

at

5135 Pinedale Avenue
Burlington, Ontario

for



Halton District School Board
2050 Guelph Line
Burlington, Ontario

HDSB RFT # 24-036
Project No.: 23001



118 James Street North, Suite 301, Hamilton, Ontario L8R 2K7
Tel: 905.297.0863 Web: cgsarch.ca

1 General

1.1 OWNER

.1 Owner for the Project is:

Halton District School Board
2050 Guelph Line
Burlington, Ontario
L7R 3Z2

1.2 CONSULTANTS

.1 Document Responsibility: Refer to Section 00 01 10 - Table of Contents for indication of document responsibility. Abbreviations for entity responsible for document preparation are as indicated below in parentheses.

.2 The following firms comprise the Consultant team for the Project:

.1 Architect (A)

Curran Gacesa Slote Architects
118 James Street North, Suite 301
Hamilton, Ontario
L8R 2K7
Telephone: 905.297.0863

END OF DOCUMENT

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1 General

1.1 STATUS OF AVAILABLE PROJECT INFORMATION

- .1 Available Project information means information of any type and in any form that is expressly identified as available project information relevant to Place of the Work, that have been prepared by third-parties, and are intended strictly as additional information for consideration by Bidders.
- .2 No available Project information forms part of the Contract Documents unless copied or transcribed into Drawings or Specifications, or is expressly listed in the agreement as a Contract Document.

1.2 USE AND RELIANCE UPON AVAILABLE PROJECT INFORMATION

- .1 Available Project information is made available to Bidders to fulfill Owner's duty to disclose all relevant Project information to Bidders.
- .2 Bidders shall interpret and draw their own conclusions about available Project information, including consideration of the time when it was created. Available Project information may be time sensitive. Owner and Consultant assume no responsibility for such interpretations and conclusions.
- .3 Available Project information, or any part thereof, shall not be construed as contract requirements unless also reflected in Drawings or Specifications, and in case of conflict, Drawings or Specifications shall govern.
- .4 Bidders, acting reasonably, may rely on available Project information in preparing their bids, subject to any qualifications stated in such available Project information and unless expressly stated otherwise.
- .5 Bidders are cautioned that such documents, by their nature, cannot reveal all conditions that exist or can occur at Place of the Work.
- .6 Should conditions at Place of the Work, in Consultant's opinion, be found to substantially vary from those identified in available Project information, then changes in the Work may need to be made, with appropriate adjustments being made to Contract Price and Contract Time.
- .7 Direct questions pertaining to available Project information by contacting issuing organization.

1.3 DESIGNATED SUBSTANCE SURVEYS AND AUDITS

- .1 A copy of a designated substance audit report with respect to Place of the Work is being made available as part of the Bid Documents; described as follows:
 - Titled: Survey and Assessment of Asbestos-Containing Materials, Frontenac Public School, Burlington, Ontario;
 - Ref. No.: 701931-000;
 - Dated: August 2013;
 - Prepared by: Decommissioning Consulting Services.
- .2 Such reports identify locations and types of designated substances found to be present at Place of the Work, and may include recommendations for their safe removal and disposal.
- .3 Conditions at Place of the Work identified in the report are relevant only at time of survey.
- .4 The condition of some building materials may have changed.

- .5 Items discovered during the execution of the Work that are not itemized within the report should be analytically tested by an accredited laboratory before further disturbance.

END OF SECTION

- 1 General
- 1.1 AGREEMENT
 - .1 CCDC 2-2020 Stipulated Price Contract, as amended below, forms the basis of Agreement between Owner and Contractor.
- 1.2 AMENDMENTS TO THE AGREEMENT
 - .1 Article A-5 - Payment
 - .1 Revise Subparagraph A-5.1.1 by adding the following words to the end: *"... or, where there is no Payment Certifier, jointly by the Owner and Contractor"*.
 - .2 Article A-6 - Receipt and Addresses for Notices in Writing
 - .1 Delete Paragraph A-6.5 in its entirety and replace it with the following: *"Contact information for a party may be changed by Notice in Writing to the other party setting out the new contact information in accordance with this Article."*

END OF SECTION

1 General

1.1 DEFINITIONS

- .1 CCDC 2-2020 Stipulated Price Contract includes the Definitions of specific words and terms.

1.2 SUPPLEMENTARY DEFINITIONS

- .1 Add a new Definition for Proper Invoice as follows: *"Proper Invoice means a proper invoice as defined in the Payment Legislation, if any, and as may be modified by written agreement between the parties to the extent permitted by such Payment Legislation."*
- .2 Add a new Definition for Submittals, as follows: *"Submittals are documents or items required by the Contract Documents to be provided by the Contractor, such as:*
- .1 Shop Drawings, samples, models, mock-ups to indicate details or characteristics, before the portion of the Work that they represent can be incorporated into the Work; and*
 - .2 As-built drawings and manuals to provide instructions to the operation and maintenance of the Work."*

END OF SECTION

1 General

1.1 GENERAL CONDITIONS

- .1 CCDC 2-2020 Stipulated Price Contract is the General Conditions between Owner and Contractor.

1.2 SUPPLEMENTARY CONDITIONS

- .1 Refer to Supplementary Conditions for amendments and supplements to General Conditions.
- .2 Where a General Condition of the Contract or a paragraph of the General Conditions of the Contract is deleted by Supplementary Condition, the numbering of the remaining General Conditions or paragraphs shall remain unchanged, and the numbering of the deleted item will be retained, unused.

END OF SECTION

1 Supplements to General Conditions

1.1 GC 1.1 - CONTRACT DOCUMENTS

- .1 Delete Paragraph 1.1.3 in its entirety and replace with the following: *"The Contractor shall review the Contract Documents for the purpose of facilitating and coordination and execution of the Work by the Contractor. The Contractor shall report promptly to the Consultant any ambiguities, design issues or other matters requiring clarification made known to the Contractor or that the Contractor may discover from such a review. Such review by the Contractor shall comply with the standard of care described in paragraph 3.9.1 of the Contract."*
- .2 Delete Paragraph 1.1.4 in its entirety and replace with the following: *"Except for its obligation to review the Contract Documents and report the result pursuant to paragraph 1.1.3, the Contractor is not responsible for ambiguities, design issues or other matters requiring clarification in the Contract Documents and does not assume any responsibility to the Owner or to the Consultant for the accuracy of the Contract Documents. Without limiting the foregoing, the Contractor shall not be liable for any damages or costs resulting from any ambiguities, design issues or other matters requiring clarification in the Contract Documents which the Contractor could not reasonably have discovered from such review in accordance with the standard of care. If the Contractor does discover any ambiguities, design issues or other matters requiring clarification in the Contract Documents, the Contractor shall not proceed with the work affected until the Contractor has received modified or additional information from the Consultant. The impacts of any ambiguities, design issues or other matters requiring clarification in the Contract Documents, including to the Contract Price and Contract Time, shall be addressed by the parties in accordance with Part 6 - CHANGES."*
- .3 Revise Subparagraph 1.1.6.2 by adding the following clause to the end: *"except to the extent the Consultant is indemnified as a third party beneficiary as provided in subparagraphs 9.2.7.4 and 9.5.3.4 and in paragraph 13.1.3."*

1.2 GC 2.2 - ROLE OF THE CONSULTANT

- .1 Add new Sentence to Paragraph 2.2.3, as follows: *"Without limiting the foregoing, the Consultant may appoint one or more authorized representatives in writing who may fulfill the obligations of the Consultant under this Contract."*
- .2 Revise Paragraph 2.2.8 by adding the words *'written statements'* after the word *'interpretations'* in both the first and second sentences; and by adding the following sentence to the end of the paragraph: *"The Owner and the Contractor shall waive any claims against the Consultant arising out of its making of any interpretations, written statements or findings in accordance with paragraphs 2.2.6, 2.2.7, 2.2.8 and 7.1.2, but only to the extent that any such interpretations, written statements and findings are made by the Consultant in an unbiased manner, and in accordance with the Consultant's professional standard of care at law."*
- .3 Revise Paragraph 2.2.13 by adding the words *"which are submitted"* before the words *'by the Contractor'*.

1.3 GC 2.4 - DEFECTIVE WORK

- .1 Delete Paragraph 2.4.1 in its entirety and replace with the following: *"The Contractor shall promptly correct, in a manner acceptable to the Owner and the Consultant, defective work that has been rejected by the Consultant as failing to conform to the Contract Documents, or work that the Contractor discovers to be defective, whether or not the defective work had been identified by the Consultant, and whether or not the defective work was incorporated in the Work or the defect is the result of poor workmanship, use of defective Products or damage through carelessness or other act or omission of the Contractor."*

- .2 Add new Paragraph 2.2.4 as follows: *"The Contractor shall prioritize the correction of any defective work which, in the sole discretion of the Owner, adversely affects the day-to-day operation of the Owner."*
- 1.4 GC 3.1 - CONTROL OF THE WORK
- .1 Add new Paragraph 3.1.3 as follows: *"Prior to commencing individual procurement, fabrication and construction activities, Contractor shall verify at Place of the Work relevant measurements and levels necessary for proper and complete fabrication, assembly and installation of the Work and shall further carefully compare such field measurements and conditions with the requirements of Contract Documents. Where dimensions are not included or contradictions exist, or exact locations are not apparent, Contractor shall immediately notify Consultant in writing and obtain written instructions from Consultant before proceeding with any affected part of the Work."*
- 1.5 GC 3.2 - CONSTRUCTION BY OWNER AND OTHER CONTRACTORS
- .1 Add new Paragraph 3.2.7 as follows: *"At commencement of the Work, the Contractor shall prepare for the review and acceptance of the Owner and the Consultant, a schedule indicating the times, within the construction schedule referred to in GC 3.4, that items that are specified to be Owner purchased and Contractor installed or hooked up are required at the Place of the Work to avoid delaying the progress of the Work."*
- 1.6 GC 3.6 - SUBCONTRACTORS AND SUPPLIERS
- .1 Revise Paragraph 3.6.2 by adding the following sentence to the end of the paragraph: *"The Contractor shall not subsequently change Subcontractors without the prior written approval of the Owner."*
- 1.7 GC 3.7 - LABOUR AND PRODUCTS
- .1 Revise Paragraph 3.7.1 by adding the following to the end: *"The Contractor represents that it has sufficient skilled employees to replace, subject to the Owner's approval, acting responsibly, its designated supervisor and project manager in the event of death, incapacity, removal or resignation."*
- .2 Add new Paragraph 3.7.4 as follows: *"The Owner shall provide the Contractor in a timely manner with all relevant information (including storage, protection, and installation requirements) regarding Products to be supplied by the Owner or other contractors and, prior to delivery of any such Products to the Place of the Work, the Owner shall obtain the Contractor's written approval of the delivery date and proposed storage, protection and installation requirements."*
- .3 Add new Paragraph 3.7.5 as follows: *"Once the Contractor has accepted delivery of Products, the Contractor shall be responsible for the safe storage and protection of Products as required to avoid dangerous conditions or contamination to the Products or other persons or property. Products shall be stored in locations and at the Place of the Work to the satisfaction of the Owner and the Consultant as agreed and approved by the Contractor pursuant to paragraph 3.7.4."*
- .4 Add new Paragraph 3.7.6 as follows: *"Notwithstanding the foregoing, the Contractor shall not be responsible for any Products supplied by the Owner or other contractors unless:*
- .1 the Contract Documents expressly stipulate that such Product is to be the Contractor's responsibility and to be installed by the Contractor as part of the Work;*
 - .2 the Contractor has or has received from the Owner proof of insurance coverage sufficient, at a minimum, to cover the replacement cost of such Product; and*
 - .3 the Owner obtained the Contractor's approval as required by paragraph 3.7.4."*

1.8 GC 3.8 - SHOP DRAWINGS

- .1 Add the words "*AND OTHER SUBMITTALS*" to the title of GC 3.8 after the words 'SHOP DRAWINGS'.
- .2 Add the words "*and Submittals*" after the words '*Shop Drawings*' in paragraphs 3.8.1, 3.8.2, 3.8.3, subparagraph 3.8.3.2, and paragraphs 3.8.5, 3.8.6 and 3.8.7.
- .3 Delete Paragraph 3.8.2 in its entirety and replace it with the following: "*Prior to the first application for payment, the Contractor and the Consultant shall jointly prepare a schedule of the dates for submission and return of Shop Drawings and Submittals in an orderly sequence.*"
- .4 Revise Paragraph 3.8.7 by deleting the clause 'with reasonable promptness so as to cause no delay in the performance of the Work' and replace it with the following clause: "*within 10 Working Days or such longer period as may be reasonably required*".

1.9 ADD NEW GC 3.9 - PERFORMANCE BY CONTRACTOR

- .1 Add new Paragraph 3.9.1 as follows: "*In performing its services and obligations under the Contract, the Contractor shall exercise a standard of care, skill and diligence that would normally be provided by an experienced and prudent contractor supplying similar services for similar projects. The Contractor acknowledges and agrees that throughout the Contract, the Contractor's obligations, duties and responsibilities shall be interpreted in accordance with this standard. The Contractor shall exercise the same standard of due care and diligence in respect of any Products, personnel, or procedures which it may recommend to the Owner.*"

1.10 GC 4.1 - CASH ALLOWANCES

- .1 Delete Paragraph 4.1.7 in its entirety and replace with the following: "*At the commencement of the Work, the Contractor shall prepare for the review and acceptance of the Owner and the Consultant, a schedule indicating the times, within the construction schedule referred to in GC 3.4 that items called for under cash allowances are required to be delivered to the Place of the Work to avoid delaying the progress of the Work.*"
- .2 Add new Paragraph 4.1.8 as follows: "*The Owner reserves the right to call, or to have the Contractor call, for competitive bids for portions of the Work, to be paid for from cash allowances.*"

1.11 GC 5.2 - APPLICATIONS FOR PAYMENT

- .1 Revise Paragraph 5.2.7 by deleting the words 'first payment' and replacing them with the words "*second payment*".

1.12 GC 5.4 - SUBSTANTIAL PERFORMANCE OF THE WORK AND PAYMENT OF HOLDBACK

- .1 Delete Paragraph 5.4.1 in its entirety and replace it with the following: "*When the Contractor considers that the Work is substantially performed, or if permitted by the lien legislation applicable to the Place of the Work a designated portion thereof which the Owner agrees to accept separately is substantially performed, the Contractor shall, within five (5) Working Days, deliver to the Consultant and to the Owner a comprehensive list of items to be completed or corrected, together with a written application for a review by the Consultant to establish Substantial Performance of the Work or substantial performance of the designated portion of the Work. Failure to include an item on the list does not alter the responsibility of the Contractor to complete the Contract.*"

- .2 Delete Paragraph 5.4.2 in its entirety and replace it with the following: *"The Consultant will review the Work to certify or verify the validity of the application and shall promptly, and in any event, no later than 10 calendar days after receipt of the Contractor's application:*
 - .1 *advise the Contractor in writing that the Work or the designated portion of the Work is not substantially performed and give reasons why, or*
 - .2 *state the date of Substantial Performance of the Work or a designated portion of the Work in a certificate and issue a copy of that certificate to each of the Owner and the Contractor."*
 - .3 Delete Paragraph 5.4.3 in its entirety and replace it with the following: *"Where the holdback amount required by the applicable lien legislation has not been placed in a separate lien holdback account, the Owner shall, no later than 10 calendar days prior to the expiry of the holdback period stipulated in the lien legislation applicable to the Place of the Work, place the holdback amount in a bank account in the joint names of the Owner and the Contractor."*
 - .4 Delete Paragraph 5.4.4 in its entirety and replace it with the following: *"Subject to the requirements of any Payment Legislation, all holdback amounts prescribed by the applicable lien legislation for the Place of the Work shall become due and payable to the Contractor no later than 10 Working Days following the expiration of the holdback period stipulated in the lien legislation applicable to the Place of the Work, as certified or verified by the Consultant when permitted by any Payment Legislation."*
 - .5 Delete Paragraph 5.4.5 in its entirety and replace it with the following: *"The Contractor shall submit an application for release of the lien holdback amount in accordance with the lien legislation applicable to the Place of the Work. Except to the extent required by any Payment Legislation, such application for release of the holdback shall not constitute an application for payment that is subject to Proper Invoice requirements."*
 - .6 Delete Paragraph 5.4.6 in its entirety and replace it with the following: *"Where legislation permits progressive release of the holdback for a portion of the Work and the Consultant has certified or verified that the part of the Work has been performed prior to Substantial Performance of the Work, the Owner hereby agrees to release, and shall release the holdback for such portion of the Work to the Contractor in accordance with such legislation."*
 - .7 Add new Paragraph 5.4.7 as follows: *"Notwithstanding any progressive release of the holdback, the Contractor shall ensure that such parts of the Work are protected pending the issuance of a final certificate for payment or until the Owner takes early occupancy in accordance with GC 12.2, whichever comes first, and shall be responsible for the correction of defects or work not performed regardless of whether or not such was apparent when the holdback was released."*
- 1.13 GC 5.5 - FINAL PAYMENT
- .1 Revise Paragraph 5.5.1 by adding the following Sentence to the end of the paragraph: *"The application for final payment shall meet the requirements of Proper Invoice."*
 - .2 Revise Paragraph 5.5.3 by adding the following Sentence to the end: *"Subject to any Payment Legislation, when the Consultant finds the Contractor's application for final payment to be not valid, the Contractor shall revise and resubmit the application when the Contractor has addressed the reasons given by the Consultant."*
- 1.14 GC 6.3 - CHANGE DIRECTIVE
- .1 Revise Subparagraph 6.3.7.18 by deleting the word 'and' from the end of the subparagraph.
 - .2 Revise Subparagraph 6.3.7.19 by deleting the period at the end of the subparagraph, and replacing it with *"; and"*.
 - .3 Add new Subparagraph 6.3.7.20 as follows: *"safety measures and requirements."*

1.15 GC 6.4 - CONCEALED OR UNKNOWN CONDITIONS

- .1 Add new Paragraph 6.4.5 as follows: *"The Contractor confirms that, prior to bidding the Project, it carefully investigated the Place of the Work and applied to that investigation the degree of care and skill described in paragraph 3.9.1, given the amount of time provided between the issue of the bid documents and the actual closing of bids, the degree of access provided to the Contractor prior to the submission of its bid, and the sufficiency and completeness of the information provided by the Owner. The Contractor is not entitled to compensation or to an extension of the Contract Time for conditions which could reasonably have been ascertained by the Contractor by such review undertaken in accordance with this paragraph 6.4.5."*

1.16 GC 6.6 - CLAIMS FOR A CHANGE IN CONTRACT PRICE

- .1 Revise Paragraph 6.6.5 by adding the words *"as noted in paragraph 6.6.3"* after the words 'of the claim' and add the words *"and the Consultant"* at the end of the paragraph.

