



City of Winnipeg

NMS SPECIFICATIONS

TENDER NO. 419-2026

City Hall Administration Building Cladding Investigation

May 2026

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Part 1 General

1.1 CITY OF WINNIPEG OCCUPANCY

- .1 No City of Winnipeg occupancy impacting construction is planned. The City will vacate the entire Place of Work from commencement of Work through to Total Performance.

1.2 PARTIAL CITY OF WINNIPEG OCCUPANCY – NON-CONSTRUCTION AREAS

- .1 The City will turn over to the Contractor areas of Work as follows and occupy the entire remainder of the Site from Commencement of Work through to Total Performance.
 - .1 The City will turn over to the Contractor:
 - .1 Exterior cladding.
 - .2 The City will continue to occupy:
 - .1 Interior areas of the building.
 - .2 Remaining exterior areas of the Site not turned over to the Contractor.
- .2 During construction, The City will provide or be responsible for:
 - .1 Operation and maintenance of building equipment and services of the Site, including services serving the areas of Work.
 - .2 Complying with Contractor safety procedures within the areas of Work.
- .3 During construction, Contractor will provide or be responsible for:
 - .1 Protection of building services, equipment and finishes:
 - .1 Within active and non-active areas of Work and areas.
 - .2 Where routing to access areas of Work is required throughout the Site outside of areas of Work.
 - .2 Safety of Contractor and Sub-contractor activities within areas of Work from commencement of construction through to Total Performance.
 - .3 Maintenance and security of the areas of Work from commencement of construction through to Total Performance.
- .4 Upon Substantial Performance and subsequent turn over to the City for re-occupancy of a designated area of Work, the Contractor shall no longer be liable for the safety, maintenance and care of the area of Work deemed to have attained Substantial Performance.
 - .1 Notwithstanding the above, the Contractor shall remain liable for the safety, maintenance and care of City-occupied areas of Work during periods of active construction activity to address deficiencies and complete project close-out in accordance with the Contract Documents following Substantial Performance