1.17 GC 7.1 - OWNER'S RIGHT TO PERFORM THE WORK, TERMINATE THE CONTRACTOR'S RIGHT TO CONTINUE WITH THE WORK OR TERMINATE THE CONTRACT

- .1 Add Paragraph 7.1.7 as follows: *"When a performance bond has been obtained and submitted to Owner by Contractor, the provisions of paragraph 7.1.5 shall be exercised in accordance with the conditions of such performance bond unless Owner chooses to forfeit its rights under said bond."*

1.18 GC 8.2 - ADJUDICATION

- .1 Revise Paragraph 8.2.1 by deleting the word 'prescribed' and replacing it with the words *"provided for"*.

1.19 GC 8.3 - NEGOTIATION, MEDIATION AND ARBITRATION

- .1 Add new Paragraph 8.3.9 as follows: *"Within five (5) days of receipt of the notice of arbitration by the responding party under paragraph 8.3.6, the Owner and the Contractor shall give the Consultant a written notice containing:
 - .1 a copy of the notice of arbitration;
 - .2 a copy of supplementary conditions 8.3.9 to 8.3.13 of this Contract, and;
 - .3 any claims or issues which the Contractor or the Owner, as the case may be, wishes to raise in relation to the Consultant arising out of the issues in dispute in the arbitration."*
- .2 Add new Paragraph 8.3.10 as follows: *"The Owner and the Contractor agree that the Consultant may elect, within ten (10) days of receipt of the notice under paragraph 8.3.9, to become a full party to the arbitration under paragraph 8.3.6 if the Consultant:
 - .1 has a vested or contingent financial interest in the outcome of the arbitration;
 - .2 gives the notice of election to the Owner and the Contractor before the arbitrator is appointed;
 - .3 agrees to be a party to the arbitration within the meaning of the rules referred to in Paragraph 8.3.6, and;
 - .4 agrees to be bound by the arbitral award made in the arbitration."*
- .3 Add new Paragraph 8.3.11 as follows: *"Without limiting and subject to the Owner's and Contractor's rights under paragraph 8.3.12 to challenge whether the Consultant has satisfied the requirements of Paragraph 8.3.10, if an election is made under Paragraph 8.3.10:
 - .1 the Owner or Contractor may request particulars and evidence of the Consultant's vested or contingent financial interest in the outcome of the arbitration;
 - .2 the Consultant shall participate in the appointment of the arbitrator; and,
 - .3 notwithstanding the rules referred to in paragraph 8.3.6, the time period for reaching agreement on the appointment of the arbitrator shall begin to run from the date the respondent receives a copy of the notice of arbitration."*

- .4 Add new Paragraph 8.3.12 as follows: *"The arbitrator in the arbitration in which the Consultant has elected under paragraph 8.3.10 to become a full party may:*
 - .1 *on application of the Owner or the Contractor, determine whether the Consultant has satisfied the requirements of paragraph 8.3.10, and;*
 - .2 *make any procedural order considered necessary to facilitate the addition of the Consultant as a party to the arbitration."*
 - .5 Add new Paragraph 8.3.13 as follows: *"The provisions of paragraph 8.3.9 shall apply (with all appropriate changes being made) to written notice to be given by the Consultant to any sub-consultant."*
- 1.20 GC 9.1 - PROTECTION OF WORK AND PROPERTY
- .1 Delete Subparagraph 9.1.1.1 in its entirety and replace it with the following: *"errors in the Contract Documents which the Contractor could not have discovered applying the standard of care described in paragraph 3.9.1;"*.
 - .2 Delete Paragraph 9.1.2 in its entirety and replace it with the following: *"Before commencing any Work, the Contractor shall determine the locations of all underground utilities and structures indicated in the Contract Documents, or that are discoverable by applying to an inspection of the Place of the Work the degree of care and skill described in Paragraph 3.9.1."*
- 1.21 GC 9.2 - TOXIC OR HAZARDOUS SUBSTANCES
- .1 Revise Paragraph 9.2.6 by adding the following clause after the word "responsible": *"... or whether any toxic of hazardous substances or materials already at Place of the Work (and which were then harmless or stored, contained or otherwise dealt with in accordance with legal and regulatory requirements) were dealt with by the Contractor or anyone for whom the Contractor is responsible in a manner which does not comply with legal and regulatory requirements, or which threatens human health and safety or the environment, or material damage to the property of the Owner or others, the Owner shall ..."*.
 - .2 Revise Subparagraph 9.2.7.4 by adding the words *"and the Consultant"* after the word 'Contractor'.
 - .3 Revise Paragraph 9.2.8 by adding the following clause after the word "responsible": *"... or that any toxic of hazardous substances or materials already at the Place of the Work (and which were then harmless or stored, contained or otherwise dealt with in accordance with legal and regulatory requirements) were dealt with by the Contractor or anyone for whom the Contractor is responsible in a manner which does not comply with legal and regulatory requirements, or which threatens human health and safety or the environment, or material damage to the property of the Owner or others, the Contractor shall ..."*.
- 1.22 GC 9.5 - MOULD
- .1 Revise Subparagraph 9.5.3.4 by adding the words *"and the Consultant"* after the word 'Contractor'.
- 1.23 GC 10.2 - LAWS, NOTICES, PERMITS, AND FEES
- .1 Revise Paragraph 10.2.5 by deleting the word 'The' from the start of the paragraph and substituting it with the words *"Subject to paragraph 3.9.1, the"*.
- 1.24 GC 11.1 - INSURANCE
- .1 Revise Subparagraph 11.1.1.3 by deleting the Liability Insurance for manned aircraft and watercraft, either owned or non-owned.
 - .2 Delete Subparagraph 11.1.1.5 describing Boiler and Machinery Insurance in its entirety.

1.25 GC 12.1 - READY-FOR-TAKEOVER

- .1 Revise Paragraph 12.1.3 by deleting the words 'written application for *Ready-for-Takeover*', and replacing them with the words "*written application for determination of Ready-for-Takeover*".

1.26 GC12.2 - EARLY OCCUPANCY BY THE OWNER

- .1 Revise Paragraph 12.2.4 by deleting the word 'achieve' and replacing it with the words "*have achieved*".

1.27 GC 12.3 - WARRANTY

- .1 Revise Paragraph 12.3.2 by deleting the word 'The' from the start of the paragraph and substituting it with the words "*Subject to paragraph 3.9.1, the*".
- .2 Amend Paragraph 12.3.3 by adding the following Sentence: "*The warranty period for corrected work shall re-commence upon acceptance of the correction.*"

1.28 GC 13.1 - INDEMNIFICATION

- .1 Revise Paragraph 13.1.3 by deleting the words 'paragraphs 13.1.1 and 13.1.2' and replacing them with the words "*paragraphs 13.1.1, 13.1.2 and 13.1.7*".
- .2 Add new Paragraph 13.1.7 as follows: "*The Contractor shall indemnify and hold harmless the Consultant, its agents and employees from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings by third parties that arise out of, or are attributable to the Contractor's performance of the Contract, provided such claims are:*
 - .1 *attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property,*
 - .2 *caused by negligent acts or omissions of the Contractor or anyone for whose negligent acts or omissions the Contractor is liable, and*
 - .3 *made by Notice in Writing within a period of 6 years from the Ready-for-Takeover date or within such shorter period as may be prescribed by any limitation statute or the Province or Territory of the Place of the Work.*"

END OF SECTION

1 General

1.1 WORK OF THIS CONTRACT

- .1 Work of this Contract comprises the following:

Construction of the
FRONTENAC P. S. - CLADDING REPLACEMENT
located at
5135 Pinedale Avenue,
Burlington, Ontario;
and is further identified as:
HDSB RFT #24-036, and
CGS Project No.: 23001.

1.2 DIVISION OF WORK

- .1 Division of the Work among Subcontractors and Suppliers is solely Contractor's responsibility. Consultant and Owner assume no responsibility to act as an arbiter to establish subcontract limits between Sections or Divisions of the Work.

1.3 SPECIFICATIONS LANGUAGE AND STYLE

- .1 Specifications are written in imperative mood and in streamlined form. Imperative language is directed to Contractor, unless stated otherwise.
- .2 Complete sentences by reading "shall", "Contractor shall", "shall be", and similar phrases by inference. Where a colon (:) is used within sentences and phrases, read the words "shall be" by inference.
- .3 Fulfil and perform all indicated requirements whether stated imperatively or otherwise.
- .4 When used in the context of a Product, read the word "Provide" to mean "supply and install to result in a complete installation ready for its intended use".

1.4 SPECIFICATIONS MEASUREMENTS AND DIMENSIONS

- .1 Specifications are written using metric measurements and dimensions.
- .2 This does not preclude the use of Products manufactured or produced to imperial measurements.
- .3 It remains Contractor's responsibility to make the various parts of the Project come together properly and neatly in a complete manner, in accordance with Contract Documents.

1.5 CONTRACT DOCUMENTS FOR CONSTRUCTION PURPOSES

- .1 Contract Documents were prepared by Consultant for the account of Owner. Information contained in Contract Documents reflects Consultant's best judgement in light of the information available to them at the time of preparation. Any use which a third party makes of Contract Documents, or any reliance on or decisions to be made based on them, are the responsibility of such third parties. Consultant accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on Contract Documents.
- .2 Owner will supply Contractor with a complete set of Contract Documents in electronic form before commencement of the Work. Contractor may print hard copies for construction purposes as required.

1.6 DOCUMENTS AT PLACE OF THE WORK

- .1 Keep the following documents at Place of the Work, stored securely and in good order and available to Owner and Consultant in both hard copy and electronic form.
 - .1 Current Contract Documents, including Drawings, Specifications, addenda, bid revisions and Notices in Writing.
 - .2 Proposed changes, Change Orders, Change Directives and Supplemental Instructions.
 - .3 Reviewed Shop Drawings, Product data and samples.
 - .4 Field test reports and records.
 - .5 Construction progress schedule.
 - .6 Construction daily log.
 - .7 Meeting minutes.
 - .8 Manufacturer's certifications.
 - .9 Current as-built drawings.
 - .10 Safety Data Sheets (SDS) for controlled Products.
 - .11 Manufacturer's installation and maintenance guidelines.
 - .12 Consultant's field review reports and deficiency reports.
 - .13 Permits and reports issued by authorities having jurisdiction.
- .2 Make documents available to Consultant for review at Place of the Work.

1.7 CONTRACTOR USE OF THE PREMISES

- .1 Except as otherwise specified in Section 01 14 00, Contractor has unrestricted use of Place of the Work from time of Contract award until Ready-for-Takeover.
- .2 Confine Construction Equipment, Temporary Work, storage of Products, waste materials and debris, and other construction operations to limits required by laws, ordinances, permits, and Contract Documents, whichever is most restrictive. Do not unreasonably encumber Place of the Work.

1.8 OWNER-SUPPLIED PRODUCTS

- .1 Owner Responsibilities
 - .1 Order and pay for Owner-supplied Products not already in Owner's possession.
 - .2 Arrange and pay for delivery of Owner-supplied Products F.O.B. Place of the Work, within time frames required by Contractor's construction progress schedule. If delivered sooner than required by Contractor's latest construction progress schedule submitted to Owner, arrange and pay for delivery to a temporary storage location and subsequent delivery to Place of the Work.
 - .3 Advise Contractor in writing of the value of Owner-supplied Products for Contractor's insurance purposes.
 - .4 Arrange and pay for delivery to Contractor of reviewed Shop Drawings, Product data, samples, and manufacturer's instructions and certificates.
 - .5 Inspect deliveries jointly with Contractor.
 - .6 Submit claims for transportation damage.
 - .7 Arrange for replacement of damaged, defective or missing items identified at time of delivery.
 - .8 Arrange for manufacturer's field services.
 - .9 Arrange for delivery of manufacturer's warranties to Contractor for inclusion in operation and maintenance manuals.
- .2 Contractor Responsibilities
 - .1 Designate in construction progress schedule, time frames for delivery of Owner-supplied Products to Place of the Work and for receipt of related submittals. If Place of the Work is not ready to receive delivery of Owner-supplied Products within the time frame indicated in the latest construction progress schedule submitted to Owner, arrange and pay for delivery to a temporary storage location and subsequent delivery to Place of the Work.

- .2 Review required submittals and notify Consultant of any observed discrepancies or anticipated problems.
- .3 Ensure course of construction insurance is adequate to cover Owner-supplied Products.
- .4 Receive and unload Owner-supplied Products at Place of the Work.
- .5 Inspect deliveries jointly with Owner. Record and notify Owner and Consultant of shortages and visibly damaged or defective items.
- .6 Handle Owner-supplied Products at Place of the Work, including uncrating and storage. Dispose of waste materials and debris.
- .7 Take appropriate precautions to protect Owner-supplied Products from loss or damage.
- .8 Repair or replace items damaged at Place of the Work.
- .9 Assemble, install, connect, adjust and finish Owner-supplied Products.
- .10 Arrange for inspections required by authorities having jurisdiction.
- .11 Arrange for or perform testing required by authorities having jurisdiction.
- .12 Workmanship warranty for installation.
- .13 Make Good Owner-supplied Products damaged by Contractor or Subcontractors at Place of the Work.

END OF SECTION

- 1 General
- 1.1 RESTRICTIONS ON USE OF PREMISES
 - .1 Limit use of premises for Work, for storage, and for access, to allow:
 - .1 Owner occupancy.
 - .2 Work by Other Contractors.
 - .3 Public usage.
 - .2 Coordinate use of premises under direction of Owner.
- 1.2 OWNER OCCUPANCY OF EXISTING FACILITY
 - .1 Owner will occupy existing facility during entire construction period.
 - .2 Cooperate with Owner in scheduling operations to minimize disruptions and to facilitate Owner usage.
- 1.3 RESTRICTED HOURS OF WORK IN OCCUPIED FACILITIES
 - .1 When performing Work within existing facility, coordinate with Owner's representative at Place of the Work to ensure operational program of existing facility is not disrupted. Conduct such coordination not less than 48 hours prior to commencing such portions of the Work.
 - .2 Work performed within existing facility is restricted to the following times:
 - .1 July 1 to August 31: Mondays to Fridays, between the hours of 7:30 am and 4:00 pm.
 - .2 September 1 to June 30: Mondays to Fridays, between the hours of 4:00 pm and 10:30 pm.
 - .3 Make special arrangements with Owner to perform portions of the Work in existing facility outside of these hours. Submit requests for special arrangements not less than 48 hours in advance.
 - .4 Submit written notice to Owner and Owner's representative at Place of the Work within 24 hours of any potential disruptions to continuing operations of existing facility.
 - .5 Allow for hours of work restrictions in construction progress schedule.
- 1.4 PRODUCT DELIVERY RESTRICTIONS IN OCCUPIED FACILITIES
 - .1 Schedule Product deliveries to Place of the Work only outside normal hours of operation.
- 1.5 NOISY WORK RESTRICTIONS IN OCCUPIED FACILITIES
 - .1 Schedule excessively noisy work to avoid disturbance to building occupants. Perform excessive noise generating work outside of Owner's normal operating hours.
 - .2 Use powder actuated devices only with Consultant's written permission.
- 1.6 FOOD AND BEVERAGE RESTRICTIONS IN OCCUPIED FACILITIES
 - .1 There shall be no food or beverages allowed within existing facility.
 - .2 Only water will be permitted to be consumed within existing facility.
 - .3 No sunflower seeds, peanuts, nuts or similar foods are permitted anywhere at Place of the Work.
 - .4 Workers found to be in violation of this requirement will be required to leave Place of the Work and will be replaced by Contractor.

1.7 MAINTAINING LIFE SAFETY SYSTEMS IN OCCUPIED FACILITIES

- .1 Maintain operational life safety systems and public access to exits in occupied areas during execution of the Work.
- .2 Existing Entrances and Exits:
 - .1 Maintain existing entrances and exits to ensure public safety.
 - .2 Where existing entrances and exits are blocked or adversely affected by construction activities, construct temporary entrances and exits in accordance with authorities having jurisdiction.
- .3 Determine nature and exact locations of existing fire and smoke sensors prior to commencement of the Work. Avoid direct or indirect jarring while working in adjacent areas and exercise caution to avoid triggering these devices.
- .4 Be responsible for costs incurred by Owner on account of false fire alarms activated as a result of the execution of the Work without adequate precautions.

END OF SECTION

1 General

1.1 DEFINITION

- .1 Substitution means a Product, a manufacturer, or both, not originally specified in Contract Documents by proprietary name but proposed for use by Contractor in place of a Product, a manufacturer, or both, specified by proprietary name.

1.2 SUBSTITUTION PROCEDURES

- .1 Contractor may propose a Substitution wherever a Product or manufacturer is specified by proprietary name(s), unless there is accompanying language indicating that Substitutions will not be considered.
- .2 Contractor may propose a Substitution wherever a Product or manufacturer is specified by proprietary name(s) and accompanied by language such as "or equal", "or approved equal", or other similar words. Do not construe such language as an invitation to unilaterally Provide a Substitution without Consultant's prior written acceptance. Do not order or install any Substitution without a Supplemental Instruction or Change Order. Unauthorized Substitutions will be removed and replaced with specified Product by Contractor.
- .3 Provided a proposed Substitution submission includes all of the information specified in this Section under Submission Requirements for Proposed Substitutions, Consultant will promptly review and accept or reject the proposed Substitution.
- .4 Consultant may accept a Substitution if satisfied that:
 - .1 The proposed substitute Product is the same type as, is capable of performing the same functions as, interfaces with adjacent work the same as, and meets or exceeds the standard of quality, performance and, if applicable, appearance, warranty and maintenance considerations, of the specified Product,
 - .2 The proposed substitute manufacturer has capabilities comparable to the specified manufacturer, and
 - .3 The Substitution provides a benefit to Owner.
- .5 If Contractor fails to order a specified Product or order a Product by a specified manufacturer in adequate time to meet Contractor's construction progress schedule, Consultant will not consider that valid reason to accept a Substitution.
- .6 If Consultant accepts a Substitution, and subject to Owner's agreement, the change in the Work will be documented in the form of either a Supplemental Instruction or Change Order as specified in Section 01 26 00.
- .7 If a Substitution is accepted in the form of a Supplemental Instruction or Change Order, Contractor shall not revert to an originally specified Product or manufacturer without Consultant's prior written acceptance.

1.3 SUBMISSION REQUIREMENTS FOR PROPOSED SUBSTITUTIONS

- .1 Include with each proposed Substitution the following information:
 - .1 Identification of the substitution, including product name, and manufacturer's name, address, telephone numbers, and web site address.
 - .2 Reason or reasons for proposing the Substitution.
 - .3 A statement verifying that the Substitution will not affect the Contract Price and Contract Time or, if applicable, the amount and extent of a proposed increase or decrease in Contract Price and Contract Time on account of the Substitution.
 - .4 A statement verifying that the Substitution will not affect the performance and warranty of other parts of the Work.
 - .5 Manufacturer's Product literature for the Substitution, including material descriptions, compliance with applicable codes and reference standards, performance and test data, compatibility with contiguous materials and systems, and environmental considerations.

- .6 Product samples as applicable.
- .7 A summarized comparison of the physical properties and performance characteristics of the specified Product and the proposed Substitution, with any significant variations clearly highlighted. Values describing the physical properties and performance characteristics of the proposed Substitution must be expressed using the same units of measurement as for the specified Product, and have been tested using the same test methods as used for the specified Product.
- .8 Availability of maintenance services and sources of replacement materials and parts for the proposed Substitution, as applicable, including associated costs and time frames.
- .9 If applicable, estimated life cycle cost savings resulting from the Substitution.
- .10 Details of other similar projects and applications where the Substitution has been used.
- .11 Identification of any consequential changes in the Work to accommodate the Substitution and any consequential effects on the performance of the Work as a whole. A later claim for an increase to the Contract Price or Contract Time for other changes in the Work attributable to the Substitution will not be considered.

END OF SECTION

1 General

1.1 CLARIFICATIONS

- .1 Request written clarifications when the meaning of Contract Documents is unclear.
- .2 Do not proceed with related parts of the Work until clarification is received.
- .3 Failure to notify Consultant when Contract Documents are unclear or inconsistent will result in Contractor incurring responsibility for resulting deficiencies and additional costs.
- .4 Clarifications issued by Consultant are deemed to supercede the relevant parts of Contract Documents, regardless whether those documents are cited in the written clarification.

1.2 REQUESTS FOR INFORMATION

- .1 Contractor may, after exercising due diligence to locate the required information, request from Consultant clarification or interpretation of Contract Documents, hereinafter referred to as a request for information (RFI).
- .2 Submit RFI on a form acceptable in content to Consultant, including a detailed description of Contractor's review of Contract Documents leading up to issuance of the RFI. Requests for information that fail to include a detailed review description, or whose description is insufficient in the opinion of Consultant, may not be considered and may be rejected.
- .3 Maintain a log of RFI sent to and responses received from Consultant, complete with corresponding dates. Submit updated RFI log with each application for payment.
- .4 Submit RFI to Consultant sufficiently in advance of affected parts of the Work so as not to cause delay in the Work. Additional costs incurred as a result of failure to submit an RFI in sufficient time will not be reimbursed by Owner.
- .5 RFI will only be received from Contractor. RFI received directly from Subcontractors or Suppliers will not be considered.
- .6 Submit one RFI per RFI form, numbered consecutively in a single sequence, in the order submitted.
- .7 Consultant will review and respond to RFI with reasonable promptness.
- .8 Consultant's response to RFI will not be considered a Change Order or a Change Directive, nor does it authorize changes in the Work, Contract Price or Contract Time.
- .9 If, at any time, Contractor submits a large quantity of RFI, such that Consultant cannot process them within a reasonable period of time, then Consultant will notify Contractor of such in writing. In this event, Contractor and Consultant will jointly prepare an estimate of time necessary for processing RFI, as well as determining an order of priority among submitted RFI. Contractor will accommodate such necessary time at no increase in Contract Time or Contract Price.
- .10 If the information requested in an RFI is apparent from field observations, is contained in Contract Documents or is reasonably inferable from them, Contractor shall be responsible to Owner for reasonable costs charged by Consultant for additional services required to prepare and issue such information.
- .11 A request for information (RFI) will not constitute a notice of claim for a delay.

1.3 SCHEDULE OF LABOUR RATES

- .1 Prior to first application for payment, submit for Consultant's review a schedule of labour rates for all Subcontracts and classifications of trades, such as journeymen, apprentices, and foremen that will be employed in the Work. Submit a breakdown of payroll burden component of labour rates.
- .2 Labour rates shall reflect salaries, wages and benefits paid to personnel in the direct employ of Contractor, Subcontractors and sub-Subcontractors, stated as hourly rates, that will be used when:
 - .1 Preparing price quotations for Change Orders, and
 - .2 Determining the cost of work attributable to Change Directives.
- .3 Labour rates stated in schedule of labour rates shall be consistent with rates that will actually be paid, and payroll burden costs that will actually be incurred, in the normal performance of the Work, during regular working hours. Labour rates shall not include any additional overhead and profit component.
- .4 Where collective agreements apply, labour rates shall not exceed those established by collective agreement.
- .5 Obtain Owner's written acceptance of schedule of labour rates before submitting first Change Order quotation.
- .6 Accepted schedule of labour rates will be used for evaluating Change Order quotations and cost of performing work attributable to Change Directives.
- .7 Contractor may request amendments to the accepted schedule of labour rates if changes in the labour rates that will actually be paid, or payroll burden cost that will actually be incurred, in the normal performance of the Work can be demonstrated. Obtain Owner's written acceptance of such changes.

1.4 SCHEDULE OF EQUIPMENT RATES

- .1 Prior to first application for payment, submit for Consultant's review a schedule of equipment rates for Contractor owned Construction Equipment.
- .2 Equipment rates shall reflect the rates that will be used when:
 - .1 Preparing price quotations for Change Orders, and
 - .2 Determining the cost of work attributable to Change Directives.
- .3 Equipment rates stated in schedule of equipment rates shall be consistent with local equipment rental market rates and shall not include any additional overhead and profit component.
- .4 Obtain Owner's written acceptance of schedule of equipment rates before submitting first Change Order quotation.
- .5 Accepted schedule of equipment rates will be used for evaluating Change Order quotations and cost of performing work attributable to Change Directives.
- .6 Contractor may request amendments to the accepted schedule of equipment rates if changes in the local equipment rental market rates can be demonstrated. Obtain Owner's written acceptance of such changes.

1.5 VALUATION OF CHANGES BASED ON AGREED UNIT PRICES

- .1 Consultant may, at the outset of the Contract or at any other time, request Contractor to submit unit prices anticipated to be required in valuing changes in the Work.
- .2 Contractor shall promptly submit requested unit prices.

- .3 Unit prices are to be valid for a specified duration.
- .4 Unit prices are to exclude fees for overhead and profit, and will be subject to the percentage fees specified in this Section under Fees for Overhead and Profit - Change Orders.
- .5 Consultant will evaluate Contractor's quoted unit prices and, if accepted by Owner in writing, the agreed unit prices will be used to value subsequent proposed changes in the Work wherever they are applicable.

1.6 METHOD OF CONTRACT PRICE ADJUSTMENT - CHANGE ORDERS

- .1 Unless otherwise agreed, the adjustment of the Contract Price on account of a proposed change in the Work will be based on a quotation for a fixed price increase or decrease to Contract Price regardless of Contractor's actual expenditures and savings.

1.7 CHANGE ORDER PROCEDURES

- .1 Upon issuance by Consultant to Contractor of a proposed change in the Work, and unless otherwise requested in the proposed change or unless otherwise agreed:
 - .1 Submit to Consultant a fixed price quotation for the proposed change in the Work within 5 days after receipt of the proposed change in the Work.
 - .2 If requested in the proposed change, submit a detailed breakdown of the price quotation including the following to the extent applicable, with appropriate supporting documentation:
 - .1 Estimated labour costs, including hours and applicable hourly rates based on the accepted schedule of labour rates.
 - .2 Estimated Product costs, including Supplier quotations, estimated quantities and unit prices.
 - .3 Estimated Construction Equipment costs.
 - .4 Enumeration of other estimated costs included in the price quotation.
 - .5 Estimated credit amounts for labour and Products not required on account of the proposed change.
 - .6 Fees, not exceeding the specified allowable percentages for overhead and profit.
 - .7 Where applicable, Subcontractor quotations, also including a detailed breakdown of all the above items.
 - .3 Include in the quotation the increase or decrease to Contract Time, if any, for the proposed change, stated in number of days.
 - .4 Include in the quotation the number of days for which the quotation is valid.
- .2 The quotation will be evaluated by Consultant and Owner and, if accepted by Owner, be documented in the form of a signed Change Order.

1.8 FEES FOR OVERHEAD AND PROFIT - CHANGE ORDERS

- .1 Where Contractor's price quotation for a Change Order results in a net increase to the Contract Price, Contractor's entitlement to fees for overhead and profit will be as described in Owner's Request for Tender documents.
- .2 Where a Subcontractor's price quotation for a Change Order results in a net increase to the Subcontractor's contract price, a Subcontractor's entitlement to fees for overhead and profit will be as described in Owner's Request for Tender documents.
- .3 Where Contractor's or a Subcontractor's price quotation for a Change Order results in a net decrease in price before adjustment for fees for overhead and profit, such a price quotation shall be for the net decrease without any adjustment for fees for overhead and profit.

1.9 METHOD OF CONTRACT PRICE ADJUSTMENT - CHANGE DIRECTIVES

- .1 Unless Owner and Contractor reach an earlier agreement on the adjustment to the Contract Price by means of a Change Order that cancels the Change Directive, the adjustment in the Contract Price for change carried out by way of the Change Directive shall be determined as specified in the General Conditions of Contract after the change in the Work is completed.

1.10 CHANGE DIRECTIVE PROCEDURES

- .1 If a Change Directive is issued for a change in the Work for which a proposed change was previously issued, but no Change Order has yet been signed, the Change Directive shall cancel the proposed change and any Contractor quotations related to that change in the Work.
- .2 When proceeding with a change in the Work under a Change Directive, keep accurate records of daily time sheets for labour and Construction Equipment, and invoices for Product and Construction Equipment costs. Submit such records to Consultant weekly, until the Change Order superseding the Change Directive is issued.

1.11 FEES FOR OVERHEAD AND PROFIT - CHANGE DIRECTIVES

- .1 Contractor's entitlement to fees for overhead and profit on Contractor's expenditures and savings attributable to a Change Directive shall be as described in Owner's Request for Tender documents.
- .2 A Subcontractor's entitlement to fees for overhead and profit on Subcontractor's expenditures and savings attributable to a Change Directive shall be as described in Owner's Request for Tender documents.
- .3 Where a Change Directive results in net savings on account of work not required to be performed and a net decrease in the Contractor's or Subcontractor's cost, the net savings to the Contractor or Subcontractor shall be calculated without any adjustment for fees for overhead and profit.
- .4 When a Change Directive is ultimately recorded as a Change Order, there shall be no additional entitlement to fees for overhead and profit beyond those specified above.

1.12 SUPPLEMENTAL INSTRUCTIONS

- .1 Consultant may issue Supplemental Instructions to clarify Contract Documents, issue additional information, or make minor variations in the Work not involving adjustments in Contract Price or Contract Time.
- .2 If Contractor considers a Supplemental Instruction to require an adjustment in Contract Price or Contract Time, Contractor shall promptly notify Consultant and Owner in writing and shall not proceed with any work related to the Supplemental Instruction pending receipt of a Change Order, a Change Directive, or, in accordance with the dispute resolution provisions of General Conditions of the Contract, a Notice in Writing of a dispute and instructions to proceed.

END OF SECTION

1 General

1.1 SCHEDULE OF VALUES

- .1 Prior to first application for payment, submit for Consultant's review an initial schedule of values.
- .2 Modify initial schedule of values if and as requested by Consultant.
- .3 Obtain Consultant's written acceptance of initial schedule of values prior to first application for payment.
- .4 Together with first and all subsequent applications for payment, submit updated versions of the schedule of values, indicating the values, to the date of application for payment, of work performed and Products delivered to Place of the Work.
- .5 Prepare schedule of values in an electronic spreadsheet format based on the format and content described in CCDC 24-2016, A Guide to Model Forms and Support Documents.

1.2 CASH FLOW PROJECTION

- .1 Prior to first application for payment, submit for Consultant's review a forecast of approximate monthly progress payments for each month of Contract Time.
- .2 Submit revised cash flow forecasts when required due to significant changes in rate of progress of the Work or significant changes in Contract Price, or when requested by Owner or Consultant.

1.3 WORKERS' COMPENSATION CLEARANCE

- .1 Submit proof of workers' compensation clearance with each application for payment.

1.4 PAYMENT FOR PRODUCTS STORED OFF SITE

- .1 Owner may, due to extraordinary circumstances and at Owner's sole discretion, make payments for Products delivered to and stored at a location other than Place of the Work, subject to:
 - .1 A request submitted by Contractor in writing, with appropriate justification, and
 - .2 Whatever conditions Owner or Consultant may establish for such payments, as required to protect Owner's interests.

END OF SECTION

- 1 General
- 1.1 COORDINATION
 - .1 Coordinate the Work to ensure the Project proceeds safely and expeditiously.
 - .2 Ensure adequate communication among involved parties.
 - .3 Allocate mobilization areas at Place of the Work; for field offices and sheds, for access, traffic and parking facilities.
 - .4 Coordinate use of Place of the Work and facilities through procedures for submittals, reports and records, schedules, coordination of Drawings, recommendations, and resolution of ambiguities and conflicts.
 - .5 Submit information required for preparation of coordination and interference drawings. Review and approve revised drawings for submission to Consultant.
- 1.2 OTHER CONTRACTORS
 - .1 Cooperate with Other Contractors employed by Owner and, if necessary, coordinate with their work.
 - .2 Submit necessary information to Owner to assist in required scheduling of Other Contractors.
- 1.3 GENERAL REQUIREMENTS FOR MEETINGS
 - .1 Schedule and administer meetings in consultation with Consultant, throughout progress of the Work.
 - .2 Prepare agenda for meetings.
 - .3 Distribute written notice of each meeting 5 Working Days in advance of meeting date to Consultant and Owner.
 - .4 Provide physical space and make arrangements for meetings.
 - .5 Preside at meetings.
 - .6 Record meeting minutes, including significant decisions and identifying action items and action dates by attendees or the parties they represent.
 - .7 Submit draft copy of minutes to Consultant within two Working Days after meeting.
 - .8 Consultant will review minutes and will submit comments for any necessary revisions or additions within 3 Working Days.
 - .9 Update minutes to reflect Consultant's comments.
 - .10 Reproduce and distribute copies of meeting minutes within 5 days after meeting and transmit to meeting participants, affected parties not in attendance, Consultant and Owner.
 - .11 Representatives of parties attending meetings shall be qualified and authorized to act on behalf of the party each represents.
 - .12 Schedule meetings on a day that is determined to be convenient by both Contractor and Consultant.
- 1.4 CONSTRUCTION START-UP MEETING
 - .1 Promptly after Contract award, Contractor shall establish the time and location of a construction start-up meeting to review and discuss administrative procedures and responsibilities.

- .2 Senior representatives of Owner, Consultant, subconsultants, Contractor, including Contractor's project manager and site superintendent, and major Subcontractors shall be in attendance.
- .3 Agenda will include the following:
 - .1 Appointment of official representatives of Owner, Contractor, Subcontractors, Consultant, and subconsultants.
 - .2 Project communications.
 - .3 Contract Documents for construction purposes.
 - .4 Documents at Place of the Work.
 - .5 Contractor's use of premises.
 - .6 Owner-supplied Products.
 - .7 Work restrictions.
 - .8 Contract modification procedures.
 - .9 Payment procedures.
 - .10 Construction progress meetings.
 - .11 Construction progress schedule, including long lead time items.
 - .12 Submittals schedule and procedures.
 - .13 Special procedures.
 - .14 Quality requirements, including testing and inspection procedures.
 - .15 Contractor's mobilization.
 - .16 Temporary utilities.
 - .17 Existing utility services.
 - .18 Construction facilities.
 - .19 Temporary barriers and enclosures.
 - .20 Temporary controls.
 - .21 Field engineering and layout of work.
 - .22 Site safety.
 - .23 Site security.
 - .24 Cleaning and waste management.
 - .25 Closeout procedures and submittals.
 - .26 Procedures for publishing Certificate of Substantial Performance of the Work, including identification of publisher, and procedures for notifying Subcontractors and Suppliers of publication.
 - .27 Commissioning.
 - .28 Other items.

1.5 PREINSTALLATION MEETINGS

- .1 During course of the Work, schedule preinstallation meetings as required by Contract Documents.
- .2 Wherever possible, schedule preinstallation meetings on same date as regularly scheduled progress meetings.
- .3 Contractor, affected Subcontractors and Suppliers, Consultant, manufacturer's representatives, field inspectors and supervisors, and any other specified parties are to be in attendance.
- .4 Agenda will include the following:
 - .1 Review of existing conditions and affected parts of the Work, and any testing thereof.
 - .2 Review of installation procedures and requirements.
 - .3 Review of environmental and field condition requirements.
 - .4 Schedule of the applicable parts of the Work.
 - .5 Schedule of submission for samples and other items requiring Consultant's selection.
 - .6 Requirements for Temporary Work.
 - .7 Requirements for notification for reviews. Allow a minimum of 48 hours notice for Consultant to review the affected parts of the Work.

- .8 Requirements for inspections and tests as applicable. Schedule and undertake inspections and tests.
- .9 Delivery schedule for Products.
- .10 Special requirements and procedures necessary to comply with regulatory requirements and authorities having jurisdiction.

1.6 CONSTRUCTION PROGRESS MEETINGS

- .1 Schedule regular bi-weekly construction progress meetings for duration of the Work.
- .2 Contractor, major Subcontractors currently involved in the Work, Consultant and Owner are to be in attendance.
- .3 Agenda will include the following:
 - .1 Review and approval of minutes from previous meeting.
 - .2 Work progress since previous meeting.
 - .3 Field observations, including any problems, difficulties, or concerns.
 - .4 Construction progress schedule.
 - .5 Submittals schedule.
 - .6 Proposed changes in the Work.
 - .7 Requests for information.
 - .8 Site safety issues.
 - .9 Maintenance of construction quality standards.
 - .10 Other business.

1.7 PROGRESS DRAW MEETINGS

- .1 Schedule regular monthly progress draw meetings for duration of the Work.
- .2 Contractor, Owner and Consultant are to be in attendance.
- .3 Submit to Consultant a copy of application for payment not less than two Working Days before scheduled progress draw meeting.
- .4 Consultant may require changes to application for payment prior to progress draw meeting occurring.

END OF SECTION

1 General

1.1 CONSTRUCTION PROGRESS SCHEDULE

.1 Format and Content:

- .1 Prepare schedule in the form of a critical path method (CPM) Gantt chart using appropriate scheduling software.
- .2 Incorporate a work breakdown structure identifying key activities, work packages, and major milestones, including long delivery Products, inspection and testing activities, preparation and review of mock-ups, Owner decisions for cash allowances, shutdown or closure activities, delivery of Owner-supplied Products, Owner performed work, demonstration and training activities, and similar items, at a sufficient level of detail to effectively manage construction progress.
- .3 Indicate milestone dates for Ready-for-Takeover and Substantial Performance of the Work.

.2 Submission:

- .1 Submit initial schedule to Owner and Consultant within 10 Working Days after Contract award.
- .2 Submit schedule as portable document format (.pdf) files.
- .3 Consultant will review format and content of initial schedule and request necessary changes, if any, within 5 Working Days after receipt.
- .4 If changes are required, resubmit finalized initial schedule within 5 Working Days after return of reviewed copy.
- .5 Submit updated progress schedule monthly to Owner and Consultant, indicating actual and projected start and finish dates with report date line and progress, activity relationships, critical path, float and baseline comparison to current progress.

1.2 SUBMITTALS SCHEDULE

.1 Format and Content:

- .1 Prepare schedule identifying required Shop Drawings, Product data and sample submissions, including samples required for testing and including those for Owner-supplied Products.
- .2 Prepare schedule in electronic format.
- .3 Incorporate separate line items for each required submittal, organized by Specification sections numbers and titles, and further broken down by individual Products and systems required.
- .4 For each required submittal, show planned earliest date for initial submission, earliest date for return of reviewed submittal by Consultant, and latest date for return of reviewed submittal without causing delay.
- .5 Allow time in schedule for resubmission of submittals, should resubmission be necessary.

.2 Submission:

- .1 Submit initial schedule to Owner and Consultant within 10 Working Days after Contract award.
- .2 Submit schedule as portable document format (.pdf) files.
- .3 Consultant will review format and content of initial schedule and request necessary changes, if any, within 5 Working Days after receipt.
- .4 If changes are required, resubmit finalized initial schedule within 5 Working Days after return of reviewed copy.
- .5 Submit updated submittals schedule monthly to Owner and Consultant.

1.3 SCHEDULE MANAGEMENT

- .1 A schedule submitted as specified and accepted by Consultant will become the baseline schedule and shall be used as the baseline for updates.

- .2 At regular progress meeting, review and discuss current construction progress and submittals schedules with Consultant and Owner, including activities that are behind schedule and planned measures to regain schedule slippage in key areas on or near the critical path.
- .3 Activities considered behind schedule are those with start or completion dates later than the dates shown on the baseline schedule.

1.4 CONSTRUCTION DAILY LOG

- .1 Maintain a construction log, recording on a daily basis the following information:
 - .1 Number of workers actively working at Place of the Work, organized on a Subcontract basis.
 - .2 Subcontractors present at Place of the Work.
 - .3 Identify the parts of the Work being worked on.
 - .4 Identify the working hours being kept at Place of the Work.
 - .5 Activities with intermittent progress.
 - .6 Time lost with an explanation as to cause.
 - .7 Difficulties encountered, such as construction activity delays, labour inefficiencies, labour shortages, etc.
 - .8 Product deliveries.
 - .9 Equipment mobilization and de-mobilization.
 - .10 Demolition conditions.
 - .11 Start and finish dates for each part of the Work.

1.5 RECORDING ACTUAL SITE CONDITIONS ON AS-BUILT DRAWINGS

- .1 Keep one hard-copy set of Drawings at Place of the Work for the purpose of creating as-built drawings. Record information and maintain as-built drawings in clean, dry and legible condition.
- .2 Clearly label each drawing as "AS-BUILT DRAWING". Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
- .3 Record actual construction including:
 - .1 Measured depths of elements of foundation in relation to finish first floor datum.
 - .2 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - .3 Measured locations of pipes, ducts, conduits, outlets, fixtures, access panels and appurtenances, referenced to visible and accessible features of construction.
 - .4 Field changes of dimension and detail.
 - .5 Changes made by Change Orders and Supplemental Instructions.
 - .6 References to Shop Drawings, where Shop Drawings show more detail.
- .4 Do not use as-built drawings for construction purposes.

1.6 PROGRESS PHOTOGRAPHS

- .1 Arrange for periodic digital photography to document and record progress of the Work.
- .2 Photographs will be properly exposed and in focus, with unobstructed views.
- .3 Identify each photograph by Project name and date taken.
- .4 Format photographs as .jpg, .bmp or .tif format files in high definition resolution.
- .5 Submit progress photographs monthly as part of current application for payment.
- .6 Submit additional photographs showing special conditions when requested by Consultant.

- .7 Do not use progress photographs, or any other Project photographs for promotional purposes without Owner's written consent.

END OF SECTION

1 General

1.1 ADMINISTRATIVE

- .1 Submit specified submittals to Consultant for review. Submit with reasonable promptness and in orderly sequence so as to not cause delay in the Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time or for Product substitutions or other deviations from Drawings and Specifications.
- .2 Where required by authorities having jurisdiction, submit submittals to authorities having jurisdiction for review and approval.
- .3 Do not proceed with Work affected by a submittal until review is complete.
- .4 Present Shop Drawings, Product data and samples in SI Metric units. Where items or information is not produced in SI Metric units, converted values are acceptable.
- .5 Review submittals, verifying field measurements where applicable, and affix Contractor's review stamp prior to submission to Consultant. Contractor's review stamp represents that necessary requirements have been determined and verified, and that the submittal has been checked and coordinated with requirements of the Work and Contract Documents.
- .6 Verify field measurements and affected adjacent work is coordinated.
- .7 Submittals not meeting specified requirements will be returned with comments.
- .8 Reproduction of construction Drawings to serve as background for Shop Drawings is not permitted.
- .9 Digital files are to be electronically created from original files. Scanned images will be rejected.
- .10 Do not propose Substitutions or deviations from Contract Documents via Shop Drawing, Product data and sample submittals.

1.2 SHOP DRAWINGS AND PRODUCT DATA

- .1 Indicate Products, methods of construction, and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of the Work.
- .2 Where Products attach or connect to other Products, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross-references to Drawings, Specifications and other already reviewed Shop Drawings.
- .3 Accompany submittals with a transmittal form containing the following information:
 - .1 Date.
 - .2 Project title and number.
 - .3 Contractor's name and address.
 - .4 Identification of each submittal item and quantity.
 - .5 Other pertinent data.
- .4 Shop Drawing submittals will include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor.
 - .2 Supplier.
 - .3 Manufacturer.
 - .4 Contractor's stamp, date, and signature of Contractor's authorized representative responsible for Shop Drawing review, indicating that each Shop Drawing has been

reviewed for compliance with Contract Documents and, where applicable, that field measurements have been verified.

- .5 Details of appropriate portions of the Work as applicable:
 - .1 Fabrication.
 - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
 - .3 Setting or erection details.
 - .4 Capacities.
 - .5 Performance characteristics.
 - .6 Standards.
 - .7 Operating weight.
 - .8 Wiring diagrams.
 - .9 Single line and schematic diagrams.
 - .10 Relationships to other parts of the Work.
 - .5 Product data submittals for controlled Products must include safety data sheets (SDS).
 - .6 Submit electronic copy of Shop Drawings, as portable document format (.pdf) files, where specified in Product Specifications.
 - .7 Submit electronic copy of Product data sheets or brochures, as portable document format (.pdf) files, where specified in Product Specifications.
 - .8 Where a submittal includes information not applicable to the Work, clearly identify applicable information and strike out non-applicable information.
 - .9 Supplement standard information to include details applicable to Project.
 - .10 Allow 10 Working Days for Consultant's review of each submittal and incorporate submittals schedule specified in Section 01 32 00. Allow additional 5 Working Days where subconsultant or commissioning agent review is required.
 - .11 If upon Consultant's review no errors or omissions are discovered, or if only minor corrections are required as indicated, submittal will be returned and fabrication or installation of work may proceed.
 - .12 If upon Consultant's review significant errors or omissions are discovered, a copy noted as such will be returned for correction and resubmission. Do not commence fabrication or installation.
 - .13 Consultant's notations on submittals are intended to ensure compliance with Contract Documents and are not intended to constitute a change in the Work requiring change to Contract Price or Contract Time. If Contractor considers any Consultant's notation to be a change in the Work, promptly notify Consultant in writing before proceeding with the Work.
 - .14 Resubmit corrected submittals through same procedure indicated above, before any fabrication or installation of the Work proceeds. When resubmitting, notify Consultant in writing of any revisions other than those requested by Consultant.
- 1.3 ENGINEERED SUBMITTALS
- .1 Submittals required to be sealed by professional engineer are to be prepared, sealed, signed and dated under direct control and supervision of a qualified professional engineer licensed to practice at Place of the Work.
 - .2 Include proof of Submittal engineer's professional liability insurance with a minimum limit of liability of \$5,000,000 per claim. Identify insurer, policy number and policy term on duly signed certificate of insurance.

- .3 Design includes life safety, sizing of supports, anchors, framing, connections, spans and as additionally required to meet or exceed requirements of applicable codes, standards, regulations, authorities having jurisdiction and design requirements of Contract Documents.
- .4 Engineered submittals are to include design calculations, complete with references to codes and standards used in such calculations, supporting the proposed design represented in the submittal. Prepare calculations in a clear and comprehensive manner so that they can be properly reviewed.
- .5 Submittal engineer shall undertake periodic field review, including review of associated mock-ups when applicable. Such reviews will include review during fabrication at the point of manufacture, and during installation at Place of the Work. Prepare and submit a field review report for each review undertaken.
- .6 Conduct field reviews at intervals appropriate to the progress of the parts of the Work relevant to the engineered submittal. Report on progress and quality of the affected parts of the Work. Determine if installation is in general conformity with Contract Documents and in strict conformance with the accepted engineered submittal.
- .7 Upon completion of the parts of the Work affected by an engineered submittal, submittal engineer shall prepare and submit a Letter of General Conformity to Contractor, Consultant and authorities having jurisdiction. Certify that the parts of the Work affected by the engineered submittal have been designed, fabricated and installed in accordance with Contract Documents and applicable regulatory requirements.
- .8 Include costs of submittal engineer's services in Contract Price.

1.4 SAMPLES

- .1 Submit samples for Consultant's review as requested in Contract Documents.
- .2 Label samples as to origin, Project name, and intended use.
- .3 Deliver samples prepaid to Consultant's business address.
- .4 Notify Consultant in writing of any deviations in samples from requirements of Contract Documents.
- .5 Where a required colour, pattern or texture has not been specified, submit full range of available Products meeting other specified requirements.
- .6 Consultant selection from samples is not intended to change Contract Price or Contract Time. If a selection would affect Contract Price or Contract Time, notify Consultant in writing prior to proceeding with the Work.
- .7 Resubmit samples as required by Consultant to comply with Contract Documents.
- .8 Reviewed and accepted samples will establish the standard against which installed Work will be reviewed.

1.5 INTERFERENCE DRAWINGS

- .1 Prepare interference drawings, identifying and resolving potential conflicts among various parts of the Work, including sprinkler systems, HVAC ductwork, plumbing and drainage lines, lighting and electrical systems.
- .2 Submit interference drawings electronically as portable document format (.pdf) files to Consultant prior to commencement of the Work.
- .3 Coordinate and review interference drawings with affected Subcontractors prior to commencement of their portions of the Work.

1.6 CERTIFICATES AND CERTIFICATION SUBMITTALS

- .1 Submit written statements, as requested in Contract Documents, certifying installed Products meet specified criteria.
- .2 Include signature of person responsible for preparing certification.

1.7 TEST AND EVALUATION REPORTS

- .1 Submit manufacturers' test and evaluation reports electronically as portable document format (.pdf) files for requirements requested in Product Specifications and as Consultant may reasonably request.
- .2 Ensure results are expressed in SI Metric units of measurement. Test and evaluation reports recording results only in Imperial units of measurement may be rejected.
- .3 Clearly indicate compliance with specified performance criteria, tested in accordance with specified test methods, and conducted by an independent testing agency.
- .4 Test results achieved through the use of alternative test methods will be rejected.

END OF SECTION

1 General

1.1 PROPER CONDUCT OF WORKERS

- .1 Ensure workers conduct themselves in a proper and civilized manner at all times.
- .2 Workers using improper language, cat calls, lewd comments or improper behaviour will be required to leave Place of the Work and will be replaced by Contractor.
- .3 Workers are required to be properly attired at all times.
- .4 Workers wearing clothing exhibiting hateful or offensive images or language will be required to replace or cover such clothing. Workers refusing to do so will be required to leave Place of the Work and will be replaced by Contractor.
- .5 Smoking or vaping of any substance is not permitted at Place of the Work.
- .6 Consumption of alcohol and use of controlled substances is not permitted at Place of the Work.

1.2 SPECIAL PROCEDURES FOR INFECTION CONTROL

- .1 Conform to latest edition of CCA COVID-19 - Standardized Protocols for All Canadian Construction Sites.

1.3 LABOUR CONDITIONS

- .1 Ensure rates of wages, working hours and working conditions at Place of the Work are in accordance with regulatory requirements and authorities having jurisdiction.

1.4 EMERGENCY CONTACT INFORMATION

- .1 Submit emergency contact information for site superintendent to authority having jurisdiction; for their use 24 hours a day, 7 days a week, 52 weeks a year.
- .2 Immediately notify authority having jurisdiction when emergency contact information changes.

1.5 FIRST AID PERSONNEL

- .1 A minimum of one person trained in basic first aid must be present at Place of the Work at all times during performance of the Work.
- .2 This person may perform other duties, but must be immediately available to render first aid when needed.

1.6 SPECIAL PROCEDURES FOR CONTRACTORS WORKING IN AN EXISTING FACILITY

- .1 Comply with Owner's procedures and requirements for construction personnel working in existing facilities.
- .2 Conform to latest edition of "Guidelines For Maintaining Fire Safety During Construction in Existing Buildings", as issued by Office of the Fire Marshal.
- .3 Coordinate requirements with local fire department. Discuss fire safety planning issues and alternative measures.

1.7 SPILL RESPONSE

- .1 Prepare and initiate a spill response procedure in accordance with appropriate authorities having jurisdiction before commencing the Work.
- .2 Supply and maintain spill kit at Place of the Work.

1.8 SPECIAL PROCEDURES FOR WORKING IN CONFINED SPACES

- .1 Perform work in confined spaces in accordance with applicable regulatory requirements.
- .2 Work in confined spaces must be supervised and performed by licenced confined space and hazardous materials personnel.

1.9 SPECIAL PROCEDURES FOR WORKING WITH DESIGNATED SUBSTANCES

- .1 Prepare and initiate a health and safety plan in accordance with authorities having jurisdiction prior to commencing construction operations involving excavating, removing, transporting, handling or disposing of potentially contaminated materials.
- .2 Keep an up-to-date copy of health and safety plan at Place of the Work.
- .3 Adhere to health and safety plan for duration of removal and disposal of contaminated material from Place of the Work.
- .4 Provide and maintain a safe working environment for on-site personnel and minimize the impact of construction activities on general public and surrounding environment.
- .5 Verify workers and visitors to Place of the Work have and are adequately trained in the use of appropriate personal protective equipment.
- .6 Should any unforeseen, or site-peculiar safety related factor, hazard, or condition become evident during performance of the Work, immediately notify authority having jurisdiction and Consultant, and take prudent temporary action to establish and maintain safe working conditions until suitable permanent action can be implemented. Safeguard workers, the public and the surrounding area from contamination.
- .7 Perform routine air monitoring at Place of the Work, testing for organic vapours, explosive conditions and oxygen deficient conditions. Evacuate affected areas immediately and implement corrective measures if unsatisfactory conditions are discovered.
- .8 Guidelines by Authorities Having Jurisdiction: Conform to the following guideline documents issued by Province of Ontario:
 - .1 Silica on Construction Projects.
 - .2 Lead on Construction Projects.
- .9 Mercury Precautions: Ensure workers handling, removing and disposing of mercury-containing materials have been properly trained by a competent and qualified person.
- .10 In the event of injury to on-site personnel, contact designated hospital and describe injury prior to or during transport of injured personnel. Transport injured personnel to designated medical facility along a predefined route.
- .11 Take appropriate measures to minimize contact of construction vehicles and Construction Equipment with potentially contaminated materials. Decontaminate construction vehicles, Construction Equipment and workers that have come into contact with contaminated materials prior to their leaving Place of the Work.

END OF SECTION

1 General

1.1 REFERENCE STANDARDS

- .1 Reference Standards means consensus standards, trade association standards, guides, and other publications expressly referenced in Contract Documents.
- .2 Where an edition or version date is not specified, referenced standards shall be deemed to be the latest edition or revision issued by the publisher at the time of bid closing. However, if a particular edition or revision date of a specified standard is referenced in an applicable code or other regulatory requirement, the regulatory referenced edition or version shall apply.
- .3 Reference standards establish minimum standards. If Contract Documents call for requirements that differ from a referenced standard, the more stringent requirements shall govern.
- .4 If compliance with two or more reference standards is specified and the standards establish different or conflicting requirements, comply with the most stringent requirement. Refer uncertainties to Consultant for clarification.
- .5 Specifications refer to standards writing, testing and certification organizations by their acronyms or initialisms, as follows:
 - .1 AA The Aluminum Association;
 - .2 AABC Associated Air Balance Council;
 - .3 AAMA American Architectural Manufacturers Association;
 - .4 ACI American Concrete Institute;
 - .5 AISC American Iron and Steel Construction;
 - .6 AMCA Air Movement and Air Control Association;
 - .7 ANSI American National Standards Institute;
 - .8 ARI Air Conditioning and Refrigeration Institute;
 - .9 ASCC American Society of Concrete Contractors;
 - .10 ASME American Society of Mechanical Engineers;
 - .11 ASTM American Society for Testing and Materials;
 - .12 ASHRAE American Society of Heating, Refrigeration and Air Conditioning Engineers, Inc.;
 - .13 AWMAC Architectural Woodwork Manufacturers' Association of Canada;
 - .14 AWPA American Wire Producers Association;
 - .15 BHMA Builders Hardware Manufacturers Association;
 - .16 BIA Brick Industry Association;
 - .17 CaGBC Canadian Green Building Council;
 - .18 CCMPA Canadian Concrete Masonry Producers Association;
 - .19 CFCA Concrete Floor Contractors Association of Canada;
 - .20 CGA Canadian Gas Association;
 - .21 CGSB Canadian General Standards Board;
 - .22 CHPVA Canadian Hardwood Plywood and Veneer Association;
 - .23 CISC Canadian Institute of Steel Construction;
 - .24 CISCA Ceiling & Interior Systems Construction Association;
 - .25 CKCA Canadian Kitchen Cabinet Association;
 - .26 CLFMI Chain Link Fence Manufacturers' Institute;
 - .27 CPC Concrete Polishing Council;
 - .28 CPCI Canadian Precast Concrete Institute;
 - .29 CPCQA Canadian Precast Concrete Quality Assurance;
 - .30 CPSC Consumer Product Safety Commission;
 - .31 CRCA Canadian Roofing Contractors' Association;
 - .32 CRI Carpet and Rug Institute;
 - .33 CSA Canadian Standards Association;
 - .34 CSC Construction Specifications Canada;
 - .35 CSDMA Canadian Steel Door Manufacturers' Association;

.36	CSSBI	Canadian Sheet Steel Building Institute;
.37	CUFCA	Canadian Urethane Foam Contractors Association Inc.;
.38	CWB	Canadian Welding Bureau;
.39	CWC	Canadian Wood Council;
.40	CWTA	Canadian Wood Truss Association;
.41	DASMA	Door & Access Systems Manufacturers' Association, International;
.42	DHI	Door and Hardware Institute;
.43	DIN	Deutsches Institut für Normung E.V.;
.44	GA	Gypsum Association;
.45	GANA	Glass Association of North America;
.46	HPVA	Hardwood Plywood and Veneer Association;
.47	ICEA	Insulated Cable Engineers Association;
.48	ICRI	International Concrete Repair Institute;
.49	IEEE	Institute of Electrical and Electronics Engineers;
.50	IGMAC	Insulated Glass Manufacturers' Association of Canada;
.51	ISCA	Interior Systems Contractors Association of Ontario;
.52	IWFA	International Window Film Association;
.53	LEED	Leadership in Energy and Environmental Design;
.54	MPI	Master Painters' Institute;
.55	MSS	Manufacturers Standardization Society of the Valve and Fittings Industry;
.56	NAAMM	National Association of Architectural Metal Manufacturers;
.57	NCMA	National Concrete Masonry Association;
.58	NEMA	National Electrical Manufacturers Association;
.59	NFPA	National Fire Protection Association;
.60	NFRC	National Fenestration Rating Council Incorporated;
.61	NHLA	National Hardwood Lumber Association;
.62	NLGA	National Lumber Grades Authority;
.63	OIRCA	Ontario Industrial Roofing Contractors' Association;
.64	OMCA	Ontario Masonry Contractors' Association;
.65	OWTFA	Ontario Wood Truss Fabricators Association;
.66	PCI	Precast Concrete Institute;
.67	PEI	Porcelain Enamel Institute;
.68	RSIC	Reinforcing Steel Institute of Canada;
.69	SEFA	Scientific Equipment & Furniture Association;
.70	SMACNA	Sheet Metal and Air Conditioning Contractors' National Association;
.71	SSPC	The Society for Protective Coatings;
.72	SWI	Sealant and Waterproofers' Institute;
.73	TPIC	Truss Plate Institute of Canada;
.74	TSSA	Technical Standards and Safety Authority;
.75	TTMAC	Terrazzo, Tile and Marble Association of Canada;
.76	ULC	Underwriters' Laboratories of Canada;
.77	ULI	Underwriters' Laboratories Incorporated;
.78	WDMA	Window and Door Manufacturers' Association; and
.79	WHI	Warnock-Hersey International.

1.2 QUALITY ASSURANCE

- .1 Quality of work shall be the best quality, executed by workers experienced and skilled in the respective duties for which they are employed.
- .2 Immediately notify Consultant if required work is such as to make it impractical to produce required results.
- .3 Decisions as to the quality or fitness of work in cases of dispute rest solely with Consultant, whose decision is final.

1.3 INDEPENDENT INSPECTION AND TESTING AGENCIES

- .1 Except as otherwise specified, Owner may retain and pay directly for independent inspection and testing agencies to inspect, test or perform other quality control reviews of parts of the Work for their own quality control purposes.
- .2 Retain and pay for inspection and testing that is for Contractor's own quality control or is required by regulatory agencies.
- .3 Employment of inspection and testing agencies by Contractor or Owner does not relieve Contractor from responsibility to perform the Work in accordance with Contract Documents.
- .4 Allow and arrange for inspection and testing agencies to have access to the Work, including access to off-site manufacturing and fabrication plants.
- .5 For inspection and testing required by Contract Documents or by authorities having jurisdiction, notify Consultant and inspection and testing agencies in a timely manner in advance of required inspection and testing.
- .6 Submit test samples required for testing in accordance with submittals schedule specified in Section 01 32 00.
- .7 Supply labour, Construction Equipment and temporary facilities needed to obtain and handle test samples at Place of the Work.
- .8 If defects are revealed during inspection and testing, the appointed agency will request additional inspection and testing to ascertain full degree of defect. Correct defect and irregularities as advised by Consultant at no additional cost to Owner. Pay costs for retesting and reinspection.

1.4 INSPECTION AND TESTING AGENCY REPORTS

- .1 For inspection and testing required by Contract Documents or by regulatory requirements, and performed by Contractor retained inspection and testing agencies, promptly submit copies of reports to Consultant, Owner and authority having jurisdiction. Submit reports electronically as portable document format (.pdf) files.
- .2 For inspection and testing performed by Owner-retained inspection and testing agencies, copies of inspection and testing agency reports will be promptly forwarded to Contractor.
- .3 In all cases, promptly forward inspection and testing agency reports to affected Subcontractors.

1.5 MANUFACTURER FIELD REVIEW

- .1 When required by Contract Documents, arrange for a qualified manufacturer's representative to review relevant parts of the Work and verify those portions of the Work are being executed in accordance with manufacturer's written recommendations and installation guidelines.
- .2 Manufacturer field review services are intended to ensure specified Products are being used and are being installed on substrates that have been prepared in accordance with manufacturer's written recommendations.
- .3 Unless specified otherwise, manufacturer's representative will undertake a minimum of one field review, with additional reviews being conducted as deemed necessary by manufacturer.
- .4 Within two Working Days of a field review, manufacturer will submit a field review report recording manufacturer representative's observations and recommendations.
- .5 Distribute copies of manufacturer's field review reports to affected Subcontractors, Consultant and authorities having jurisdiction.

1.6 MOCK-UPS

- .1 Prepare mock-ups of Work as specified in Contract Documents with reasonable promptness and in an orderly sequence, so as not to cause delay in the Work.
- .2 If a mock-up location is not indicated in Drawings or Specifications, locate where directed by Consultant.
- .3 Include all necessary Products and labour required to fully construct mock-ups.
- .4 Modify mock-up as required until Consultant acceptance is obtained.
- .5 Accepted mock-ups establish an acceptable standard for the Work.
- .6 Protect mock-ups from damage until the Work they represent is complete.
- .7 Unless specified otherwise, accepted mock-ups forming part of the Work may remain as part of the Work.
- .8 Remove mock-ups only when the Work they represent is complete or when otherwise directed by Consultant.

1.7 MILL TESTS

- .1 Submit mill tests certificates as may be requested.

1.8 EQUIPMENT AND SYSTEMS

- .1 Submit adjustment and balancing reports for mechanical, electrical and building equipment systems.
- .2 Refer to facility services Sections for definitive requirements.

END OF SECTION

- 1 General
- 1.1 ADMINISTRATIVE REQUIREMENTS
 - .1 Provide temporary utilities as specified and as otherwise necessary to perform the Work.
 - .2 Maintain temporary utilities in a neat and tidy condition.
 - .3 Remove temporary utilities from Place of the Work after use.
- 1.2 TEMPORARY WATER SUPPLY
 - .1 Connect to and use Owner's existing water supply for temporary use during construction, subject to existing available volume and pressure. Usage at no cost to Contractor.
 - .2 Arrange and pay for necessary water supply connections and disconnections.
- 1.3 TEMPORARY HEATING AND VENTILATION
 - .1 Contractor may connect to and use Owner's existing supply of natural gas or propane for temporary use during construction, subject to existing available volume and pressure. Usage at no cost to Contractor.
 - .2 Vent construction heaters in enclosed spaces to exterior or use flameless type construction heaters.
 - .3 Provide temporary heat for the Work as required to:
 - .1 Facilitate progress of the Work.
 - .2 Protect the Work against dampness and cold.
 - .3 Prevent moisture condensation on surfaces, freezing, or other damage to finishes or stored Products.
 - .4 Maintain specified minimum ambient temperatures and humidity levels for storage, installation, and curing of Products.
 - .5 After Project is enclosed, maintain interior air temperature between 10 degrees C and 35 degrees C.
 - .4 Provide temporary ventilation for the Work as required to:
 - .1 Prevent accumulation of fumes, exhaust, vapours, gases and other hazardous, noxious, or volatile substances in enclosed spaces, as required to maintain a safe work environment meeting applicable regulatory requirements.
 - .2 Ensure hazardous, noxious, or volatile substances do not migrate to Owner occupied spaces.
 - .3 Ventilate temporary sanitary facilities.
 - .5 After Project is enclosed, maintain minimum one air change per hour for enclosed areas receiving architectural finishes. Do not allow excessive build up of moisture in the Work.
- 1.4 TEMPORARY ELECTRICAL POWER AND LIGHTING
 - .1 Connect to and use Owner's existing electrical supply for temporary use during construction. Usage at no cost to Contractor.
 - .2 Existing maximum power supply of 240V AC, 3-phase, 60 Hz, 20 amps, is available for temporary use during construction.
 - .3 Arrange and pay for necessary connections and disconnections of temporary power and lighting in accordance with regulatory requirements.

END OF SECTION

1 General

1.1 ADMINISTRATIVE REQUIREMENTS

- .1 Provide temporary construction facilities as necessary for performance of the Work and in compliance with applicable regulatory requirements.
- .2 Maintain temporary construction facilities in good condition for duration of the Work.
- .3 Remove temporary construction facilities from Place of the Work when no longer required.

1.2 CONSTRUCTION PARKING

- .1 Limited parking will be permitted at Place of the Work at locations indicated on Drawings as long as it does not disrupt continuing operation of existing facility.

1.3 VEHICULAR ACCESS

- .1 Provide and maintain adequate access to Place of the Work, ensuring continuous access by emergency vehicles.
- .2 Existing private roadways at Place of the Work may be used for access to Place of the Work. Contractor assumes responsibility for any damage caused by construction traffic, and agrees to prevent or promptly clean up mud tracking or material spillage.
- .3 Clean municipal roadways located immediately adjacent to Place of the Work, regardless of cause, as follows:
 - .1 At least once per week on Friday afternoons, just before end of Working Day,
 - .2 After construction equipment or vehicles have left Place of the Work, resulting in soil or debris being deposited on roadway surfaces,
 - .3 As directed by authorities having jurisdiction, and
 - .4 As directed by Consultant.
- .4 Municipal Road Closures: Conform to requirements of authorities having jurisdiction.

1.4 FIELD OFFICES

- .1 Provide a temperature controlled and ventilated Contractor's field office, with suitable lighting, sufficiently sized and furnished to accommodate Project meetings and Contract Document layout.
- .2 Consultant's Field Office: Provide minimum 10 square metres of temporary office space for Consultant, either separately or within Contractor's field office.
- .3 Provide field office with at least one operable window and a lockable door.
- .4 Provide field office with temperature control, ventilation, and suitable power and lighting.
- .5 Equip field office with table and chairs to accommodate at least 8 meeting attendees, one 3-drawer filing cabinet and one Drawing rack.
- .6 Provide appropriate emergency and first aid equipment as required by authorities having jurisdiction. Mount equipment in a prominent and easily accessible location, complete with easily identifiable labels.
- .7 Provide public access wi-fi internet service for use by Contractor and Consultant.
- .8 Provide a photocopier / scanner for use by Contractor and Consultant.
- .9 Clean field office weekly.

- .10 Major Subcontractors may have their own field offices as necessary. Direct location of these offices.

1.5 STORAGE FACILITIES

- .1 Provide and maintain, in a clean and orderly condition, lockable weatherproof sheds for storage of Products and Construction Equipment.
- .2 Do not store Products or Construction Equipment in field office.

1.6 SANITARY FACILITIES

- .1 Provide a sufficient quantity of temporary sanitary facilities, separate for male and female workers, in accordance with authorities having jurisdiction.
- .2 Keep sanitary facilities clean and fully stocked with necessary supplies.
- .3 Permanent sanitary facilities may not be used during construction.
- .4 Except where connected to municipal sewer system, periodically remove wastes from Place of the Work.

1.7 FIRE PROTECTION

- .1 Provide and maintain temporary fire protection systems and equipment during construction.

1.8 TEMPORARY HOISTS AND CRANES

- .1 Provide, operate and maintain temporary hoists and cranes required for moving workers, Products and Construction Equipment.
- .2 Make financial arrangements with Subcontractors for use thereof.
- .3 Temporary hoists and cranes shall be operated by properly trained and qualified operators.

1.9 TEMPORARY SIGNS

- .1 No signs or advertisements, other than safety, warning or directional signs, are permitted at Place of the Work without Consultant's prior written approval.
- .2 Maintain signs in clean condition.
- .3 Remove and dispose of signs when directed by Consultant.

END OF SECTION

- 1 General
- 1.1 ADMINISTRATIVE REQUIREMENTS
 - .1 Provide temporary barriers and enclosures necessary to protect the public and building occupants and to secure Place of the Work during performance of the Work.
 - .2 Comply with applicable regulatory requirements.
 - .3 Maintain temporary barriers and enclosures in good condition for duration of the Work.
 - .4 Remove temporary barriers and enclosures from Place of the Work when no longer required.
- 1.2 FENCING
 - .1 Erect temporary security and safety site fencing of type and height determined by Contractor, subject to applicable regulatory requirements.
 - .2 Provide lockable access gates as required to facilitate construction access.
- 1.3 WEATHER ENCLOSURES
 - .1 Provide weather tight enclosures to unfinished door and window openings, top of shafts, and other openings in floors and roofs.
 - .2 Provide weather enclosures to protect floor areas where walls are not finished and to enclose work areas that require temporary heating.
 - .3 Design weather enclosures to withstand wind pressure and snow loading requirements.
- 1.4 DUST TIGHT SCREENS AND PARTITIONS
 - .1 Provide dust tight steel stud and gypsum board partitions to localize interior building areas from dust and noise generating activities.
 - .2 Erect, maintain and relocate screens and partitions as required to facilitate construction operations and Owner's operational requirements.
- 1.5 FIRE ROUTES
 - .1 Maintain fire access routes, including overhead clearances, for use by emergency response vehicles.
- 1.6 SECURITY AT PLACE OF THE WORK
 - .1 Become familiar with Place of the Work and surrounding neighbourhood.
 - .2 Provide adequate security measures to prevent vandalism, theft, arson and trespassing by unauthorized persons at Place of the Work.
 - .3 Maintain security measures for 24 hours a day, 7 days a week, 52 weeks a year, including times when construction may be shut down due to strikes or lockouts.
 - .4 Remove security measures upon Ready-for-Takeover.
- 1.7 PROTECTION OF BUILDING FINISHES
 - .1 Provide necessary temporary barriers and enclosures to protect existing and completed or partially-completed finished surfaces from damage during performance of the Work.

END OF SECTION

1 General

1.1 ADMINISTRATIVE REQUIREMENTS

- .1 Provide temporary controls necessary for performance of the Work and in compliance with applicable regulatory requirements.
- .2 Maintain temporary controls in good condition for duration of the Work.
- .3 Remove temporary controls and Construction Equipment used to provide temporary controls from Place of the Work when no longer required.

1.2 PLANT PROTECTION

- .1 Protect trees and other plant material designated to remain at Place of the Work where indicated on Drawings.
- .2 Protect trees and shrubs susceptible to damage during construction to OPSS.MUNI 801.
- .3 For trees designated to remain, protect roots inside dripline from disturbance or damage during excavation and grading. Avoid traffic, dumping and storage of materials over root zones.
- .4 Minimize stripping of topsoil near trees and other plant material designated to remain at Place of the Work.
- .5 Provide lockable access gates as required to facilitate construction access.

1.3 DUST AND PARTICULATE CONTROL

- .1 Implement and maintain dust and particulate control measures in accordance with applicable regulatory requirements.
- .2 Execute Work by methods that minimize dust from construction operations and spreading of dust at Place of the Work or to adjacent properties.
- .3 Provide temporary dust tight enclosures to prevent extraneous materials resulting from sandblasting or similar operations from contaminating air beyond immediate work area. Refer to Section 01 56 00.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.
- .5 Use appropriate covers on trucks hauling fine, dusty or loose materials.

1.4 DRAINAGE AT PLACE OF THE WORK

- .1 Maintain grades to ensure proper drainage at Place of the Work.
- .2 Prevent surface water runoff from leaving Place of the Work.
- .3 Prevent precipitation from infiltrating or from directly running off stockpiled waste materials. Cover stockpiled waste materials with an impermeable liner during periods of work stoppage including at end of each Working Day.
- .4 Control surface drainage from cuts and fills, from borrow and waste disposal areas, from stockpiles, staging areas and other work areas as required to prevent erosion and sedimentation.
- .5 Control surface drainage by ensuring gutters are kept open and water is not directed across or over pavements or sidewalks, except through pipes or properly constructed troughs. Ensure runoff from unfinished areas is intercepted and diverted to suitable outlets.

- .6 Periodically inspect and clean catch basins and storm lines at Place of the Work to ensure their continuous operation during performance of the Work and upon Ready-for-Takeover.

1.5 POLLUTION CONTROL

- .1 Take measures to prevent contamination of soil, water, and atmosphere through uncontrolled discharge of noxious or toxic substances and other pollutants, potentially causing environmental damage.
- .2 Be prepared, by maintaining appropriate materials, equipment, and trained personnel at Place of the Work, to intercept, clean up, and dispose of spills or releases that may occur. Promptly report spills and releases that may occur to:
 - .1 Authority having jurisdiction.
 - .2 Person causing or having control of pollution source, if known.
 - .3 Owner and Consultant.
- .3 Contact manufacturer of pollutant, if known and applicable, to obtain safety data sheets (SDS) and ascertain hazards involved and precautions and measures required in cleanup or mitigating actions.
- .4 Take immediate action to contain and mitigate harmful effects of the spill or release.

END OF SECTION

1 General

1.1 DEFINITIONS

- .1 Not In Contract (NIC) means an item that requires coordination for its later installation, and which is neither supplied nor installed as part of the Work.
- .2 Owner-supplied Product means a Product that will be supplied by Owner to Contractor for installation as part of the Work. Refer to Section 01 11 00.

1.2 COMMON PRODUCT REQUIREMENTS

- .1 Provide Products that are not damaged or defective, and suitable for purpose intended, subject to specified requirements. If requested by Consultant, furnish evidence as to type, source, and quality of Products Provided in the Work.
- .2 Products referred to in the singular implies the supply and installation of as many Products as necessary to complete the Work.
- .3 Unless specified otherwise, maintain uniformity of manufacture for like items throughout.
- .4 Unless specified otherwise, Consultant may select colours from manufacturer's complete range of available colours, textures and patterns, including those considered to be premium.
- .5 Permanent manufacturer's markings, labels, trademarks, and nameplates on Products are not acceptable in prominent locations, except where required by regulatory requirements or for operating instructions, or when located in mechanical or electrical rooms.

1.3 PRODUCT OPTIONS

- .1 Subject to the provisions of Section 01 25 00:
 - .1 Wherever a Product or manufacturer is specified by a single proprietary name, Provide the named Product only.
 - .2 Wherever more than one Product or manufacturer is specified by proprietary name for a single application, Provide any one of the named Products.
- .2 Wherever a Product is specified by reference to a standard only, Provide any Product that meets or exceeds the specified standard. If requested by Consultant, submit information verifying that the proposed Product meets or exceeds the specified standard.
- .3 Wherever a Product is specified by descriptive or performance requirements, and includes a named example preceded by the abbreviation "eg." (meaning "for example"), Provide the named Product or a similar Product manufactured by one of the named manufacturers that meets or exceeds the specified descriptive and performance characteristics. If requested by Consultant, submit information verifying that a proposed Product meets or exceeds the specified requirements.
- .4 Wherever a Product is specified by descriptive or performance requirements only, Provide any Product that meets or exceeds specified requirements. If requested by Consultant, submit information verifying that proposed Product meets or exceeds specified requirements.

1.4 PRODUCT AVAILABILITY AND DELIVERY TIMES

- .1 Promptly upon Contract award and periodically during construction, review and confirm Product availability and delivery times. Order Products in sufficient time to meet the construction progress schedule and the Contract Time.
- .2 If a specified Product is no longer available, promptly notify Consultant. Consultant will take action as required.

- .3 If delivery delays are foreseeable, for any reason, promptly notify Consultant.
 - .1 If a delivery delay is beyond Contractor's control, Consultant will give direction how to proceed.
 - .2 If a delivery delay is caused by something that was or is within Contractor's control, Contractor shall propose actions to maintain the construction progress schedule for Consultant's review and acceptance.

1.5 STORAGE, HANDLING AND PROTECTION

- .1 Store, handle and protect Products during transportation to Place of the Work and before, during and after installation in a manner to prevent damage, adulteration, deterioration and soiling.
- .2 Comply with manufacturer's instructions for storage, handling and protection.
- .3 Store packaged or bundle Products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove from packaging or bundling until required in the Work.
- .4 Comply with the requirements of the workplace hazardous materials information system (WHMIS) regarding use, handling, storage and disposal of hazardous materials, including requirements for labelling, and submission of safety data sheets (SDS).
- .5 Store Products subject to damage from weather in weatherproof enclosures.
- .6 Store sheet Products on flat, solid supports and keep clear of ground. Slope to shed moisture.
- .7 Store Products within the occupied facility only as approved by Owner.
- .8 Move Products stored within the Work should they become a hindrance to the Work or to the delivery of other Products.
- .9 Remove flammable rubbish and packing materials from Place of the Work on a daily basis.
- .10 Remove and replace damaged Products.

END OF SECTION

1 General

1.1 EXISTING UTILITIES AND STRUCTURES

- .1 Before commencing excavation, drilling or other earthwork, establish or confirm location and extent of existing utilities and structures in work area.
- .2 Promptly notify Consultant if concealed utilities and structures, or their locations differ from those indicated in Contract Documents or in available project information. Consultant will give appropriate direction.
- .3 Record locations of maintained, re-routed and abandoned utility lines.

1.2 VERIFICATION OF EXISTING CONDITIONS

- .1 Where work specified in any Section is dependent on the work of another Section or Sections having been properly completed, verify that work is complete and in a condition suitable to receive subsequent work. Commencement of work of a Section that is dependent on the work of another Section or Sections having been properly completed means acceptance of those existing conditions.
- .2 Verify ambient conditions are suitable before commencing the work of any Section and will remain suitable for as long as required for proper setting, curing, or drying of Products used.
- .3 Ensure substrate surfaces are clean, dimensionally stable, cured and free of contaminants.
- .4 Notify Consultant in writing of unacceptable conditions.

END OF SECTION

1 General

1.1 DEFINITIONS

- .1 Make Good means to restore new or existing work after being damaged, cut, patched or rejected by Consultant. Use materials identical to original materials, with visible surfaces matching the appearance of original surfaces in all details, and with no apparent junctions between new and original surfaces.

1.2 COLD WEATHER REQUIREMENTS

- .1 Perform the Work continually and avoid weather delays.
- .2 Provide temporary heating and cold weather working measures during cold weather periods and winter months. Refer to Sections 01 51 00 and 01 56 00.
- .3 Construction delays, whether the responsibility of Contractor or otherwise, which result in unanticipated or extended winter work will not be considered justification for claims for additional payments.
- .4 Uniformly distribute heat to avoid hot or cool areas or excessive drying.

1.3 MANUFACTURER'S INSTRUCTIONS

- .1 Install, erect, or apply Products in strict accordance with manufacturer's instructions.
- .2 Specifications requiring the installation, erection or application of Products to conform to a consensus standard does not replace or supercede the requirement to also conform to manufacturer's instructions.
- .3 Where a manufacturer's instructions and the requirements of a specified consensus standard are contradictory, manufacturer's instructions will govern.
- .4 Notify Consultant in writing of conflicts between Contract Documents and manufacturer's instructions where, in Contractor's opinion, conformance with Contract Documents instead of manufacturer's instructions may be detrimental to the Work or may jeopardize manufacturer's warranty.
- .5 Do not rely on labels or enclosures supplied with Products. Obtain written instructions directly from manufacturers.
- .6 Allow manufacturer's representatives to have access to the Work at all times. Render assistance and facilities for such access so that manufacturer's representatives may properly perform their responsibilities. Refer to Section 01 40 00.

1.4 CONCEALMENT

- .1 Conceal pipes, ducts and wiring in floors, walls and ceilings in finished areas:
 - .1 After review by Consultant and authority having jurisdiction.
 - .2 Where locations differ from those shown on Drawings, after recording actual locations on as-built record drawings.
- .2 Provide incidental furring or other enclosure as required.
- .3 Notify Consultant in writing of interferences before installation.

1.5 FASTENINGS - GENERAL

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent materials.

- .2 Provide fasteners to full required complement. Products with missing fasteners will be rejected by Consultant.
- .3 Prevent electrolytic action and corrosion between dissimilar metals and materials by using suitable non-metallic strips, washers, sleeves, or other permanent separators to avoid direct contact.
- .4 Use non-corrosive fasteners and anchors for securing exterior work and in spaces where high humidity levels are anticipated.
- .5 Space fasteners within individual load limit or shear capacity, and ensure fasteners provide positive permanent anchorage.
- .6 Keep exposed fastenings to a minimum, space evenly and install neatly.
- .7 Do not use fastenings or fastening methods that may cause spalling or cracking of material to which anchorage is made.
- .8 Fasteners stressed in withdrawal will be rejected.
- .9 Powder-actuated fasteners are to be a system suitable for the specific application, corrosion-resistant, and capable of sustaining without failure a load equal to 10 times the design load when tested to ASTM E1190.
- .10 Do not use powder-actuated fasteners stressed in withdrawal for finished work.
- .11 Do not use powder-actuated fasteners within 100 mm of concrete or masonry edges.
- .12 Do not use powder-actuated fasteners in post-tensioned concrete.

1.6 FASTENINGS - EQUIPMENT

- .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .2 Bolts shall not project more than one diameter beyond nuts.

1.7 FIRE RATED ASSEMBLIES

- .1 When penetrating fire rated wall, ceiling or floor assemblies, completely seal voids with firestopping materials, smoke seals, or both, in full thickness of the construction element as required to maintain the integrity of the fire rated assembly.

1.8 TEMPLATES, BUILT-INS AND DIMENSIONS

- .1 Take field measurements and confirm dimensions necessary for proper execution of the Work.
- .2 Assume responsibility for accuracy and completeness of dimensions.
- .3 Provide forms, templates, anchors, inserts and accessories to be fixed to or inserted as part of the Work.
- .4 Prepare and submit setting drawings, templates and other information necessary for the placement and installation of Products, holes, sleeves, inserts, anchors, accessories, fastenings, connections and access panels.
- .5 Supply items in sufficient time, complete with templates and other necessary information, to accommodate installation without causing delay to the Work. Failure to do so will not result in an increase in Contract Price and Contract Time.

- .6 Verify the Work, as it proceeds, is executed in accordance with dimensions and positions indicated, which maintain levels and clearances to adjacent work, as set out in Contract Documents.
- .7 Verify details and field measurements at Place of the Work prior to fabricating Products of special design to ensure fit.

1.9 INTERFERENCES

- .1 Prior to commencement of the Work, coordinate placement of Products to ensure components are properly accommodated within designed spaces. Prepare and submit interference drawings as specified in Section 01 33 00.
- .2 Be responsible for additional work and costs necessitated by failure to coordinate the parts of the Work.
- .3 Provide adequate access and clearances around Products as required by authorities having jurisdiction and as required for maintenance purposes by manufacturers.
- .4 Notify Consultant if Contract Documents are in conflict with access and clearance requirements.

1.10 LOCATION OF FIXTURES, OUTLETS AND DEVICES

- .1 Consider location of fixtures, outlets, and devices indicated on Drawings as approximate.
- .2 Locate fixtures, outlets, and devices for minimum interference, maximum usable space, and as required to meet safety, access, maintenance, acoustic, and regulatory, including barrier free, requirements.
- .3 Promptly notify Consultant in writing of conflicting installation requirements for fixtures, outlets and devices. If requested, indicate proposed locations and obtain approval for actual locations.

1.11 REMEDIAL WORK AND MAKING GOOD

- .1 Notify Consultant of, and perform remedial work required to Make Good defective or unacceptable work.
- .2 Ensure properly qualified workers perform remedial work.
- .3 Coordinate adjacent affected work as required.
- .4 Make Good defective and damaged parts of the Work.
- .5 Make Good damage to property located adjacent to Place of the Work.
- .6 Make Good damage to existing surfaces designated to remain as part of the Work.
- .7 Make Good existing conditions as noted on Drawings.
- .8 Prioritize the correction of defective work which, in the sole discretion of Owner, adversely affects Owner's day to day operations.
- .9 Make Good damage to the Work resulting from lack of adequate heating protection.
- .10 Make Good damage to utility services in accordance with authority having jurisdiction.

END OF SECTION

1 General

1.1 REQUESTS FOR CUTTING, PATCHING AND REMEDIAL WORK

- .1 Submit written request in advance of cutting, coring or alteration which affects or is likely to affect:
 - .1 Structural integrity of any element of the Work.
 - .2 Integrity of weather-exposed or moisture-resistant elements.
 - .3 Efficiency, maintenance, or safety of any operational element.
 - .4 Visual qualities of sight-exposed elements.
 - .5 Work of Owner or Other Contractor.
 - .6 Warranty of Products affected.
- .2 Include in request:
 - .1 Identification of Project.
 - .2 Location and description of affected work, including drawings or sketches as required.
 - .3 Statement on necessity for cutting or alteration.
 - .4 Description of proposed work, and Products to be used.
 - .5 Alternatives to cutting and patching.
 - .6 Effect on work of Owner or Other Contractors.
 - .7 Written permission of affected Other Contractors.
 - .8 Date and time work will be executed.

1.2 PRODUCTS

- .1 Unless specified otherwise, when replacing existing or previously installed Products in the course of cutting and patching work, use replacement Products of same character and quality as those being replaced.
- .2 If an existing or previously installed Product must be replaced with a different Product, submit request for substitution as specified in Section 01 25 00.

1.3 PREPARATION

- .1 Inspect existing conditions as specified in Section 01 71 00.
- .2 Provide supports to assure structural integrity of surroundings.
- .3 Provide devices and methods to protect other portions of the Work from damage.
- .4 Provide protection from elements for areas that may be exposed by uncovering work.

1.4 EXISTING UTILITIES

- .1 Where the Work involves breaking into or connecting to existing utility services, give authority having jurisdiction, Owner and Consultant 48 hours notice for necessary interruption of facility services.
- .2 Maintain excavations free of water.
- .3 Keep duration of interruptions to a minimum.
- .4 Carry out interruptions after regular working hours of occupants, preferably on weekends, unless Owner's prior written approval is obtained.
- .5 Protect and maintain existing active services.
- .6 Record locations of services, including depth, on as-built drawings.
- .7 Construct or erect temporary barriers as specified in Section 01 56 00, as required to protect pedestrian and vehicular traffic.

1.5 CUTTING, PATCHING AND REMEDIAL WORK

- .1 Coordinate and perform the Work to ensure cutting and patching work is kept to a minimum.
- .2 Perform cutting, fitting, patching and remedial work to make the affected parts of the Work come together properly and complete the Work.
- .3 Provide openings in non-structural elements of the Work for penetrations of mechanical and electrical work.
- .4 Perform cutting by methods to avoid damage to other work.
- .5 Provide proper surfaces to receive patching, remedial work, and finishing.
- .6 Perform cutting, patching, and remedial work using competent and qualified specialists familiar with the Products affected, in a manner that neither damages nor endangers the Work.
- .7 Do not use pneumatic or impact tools without Consultant's prior written approval.
- .8 Ensure cutting, patching, and remedial work does not jeopardize manufacturers' warranties.
- .9 Refinish surfaces to match adjacent finishes. For continuous surfaces refinish to nearest intersection. For an assembly, refinish entire unit.
- .10 Fit work to pipes, sleeves, ducts, conduit and other penetrations through surfaces with suitable allowance for deflection, expansion, contraction, acoustic isolation and firestopping.
- .11 Maintain fire ratings of fire rated assemblies where cutting, patching or remedial work is performed. Completely seal voids or penetrations of assembly with firestopping and smoke seal materials to full depth or with suitably rated devices.

END OF SECTION

- 1 General
- 1.1 REGULATORY REQUIREMENTS
 - .1 Comply with applicable regulatory requirements when disposing of waste materials.
 - .2 Obtain permits from authorities having jurisdiction and pay disposal fees where required for disposal of waste materials and recyclables.
- 1.2 GENERAL CLEANING REQUIREMENTS
 - .1 Provide adequate ventilation during use of volatile or noxious substances. Do not rely on building ventilation systems for this purpose.
 - .2 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
 - .3 Prevent cross-contamination during cleaning process.
 - .4 Notify Consultant of the need for cleaning caused by Owner or Other Contractors.
- 1.3 PROGRESSIVE CLEANING AND WASTE MANAGEMENT
 - .1 Maintain the Work in tidy and safe condition, free from accumulation of waste materials and construction debris.
 - .2 Provide appropriate, clearly marked, containers for collection of waste materials and recyclables. Locate containers where they will not hinder the progress of the Work and Owner's continuing operations.
 - .3 Remove waste materials and recyclables from work areas, separate, and deposit in designated containers at end of each Working Day. Collect packaging materials for recycling or reuse.
 - .4 Remove waste materials and recyclables from Place of the Work at regular intervals.
 - .5 Clean interior building areas prior to start of finish work and maintain free of dust and other contaminants during finishing operations.
 - .6 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly finished surfaces nor contaminate building systems.
- 1.4 FINAL CLEANING
 - .1 Before final cleaning, arrange a meeting at Place of the Work to determine the acceptable standard of cleaning. Ensure Owner, Consultant, Contractor and cleaning Subcontractor are in attendance.
 - .2 Remove from Place of the Work surplus Products, waste materials, recyclables, Temporary Work and Construction Equipment not required to perform any remaining work.
 - .3 Provide professional cleaning by a recognized, established cleaning company.
 - .4 Lock or otherwise restrict access to each room or area after completing final cleaning in that area.
 - .5 Re-clean as necessary areas that have been accessed by Contractor's workers prior to Ready-for-Takeover.
 - .6 Remove stains, spots, marks and dirt from finished surfaces, mechanical and electrical fixtures, furniture, fitments, walls and floors.

- .7 Clean and polish glass, mirrors, hardware, wall tile, stainless steel, chrome, porcelain enamel, baked enamel, plastic laminate and all other finished surfaces, including mechanical and electrical fixtures. Replace broken, scratched or otherwise damaged glass.
- .8 Remove dust from lighting reflectors, lenses, lamps, bulbs and other lighting surfaces.
- .9 Vacuum clean and dust exposed wall, floor and ceiling surfaces, above suspended ceiling tiles, and behind grilles, louvres and screens.
- .10 Clean mechanical, electrical and other equipment. Replace filters for mechanical equipment if equipment has been used during construction.
- .11 Remove waste materials and debris from crawlspaces and other accessible concealed spaces.
- .12 Remove stains, spots, marks and dirt from exterior facades.
- .13 Clean exterior and interior window glass and frames.
- .14 Power wash exterior paved surfaces.
- .15 Use leaf blower to clean landscaped surfaces.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Dispose of waste materials and recyclables at appropriate municipal landfills and recycling facilities in accordance with applicable regulatory requirements.
- .2 Do not burn or bury waste materials at Place of the Work.
- .3 Do not dispose of volatile and other liquid waste such as mineral spirits, oil, paints and other coating materials, paint thinners, cleaners, and similar materials together with dry waste materials or on the ground, in waterways, or in storm or sanitary sewers. Collect such waste materials in appropriate covered containers, promptly remove from Place of the Work, and dispose of at recycling facilities or as otherwise permitted by applicable regulatory requirements.
- .4 Cover or wet down dry waste materials to prevent blowing dust and debris.

1.6 HAZARDOUS WASTE DISPOSAL

- .1 If and when required, remove and dispose of hazardous or contaminated waste materials in accordance with applicable regulatory requirements.
- .2 Hazardous or contaminated waste materials must be transported by a licensed waste hauling company.
- .3 Submit a copy of hauling company's Certificate of Approval to authority having jurisdiction prior to transporting any hazardous or contaminated waste materials.
- .4 Stockpile suspected hazardous or contaminated waste material temporarily in neat and secure stockpiles overlying a double layer of 0.20 mm thick high density polyethylene.
- .5 Isolate stockpiles from remainder of Place of the Work and cover with a single layer of 0.20 mm thick polyethylene to prevent entry, wind disturbance or collection of surface water.
- .6 Do not transport potentially hazardous or contaminated waste materials until such materials have been properly identified by appropriate authority having jurisdiction.

END OF SECTION

1 General

1.1 PROTECTION OF EXISTING PROPERTY

- .1 Protect Owner's existing property and property adjacent to Place of the Work from damage.
- .2 Make Good damage to Owner's existing property resulting from performance of the Work.
- .3 Do not undertake to Make Good damage to any property located adjacent to Place of the Work, or acknowledge that such damage was caused or occasioned by Contractor, without first consulting with Owner and receiving written instructions as to the course of action to be followed.
 - .1 Under such circumstances, where there is danger to life or property, Contractor may take such emergency action as he deems necessary to remove the danger.
 - .2 Contractor shall indemnify and hold harmless Owner and Consultant, including their agents and employees from and against claims, demands, losses, costs, damages, actions, suits, or proceedings by third parties that arise out of, or are attributable to, such emergency action.

1.2 PROTECTION OF COMPLETED WORK AND WORK IN PROGRESS

- .1 Adequately protect parts of the Work completed and in progress from any kind of damage.
- .2 Do not load or permit to be loaded any part of the Work with a weight or force that will endanger the safety or integrity of the Work.
- .3 Refer to technical specification Sections for Product-specific requirements regarding protection of installed Products.
- .4 Unless specified otherwise, maintain protection until Ready-for-Takeover. Remove protection and protective coverings upon expiry of specified duration.
- .5 Promptly Make Good parts of the Work damaged as a result of inadequate protection.

END OF SECTION

- 1 General
- 1.1 READY-FOR-TAKEOVER
 - .1 Prerequisites to attaining Ready-for-Takeover of the Work are described in General Conditions of the Contract.
 - .2 Ready-for-Takeover is required on or before August 31, 2024.
- 1.2 INSPECTION AND REVIEW BEFORE READY-FOR-TAKEOVER
 - .1 Contractor's Inspection: Before applying for Consultant's review to establish Ready-for-Takeover of the Work:
 - .1 Ensure specified prerequisites for Ready-for-Takeover of the Work are completed.
 - .2 Conduct an inspection of the Work to identify defective, deficient, or incomplete work.
 - .3 Prepare a comprehensive and detailed list of items to be completed or corrected.
 - .4 Submit an anticipated schedule and costs for items to be completed or corrected.
 - .2 Consultant's Review: Upon receipt of Contractor's application for review, together with Contractor's list of items to be completed or corrected, Consultant will review the Work. Consultant will advise Contractor whether or not the Work is Ready-for-Takeover and will prepare and give Contractor a list of items, if any, to be added to Contractor's list of items to be completed or corrected. Submit to Consultant a revised list of items to be completed or corrected.
 - .3 Maintain the list of items to be completed or corrected and promptly correct or complete defective, deficient and incomplete work. Contractor's inspection and Consultant's review procedures specified above shall be repeated until the Work is Ready-for-Takeover and no items remain on Contractor's list of items to be completed or corrected.
 - .4 When Consultant determines the Work is Ready-for-Takeover, Consultant will notify Contractor and Owner in writing to that affect.
- 1.3 PREREQUISITES TO FINAL PAYMENT
 - .1 After Ready-for-Takeover of the Work and before submitting an application for final payment in accordance with General Conditions of the Contract:
 - .1 Correct or complete all remaining defective, deficient, and incomplete work.
 - .2 Remove from Place of the Work surplus Products, Construction Equipment and Temporary Work.
 - .3 Perform final cleaning and waste removal necessitated by Contractor's work performed after Ready-for-Takeover, as specified in Section 01 74 00.
- 1.4 SUBSTANTIAL PERFORMANCE OF THE WORK
 - .1 The prerequisites to, and the procedures for, attaining Substantial Performance of the Work shall be:
 - .1 Independent of those for attaining Ready-for-Takeover of the Work.
 - .2 In accordance with lien legislation applicable at Place of the Work.

END OF SECTION

- 1 General
- 1.1 OPERATION AND MAINTENANCE MANUAL
 - .1 Prepare a comprehensive operation and maintenance manual, in the language of the Contract, using personnel qualified and experienced for this task.
 - .2 Submit an initial draft of operation and maintenance manual for Consultant's review. If required by Consultant's review comments, revise manual contents and resubmit for Consultant's review. If required, repeat this process until Consultant accepts draft manual in writing.
 - .3 Submit final version of operation and maintenance manual to Owner in hard copy and electronic formats. Submit two hard copies.
- 1.2 OPERATION AND MAINTENANCE MANUAL FORMAT
 - .1 Organize data in the form of an instructional manual.
 - .2 Arrange content by systems, under Section numbers and sequence of Table of Contents.
 - .3 Hard Copy Requirements:
 - .1 Binders: Vinyl, hard covered, three D-rings, loose leaf, 215 x 280 mm size, with spine and face pockets.
 - .2 When multiple binders are used, correlate data into related consistent groupings. Identify contents of each binder on spine and front cover.
 - .3 Cover: Identify each binder with typed or printed title "Operation and Maintenance Manual", name of Project, and subject matter of contents.
 - .4 Include tabbed fly leaf for each separate Product or system, with typed description of Product and major component parts of equipment.
 - .5 Text: Manufacturer's printed data, or typewritten data.
 - .6 Drawings: With reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
 - .4 Electronic Copy Requirements:
 - .1 Prepare electronic copy of operation and maintenance manual as portable document format (.pdf) file.
 - .2 When multiple files are used, correlate data into related consistent groupings. Identify contents of each file in file name.
 - .3 Submit electronic copy of operation and maintenance manual on electronic media type acceptable to Owner.
 - .4 Include electronic bookmarks for each separate Product and system, with description of Product and major component parts of equipment.
 - .5 Include electronic copy of Shop Drawings in manual as portable document format (.pdf) files.
- 1.3 OPERATION AND MAINTENANCE MANUAL - GENERAL CONTENT
 - .1 Table of Contents for each volume.
 - .2 Introductory information, including:
 - .1 Date of manual submission.
 - .2 Complete contact information for Consultant, subconsultants, other consultants, and Contractor, with names of responsible parties identified for each.
 - .3 Schedule of Products and systems indexed to content of volume.
 - .3 For each Product or system, include complete contact information for Subcontractors, Suppliers and manufacturers, including local sources for supplies and replacement parts.

- .4 Product Data: Mark each sheet to clearly identify specific Products, options, and component parts, and data applicable to installation. Delete or strike out inapplicable information. Supplement with additional information as required.
 - .5 Reviewed Shop Drawings.
 - .6 Permits, certificates, letters of assurance and other relevant documents issued by or required by authorities having jurisdiction.
 - .7 Warranties.
 - .8 Operating and maintenance procedures, incorporating manufacturer's operating and maintenance instructions, in a logical sequence.
 - .9 Training materials as specified in Section 01 79 00.
- 1.4 OPERATION AND MAINTENANCE MANUAL - PRODUCTS AND FINISHES
- .1 Include Product data, with catalogue number, options selected, size, composition, and colour and texture designations. Include information for re-ordering custom manufactured Products.
 - .2 Include instructions for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
 - .3 Include an outline of requirements for routine and special inspections and for regular maintenance to ensure that on-going performance of building envelope will meet the initial building envelope criteria.
 - .4 Include additional content as specified in Product Specifications.
- 1.5 OPERATION AND MAINTENANCE MANUAL - WARRANTIES CONTENT
- .1 Separate each warranty with index tab sheets keyed to Table of Contents listing.
 - .2 List each warrantor with complete contact information.
 - .3 Verify that documents are in proper form and contain full information. Ensure that warranties are for the correct duration and are in Owner's name.
- 1.6 PROJECT AS-BUILT RECORD DRAWINGS
- .1 Transfer information marked up on as-built drawings during progress of the Work to a master set of electronic drawing files obtained from Consultant.
 - .2 Mark revised drawings as "AS-BUILT DRAWINGS".
 - .3 Submit completed as-built record drawings in hard copy and electronic formats to Owner. Submit 3 hard copies.
 - .4 Submit electronic copy as both Autodesk AutoCAD (.dwg) and portable document format (.pdf) files.
- 1.7 SPARE PARTS, EXTRA STOCK MATERIALS AND SPECIAL TOOLS
- .1 Supply spare parts, extra stock materials and special tools in quantities specified in technical specification Sections.
 - .2 Ensure spare parts and extra stock materials are new, not damaged or defective, and of same quality, manufacturer, and batch or production run as installed Products.
 - .3 Include tags for special tools identifying their function and associated Product.

- .4 Deliver to and store items at location directed by Owner at Place of the Work. Store in original packaging with manufacturer's labels intact and in a manner to prevent damage or deterioration.
- .5 Catalogue items and submit to Consultant an inventory listing organized by specification Section numbers. Include Consultant reviewed inventory listing in operation and maintenance manual.

END OF SECTION

1 General

1.1 ADMINISTRATIVE REQUIREMENTS

- .1 Demonstrate and train Owner's personnel on operation and maintenance of equipment, building envelope and systems prior to scheduled date of Ready-for-Takeover.
- .2 Owner will prepare list of personnel to receive training and will coordinate their attendance at agreed upon times.
- .3 Coordinate and schedule demonstration and training given by Subcontractors and Suppliers.

1.2 SUBMITTALS

- .1 Submit proposed dates, times, durations, and locations for demonstration and training of each item of equipment and each system for which demonstration and training is required. Allow sufficient time for training and demonstration for each item of equipment or system, or time as may be specified in Product Specifications.
- .2 Consultant and Owner will review submittal and advise Contractor of any necessary revisions.
- .3 Submit reports within 5 Working Days after completion of demonstration and training:
 - .1 Identifying time and date of each demonstration and training session.
 - .2 Summarizing demonstration and training performed.
 - .3 Including list of attendees.
- .4 Submit video recordings of demonstration and training sessions together with reports.

1.3 PREREQUISITES TO DEMONSTRATION AND TRAINING

- .1 Ensure testing, adjusting and balancing has been performed in accordance with Contract Documents.
- .2 Ensure equipment and systems are fully operational.
- .3 Ensure a copy of the completed operation and maintenance manual is available for use in demonstration and training.
- .4 Ensure conditions for demonstration and training comply with requirements specified in Product Specifications.

1.4 DEMONSTRATION AND TRAINING

- .1 Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing and maintenance of each item of equipment and system.
- .2 Review operation and maintenance manual in detail to explain all aspects of operation and maintenance.
- .3 Prepare and insert additional data in operation and maintenance manual if required.

END OF SECTION

1 General

1.1 REFERENCES

- .1 CSA S350-M1980 (R2003): Code of Practice for Safety in Demolition of Structures.
- .2 CSA Z783-12: Deconstruction of Buildings and Their Related Parts.

1.2 SEQUENCING

- .1 Schedule deconstruction activities to minimize disruption to existing facility operations.
- .2 Verify deconstruction schedule with Consultant prior to commencement of the Work.
- .3 Protect existing facility occupants from dust and from any danger arising from deconstruction operations. Refer to Section 01 56 00.

1.3 SPECIAL PROCEDURE SUBMITTALS

- .1 Submit 3 copies of each photograph taken of existing conditions to Consultant.

1.4 QUALIFICATIONS

- .1 Demolition Supervisor: An individual experienced in building deconstruction, capable of ensuring deconstruction is carried out safely, expeditiously and without unnecessary damage to materials and surfaces that are designated to remain.

1.5 FIELD CONDITIONS

- .1 Inspect and photograph existing adjacent surfaces and assemblies.
- .2 Record conditions and stability in a manner suitable for evaluation of possible damage caused by deconstruction operations.
- .3 Approximate locations of existing facility services may be indicated on Drawings. Owner and Consultant assume no responsibility for accuracy of such information.

2 Products

2.1 REGULATORY REQUIREMENTS

- .1 Permits and Fees: Include tipping charges and other related fees necessary for completion of deconstruction operations.
- .2 Utilities: Obtain approval from authorities having jurisdiction prior to commencing deconstruction operations.
- .3 Hazardous Waste: Conform to authorities having jurisdiction.

2.2 EQUIPMENT

- .1 Deconstruction: Appropriate equipment for type of deconstruction being contemplated.
- .2 Do not use heavy equipment for making openings in existing walls or in confined spaces where damage to other parts of the Work or adjacent property may result.

3 Execution

3.1 EXAMINATION

- .1 Refer to Section 01 71 00.

- .2 Verify locations and construction of structures to be demolished.
- .3 Verify construction and details of other existing and adjacent property.
- .4 Verify location of utility and facility services.
- .5 Undertake x-ray investigations of existing building elements designated for selective demolition to determine locations of concealed components, utility services and facility services.

3.2 PREPARATION

- .1 Erect shoring, bracing and other temporary structures to prevent collapse, settlement and movement of property. Refer to Section 01 56 00.
- .2 Provide and maintain dust protection screen as specified in Section 01 56 00.
- .3 Provide and maintain weather enclosures as specified in Section 01 56 00.
- .4 Barricade access by unauthorized persons to areas in which deconstruction is in-progress.
- .5 Post danger signs in conspicuous locations to warn persons that deconstruction is in-progress.
- .6 Erect protection to ensure safe access that must be maintained to existing areas still occupied by the public.
- .7 Protect adjacent property from damage caused by deconstruction operations.
- .8 Remove flammable and contaminated materials, and refuse from area before deconstruction operations commence.
- .9 Arrange for disconnection, capping and plugging of facility services that may be affected by deconstruction operations.

3.3 DECONSTRUCTION

- .1 Perform deconstruction work in an expeditious and safe manner.
- .2 Conform to CSA S350-M and CSA Z783.
- .3 Confine deconstruction operations to only those areas required.
- .4 Prevent and contain spread of dust.
- .5 Do not drop debris more than one storey unless in an enclosed chute. Lower large components carefully, under control and fully supported at all times.
- .6 Withdraw or flatten protruding nails as deconstruction operations proceed.

3.4 SALVAGE

- .1 Carefully remove materials scheduled for salvage to CSA Z783.
- .2 Clean and prepare salvaged items for use by others.
- .3 Store salvaged materials in secure locations, protected from damage.
- .4 Items not scheduled for salvage become property of Contractor.

3.5 CLEANING

- .1 Leave Place of the Work in a clean and orderly condition, ready for use by others.

- .2 Remove debris as specified in Section 01 74 00 and in accordance with authorities having jurisdiction.
- .3 Remove protections, barricades and other temporary constructions on completion of deconstruction operations.
- .4 Make Good property and materials damaged during deconstruction operations.

END OF SECTION

DRAFT

FINISHING HARDWARE SPECIFICATION

FOR
CLADDING REPLACEMENT TO
HDSB FRONTENAC PUBLIC SCHOOL
5135 PINEDALE AVE.
BURLINGTON, ON.

SUBJECT TO APPROVAL

ARCHITECT:



CGS | CURRAN GACESA SLOTE ARCHITECTS INC.
118 JAMES STREET NORTH, SUITE 301.
HAMILTON, ON. L8R 2K7
PH# 905.297.0863
FAX# 905.297.0864

CONTRACTOR:

SUPPLIER:



GROUP 87
ARCHITECTURAL HARDWARE INC.
UNIT #1 – 3245 HARVESTER RD,
BURLINGTON, ON. L7N 3T7
PH# 905.639.4676
FAX# 905.639.7561
E-MAIL: craig@group87.ca
WEB: www.group87.ca

CONSULTANT:

CRAIG S. WILSON AHC



COORDINATOR:

DERRILL A. WILSON

DATE:

June 20, 2023

REVISION:

DEVELOPED FROM ARCHITECTURAL DRAWING DATED: 02 | 2023.04.17 | Issued for BLDG Permit

Abbreviations (Categorized)

HARDWARE

Door Type

Abbreviation	Definition
HMD	HOLLOW METAL DOOR

Fire Ratings

Abbreviation	Definition
NON-RTD	NON RATED

Frame Type

Abbreviation	Definition
HMF	HOLLOW METAL FRAME

Hardware Finishes

Abbreviation	Definition
26D	SATIN CHROMIUM PLATED
32D	SATIN STAINLESS STEEL, 300 SERIES
626	SATIN CHROMIUM PLATED OVER NICKEL
627	SATIN ALUMINUM, CLEAR COATED
628	SATIN ALUMINUM, CLEAR ANODIZED
630	SATIN STAINLESS STEEL
652	SATIN CHROMIUM PLATED OVER NICKEL
689	ALUMINUM PAINTED
AL	ALUMINUM MILL FINISH
BLK	BLACK
CL	CLEAR ANODIZED

Hardware Mfrs

Abbreviation	Definition
GLY	GLYNN-JOHNSON
IVE	H.B. IVES
KMT	K.M. THOMAS
KNC	K.N. CROWDER MFG. INC.
LCN	LCN COMMERCIAL DIVISION
SCH	SCHLAGE LOCK COMPANY
SMH	STANDARD METAL HARDWARE MANUFACTURING
VON	VON DUPRIN

Hardware Miscellaneous

Abbreviation	Definition
50-210	KEYING/MASTERKEYING REQUIRED
BE	BLANK ESCUTCHEON
EO	EXIT ONLY
HW	HEAVY WEIGHT
NRP	NON-REMOVEABLE PIN (IN HINGE)
SS	STAINLESS STEEL
UL	UNDERWRITERS' LABORATORY

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Abbreviations (Categorized)

HARDWARE

Heading Remark

Abbreviation	Definition
DE	DOUBLE EGRESS; ALSO DESIGNATED AS "DBLE EG"D
EX	EXISTING

Modes of Operation

Abbreviation	Definition
PR	PAIR OF DOORS
SGL	SINGLE DOOR

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SPECIFICATION NOTES

1) To be bid **as per specification**. Substitution of products requires Architects/Consultants approval.

Substitution of products requires Architects/Consultants approval.

Request for Substitutions must be made a minimum of 10 days prior to Tender Close.

2) Standard mounting heights [unless otherwise noted]

- A. Locks/Latches 40-5/16" [1023mm] to center line of strike from finished floor.
- B. Deadlocks 47 1/4" [1200mm] to center line of strike from finished floor. *Unless otherwise noted.
- C. Exit Devices 40-5/16" [1023mm] to center line of strike from finished floor.
- D. Door Pulls 42" [1067mm] to center line of pull from finished floor.
- E. Push Plate 45" [1143mm] to center line of Push Plate from finished floor.
- F. Coat Hook 47" [1200mm] to center line of Hook from finished floor.
- G. Door Viewer 43" [1100mm] to center line of Viewer from finished floor.

The above noted mounting heights are a recommended standard and may vary under special applications and conditions.

3) All locks to be keyed to the existing system. If one does not exist, the hardware supplier will arrange a meeting with the Architect and or Owner to develop and prepare a key schedule to the owners requirements.

4) Auto Door Operator Installation [if required]:

Automatic operators are supplied and installed by the finishing hardware supplier. Rough-in, 110V to head of frame, conduit, backboxes and low voltage wire runs by electrical division. Backing and reinforcement for operator by General Contractor Work must be completed prior to the arrival of the Operator Installation Technician. Installation company must employ an AAADM certified technician.

5) ***Installation of frames** to be site confirmed by G.C. to be Plumb & True prior to commencement of door & hardware installation.

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Mark#	Outside Location	Inside Location	Hand	Hdg
D02	EXTERIOR	STAIR	RHRA	01
D15A	EXTERIOR	CORRIDOR	RHR	02
D15B	EXTERIOR	CORRIDOR	RHR	03
D15C	EXTERIOR	CORRIDOR	RHR	04
D17	EXTERIOR	VESTIBULE	RHRA	05
D17A	VESTIBULE	CORRIDOR	RHRA	06
D18	EXTERIOR	MECHANICAL ROOM	RHRA	07
D19	EXTERIOR	CORRIDOR	LHR	08
D20	EXTERIOR	CORRIDOR	RHR	09
D23	EXTERIOR	VESTIBULE	RHR	10
D24	EXTERIOR	VESTIBULE	LHR	11

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Heading 01 (HwSet)

1 PR DOOR(S) D02 EXTERIOR FROM STAIR

Hand Degree
RHR 95 95

2-965 x 2135 x 44 x HMD x HMF x NON-RTD
Opening Remark: ACCESS CONTROLLED OPENING.

Totals	Each Assembly to have:					
(6)	6	EA	HW HINGE	5BB1HW 127 X 114 NRP	630	IVE
(1)	1	EA	REM. MULLION	KR4954 2286MM	689	VON
(1)	1	SET	MULLION STABILIZER	154	689	VON
(1)	1	EA	PANIC HARDWARE	CD98EO 1220MM *CYL. DOGGING	626	VON
(1)	1	EA	PANIC HARDWARE	CD98NL-OP 1220MM *CYL. DOGGING	626	VON
(2)	2	EA	GLASS BEAD KIT	99GBK-R/M	689	VON
(1)	1	EA	MORTISE CYLINDER	20-001 32MM 50-210/211 *MULLION	626	SCH
(2)	2	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211	626	SCH
(1)	1	EA	RIM CYLINDER	20-021 50-210/211	626	SCH
(1)	1	EA	ELECTRIC STRIKE	6300	630	VON
(2)	2	EA	DOOR PULL	3015-2 #2	32D	SMH
(2)	2	EA	CLOSER-STOP	4040XP S CUSH *SPRING STOP	689	LCN
(2)	2	EA	KICKPLATE	K10A 200 X 915 TAPE MTD.	32D	SMH
(2)	2	EA	WEATHERSTRIP	6216 .125 X .375 X 2135 *APPLY TO MULLION	BLK	KNC
(1)	1	SET	WEATHERSTRIP	W-17N 1/1930 X 2/2135	628	KNC
(2)	2	EA	DOOR SWEEP	W-24S 965MM	628	KNC
(1)	1	EA	THRESHOLD	CT-65 X 1930MM X 10 X 1 1/2" FHSD TAP CON	AL	KNC
(1)	1	EA	WIRE HARNESS	CON-50		VON
(1)	1	EA	WIRE HARNESS	CON-6W		VON
(1)	1	EA	CARD READER	BY ACCESS CONTROL SUPPLIER		

INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.
INGRESS WHEN EXIT DEVICE LATCHES ARE IN THE DOGGED/RETRACTED POSITION OR BY
CARD READER.

Heading 02 (HwSet)

1 SGL DOOR(S) D15A EXTERIOR FROM CORRIDOR

Hand Degree
RHR 95

915 x 2135 x 44 x HMD x HMF x NON-RTD

Totals	Each Assembly to have:					
(3)	3	EA	HW HINGE	5BB1HW 114 X 114 NRP	630	IVE
(1)	1	EA	PANIC HARDWARE	CD98EO 1220MM *CYL. DOGGING	626	VON
(1)	1	EA	GLASS BEAD KIT	99GBK-R/M	689	VON
(1)	1	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211	626	SCH

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Heading 02 (HwSet) Continued.....

						Hand	Degree Act InAct
(1)	1	EA	DOOR PULL	3015-2 #2		32D	SMH
(1)	1	EA	CLOSER-STOP	4040XP S CUSH *SPRING STOP		689	LCN
(1)	1	EA	KICKPLATE	K10A 200 X 865 TAPE MTD.		32D	SMH
(1)	1	EA	WEATHERSTRIP	W-17N 1-915 X 2-2135		AL	KNC
(1)	1	EA	SWEEP	W-24S 915MM		CL	KNC
(1)	1	EA	THRESHOLD	CT-65 X 915MM X 10 X 1 1/2" FHSD TAP CON		AL	KNC

NO KEYED ACCESS, DOOR PULL ONLY.
INGRESS WHEN EXIT DEVICE LATCHES ARE IN THE DOGGED/RETRACTED POSITION.
INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.

Heading 03 (HwSet)

						Hand	Degree Act InAct
1 SGL DOOR(S) D15B EXTERIOR FROM CORRIDOR						RHR	95
915 x 2135 x 44 x HMD x HMF x NON-RTD							
Opening Remark: ACCESS CONTROLLED OPENING.							
Totals	Each Assembly to have:						
(3)	3	EA	HW HINGE	5BB1HW 114 X 114 NRP		630	IVE
(1)	1	EA	PANIC HARDWARE	CD98NL-OP 915MM *CYL. DOGGING		626	VON
(1)	1	EA	GLASS BEAD KIT	99GBK-R/M		689	VON
(1)	1	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211		626	SCH
(1)	1	EA	RIM CYLINDER	20-021 50-210/211		626	SCH
(1)	1	EA	ELECTRIC STRIKE	6300		630	VON
(1)	1	EA	DOOR PULL	3015-2 #2		32D	SMH
(1)	1	EA	CLOSER-STOP	4040XP S CUSH *SPRING STOP		689	LCN
(1)	1	EA	KICKPLATE	K10A 200 X 865 TAPE MTD.		32D	SMH
(1)	1	EA	WEATHERSTRIP	W-17N 1-915 X 2-2135		AL	KNC
(1)	1	EA	SWEEP	W-24S 915MM		CL	KNC
(1)	1	EA	THRESHOLD	CT-65 X 915MM X 10 X 1 1/2" FHSD TAP CON		AL	KNC
(1)	1	EA	CARD READER	BY ACCESS CONTROL SUPPLIER			

KEYED ACCESS.
INGRESS WHEN EXIT DEVICE LATCHES ARE IN THE DOGGED/RETRACTED POSITION OR BY
CARD READER.
INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.

Heading 04 (HwSet)

						Hand	Degree Act InAct
1 SGL DOOR(S) D15C EXTERIOR FROM CORRIDOR						RHR	95
915 x 2135 x 44 x HMD x HMF x NON-RTD							

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Heading 04 (HwSet) Continued.....

Totals	Each Assembly to have:				Hand	Degree Act InAct
(3)	3	EA	HW HINGE	5BB1HW 114 X 114 NRP	630	IVE
(1)	1	EA	PANIC HARDWARE	CD98EO 915MM *CYL. DOGGING	626	VON
(1)	1	EA	GLASS BEAD KIT	99GBK-R/M	689	VON
(1)	1	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211	626	SCH
(1)	1	EA	DOOR PULL	3015-2 #2	32D	SMH
(1)	1	EA	CLOSER-STOP	4040XP S CUSH *SPRING STOP	689	LCN
(1)	1	EA	KICKPLATE	K10A 200 X 865 TAPE MTD.	32D	SMH
(1)	1	EA	WEATHERSTRIP	W-17N 1-915 X 2-2135	AL	KNC
(1)	1	EA	SWEEP	W-24S 915MM	CL	KNC
(1)	1	EA	THRESHOLD	CT-65 X 915MM X 10 X 1 1/2" FHSD TAP CON	AL	KNC

NO KEYED ACCESS, DOOR PULL ONLY.
 INGRESS WHEN EXIT DEVICE LATCHES ARE IN THE DOGGED/RETRACTED POSITION.
 INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.

Heading 05 (HwSet)

1 PR DOOR(S) D17 EXTERIOR FROM VESTIBULE

2-1016 x 2135 x 44 x HMD x HMF x NON-RTD

Opening Remark: ACCESS CONTROLLED OPENING.

Totals	Each Assembly to have:				Hand	Degree Act InAct
(6)	6	EA	HW HINGE	5BB1HW 127 X 114 NRP	630	IVE
(1)	1	EA	REM. MULLION	KR4954 2286MM	689	VON
(1)	1	SET	MULLION STABILIZER	154	689	VON
(2)	2	EA	PANIC HARDWARE	CD98EO 1220MM *CYL. DOGGING	626	VON
(2)	2	EA	GLASS BEAD KIT	99GBK-R/M	689	VON
(1)	1	EA	MORTISE CYLINDER	20-001 32MM 50-210/211 *MULLION	626	SCH
(2)	2	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211	626	SCH
(1)	1	EA	ELECTRIC STRIKE	6300	630	VON
(2)	2	EA	DOOR PULL	3015-2 #2	32D	SMH
(1)	1	EA	CLOSER-STOP	4040XP S CUSH *SPRING STOP	689	LCN
(1)	1	EA	AUTO OPERATOR	EXISTING TO BE RE-USED.	CL	
(1)	1	EA	OVERHEAD STOP	905S	630	GLY
(2)	2	EA	KICKPLATE	K10A 200 X 915 TAPE MTD.	32D	SMH
(2)	2	EA	WEATHERSTRIP	6216 .125 X .375 X 2135 *APPLY TO MULLION	BLK	KNC
(1)	1	SET	WEATHERSTRIP	W-17N 1/2032 X 2/2135	628	KNC
(2)	2	EA	DOOR SWEEP	W-24S 1016MM	628	KNC
(1)	1	EA	THRESHOLD	CT-65 X 2032MM X 10 X 1 1/2" FHSD TAP CON	AL	KNC
(1)	1	EA	WIRE HARNESS	CON-50		VON

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					Hand	Degree Act	InAct
(1)	1	EA	WIRE HARNESS	CON-6W			VON
(1)	1	EA	INTEGRATION BOX	TA2902G3 E-CR-AO *C/W RELAY			KMT
(1)	1	EA	CARD READER	BY ACCESS CONTROL SUPPLIER			

NO KEYED ACCESS.

INGRESS WHEN EXIT DEVICE LATCHES ARE IN THE DOGGED/RETRACTED POSITION OR BY CARD READER.

INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.

EXISTING AUTO OPERATOR TO BE RE-INSTALLED BY THE HARDWARE SUPPLIER EMPLOYING AN AAADM CERTIFIED TECHNICIAN.

Heading 06 (HwSet)

					Hand	Degree Act	InAct
1 PR			DOOR(S) D17A VESTIBULE FROM CORRIDOR		RHRA	100	100
			2-1016 x 2135 x 44 x HMD x HMF x NON-RTD				

Totals Each Assembly to have:

(6)	6	EA	HW HINGE	5BB1HW 127 X 114	652		IVE
(2)	2	EA	DOOR PULL	3015-2 #2	32D		SMH
(2)	2	EA	PUSH PLATE	K14 5" X 24" TAPE MNT. RADIUS CORNERS	32D		SMH
(1)	1	EA	PA CLOSER	4040XP EDA	689		LCN
(1)	1	EA	AUTO OPERATOR	EXISTING TO BE RE-USED.	CL		
(2)	2	EA	KICKPLATE	K10A 200 X 978 TAPE MTD.	32D		SMH
(2)	2	EA	CV WALL STOP	S121	26D		SMH

EXISTING AUTO OPERATOR TO BE RE-INSTALLED BY THE HARDWARE SUPPLIER EMPLOYING AN AAADM CERTIFIED TECHNICIAN.

Heading 07 (HwSet)

					Hand	Degree Act	InAct
1 PR			DOOR(S) D18 EXTERIOR FROM MECHANICAL ROOM		RHRA	95	95
			2-965 x 2135 x 44 x HMD x HMF x NON-RTD				

Totals Each Assembly to have:

(6)	6	EA	HINGE	5BB1 127 X 114 NRP	630		IVE
(2)	2	EA	SURFACE BOLT	F67UL 203MM	26D		SMH
(1)	1	EA	PANIC HARDWARE	CD98NL-OP 1220MM *CYL. DOGGING	626		VON
(1)	1	EA	RIM STRIKE	1609	BLK		VON
(1)	1	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211	626		SCH
(1)	1	EA	RIM CYLINDER	20-021 50-210/211	626		SCH
(1)	1	EA	DOOR PULL	3015-2 #2	32D		SMH

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Heading 07 (HwSet) Continued.....

						Hand	Degree Act InAct
(1)	1	EA	CLSR-HLDR-STOP	4040XP S H CUSH *SPRING STOP		689	LCN
(1)	1	EA	OVERHEAD STOP/HLDR	904H		630	GLY
(2)	2	EA	KICKPLATE	K10A 300 X 927 TAPE MTD.		32D	SMH
(1)	1	SET	WEATHERSTRIP	W-17N 1/1930 X 2/2135		628	KNC
(2)	2	EA	DOOR SWEEP	W-24S 965MM		628	KNC
(1)	1	EA	THRESHOLD	CT-10 1930MM X 10 X 1 1/2" FHSD TAP CON		627	KNC

INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.

Heading 08 (HwSet)

						Hand	Degree Act InAct
1 SGL			DOOR(S) D19 EXTERIOR FROM CORRIDOR			LHR	95
			915 x 2135 x 44 x HMD x HMF x NON-RTD				

Totals Each Assembly to have:

(3)	3	EA	HW HINGE	5BB1HW 114 X 114 NRP		630	IVE
(1)	1	EA	PANIC HARDWARE	CD98NL-OP 915MM *CYL. DOGGING		626	VON
(1)	1	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211		626	SCH
(1)	1	EA	RIM CYLINDER	20-021 50-210/211		626	SCH
(1)	1	EA	DOOR PULL	3015-2 #2		32D	SMH
(1)	1	EA	CLOSER-STOP	4040XP S CUSH *SPRING STOP		689	LCN
(1)	1	EA	KICKPLATE	K10A 200 X 865 TAPE MTD.		32D	SMH
(1)	1	EA	WEATHERSTRIP	W-17N 1-915 X 2-2135		AL	KNC
(1)	1	EA	SWEEP	W-24S 915MM		CL	KNC
(1)	1	EA	THRESHOLD	CT-65 X 915MM X 10 X 1 1/2" FHSD TAP CON		AL	KNC

KEYED ACCESS.

INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.

Heading 09 (HwSet)

						Hand	Degree Act InAct
1 SGL			DOOR(S) D20 EXTERIOR FROM CORRIDOR			RHR	90
			915 x 2135 x 44 x HMD x HMF x NON-RTD				
			Opening Remark: ACCESS CONTROLLED OPENING				

Totals Each Assembly to have:

(3)	3	EA	HW HINGE	5BB1HW 114 X 114 NRP		630	IVE
(1)	1	EA	PANIC HARDWARE	CD98NL-OP 1220MM *CYL. DOGGING		626	VON
(1)	1	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211		626	SCH
(1)	1	EA	RIM CYLINDER	20-021 50-210/211		626	SCH
(1)	1	EA	ELECTRIC STRIKE	6300		630	VON
(1)	1	EA	DOOR PULL	3015-2 #2		32D	SMH

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Heading 09 (HwSet) Continued.....

					Hand	Degree Act InAct
(1)	1	EA	AUTO OPERATOR	EXISTING TO BE RE-USED.	CL	
(1)	1	EA	OVERHEAD STOP	904S	630	GLY
(1)	1	EA	KICKPLATE	K10A 200 X 865 TAPE MTD.	32D	SMH
(1)	1	EA	WEATHERSTRIP	W-17N 1-915 X 2-2135	AL	KNC
(1)	1	EA	SWEEP	W-24S 915MM	CL	KNC
(1)	1	EA	THRESHOLD	CT-65 X 915MM X 10 X 1 1/2" FHSD TAP CON	AL	KNC
(1)	1	EA	INTEGRATION BOX	TA2902G3 E-CR-AO *C/W RELAY		KMT
(1)	1	EA	CARD READER	BY ACCESS CONTROL SUPPLIER		

KEYED ACCESS.

INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.
EXISTING AUTO OPERATOR TO BE RE-INSTALLED BY THE HARDWARE SUPPLIER EMPLOYING
AN AAADM CERTIFIED TECHNICIAN.

Heading 10 (HwSet)

1 SGL DOOR(S) D23 EXTERIOR FROM VESTIBULE
915 x 2135 x 44 x HMD x HMF x NON-RTD

Hand Degree
RHR Act InAct
90

Totals Each Assembly to have:

(3)	3	EA	HW HINGE	5BB1HW 114 X 114 NRP	630	IVE
(1)	1	EA	PANIC HARDWARE	CD98EO 915MM *CYL. DOGGING	626	VON
(1)	1	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211	626	SCH
(1)	1	EA	DOOR PULL	3015-2 #2	32D	SMH
(1)	1	EA	PA CLOSER	4040XP EDA	689	LCN
(1)	1	EA	KICKPLATE	K10A 200 X 865 TAPE MTD.	32D	SMH
(1)	1	EA	KICKDOWN DOOR HOLDER	S111	26D	SMH
(1)	1	EA	CV WALL STOP	S121	26D	SMH
(1)	1	EA	WEATHERSTRIP	W-17N 1-915 X 2-2135	AL	KNC
(1)	1	EA	SWEEP	W-24S 915MM	CL	KNC
(1)	1	EA	THRESHOLD	CT-65 X 915MM X 10 X 1 1/2" FHSD TAP CON	AL	KNC

NO KEYED ACCESS.

INGRESS WHEN EXIT DEVICE LATCHES ARE IN THE DOGGED/RETRACTED POSITION.
INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.

Heading 11 (HwSet)

1 SGL DOOR(S) D24 EXTERIOR FROM VESTIBULE

Hand Degree
LHR Act InAct
90

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Heading 11 (HwSet) Continued.....

**Hand Degree
Act InAct**

915 x 2135 x 44 x HMD x HMF x NON-RTD
Opening Remark: ACCESS CONTROLLED OPENING

Totals	Each Assembly to have:					
(3)	3	EA	HW HINGE	5BB1HW 114 X 114 NRP	630	IVE
(1)	1	EA	PANIC HARDWARE	CD98NL-OP 915MM *CYL. DOGGING	626	VON
(1)	1	EA	DOGGING CYLINDER	20-001 32MM XQ11-949 50-210/211	626	SCH
(1)	1	EA	RIM CYLINDER	20-021 50-210/211	626	SCH
(1)	1	EA	ELECTRIC STRIKE	6300	630	VON
(1)	1	EA	DOOR PULL	3015-2 #2	32D	SMH
(1)	1	EA	PA CLOSER	4040XP EDA	689	LCN
(1)	1	EA	KICKPLATE	K10A 200 X 865 TAPE MTD.	32D	SMH
(1)	1	EA	KICKDOWN DOOR HOLDER	S111	26D	SMH
(1)	1	EA	CV WALL STOP	S121	26D	SMH
(1)	1	EA	WEATHERSTRIP	W-17N 1-915 X 2-2135	AL	KNC
(1)	1	EA	SWEEP	W-24S 915MM	CL	KNC
(1)	1	EA	THRESHOLD	CT-65 X 915MM X 10 X 1 1/2" FHSD TAP CON	AL	KNC
(1)	1	EA	CARD READER	BY ACCESS CONTROL SUPPLIER		

KEYED ACCESS.
INSTALL WEATHERSTRIP PRIOR TO DOOR CLOSER, DO NOT CUT FOR CLOSER SHOE.

End of Schedule

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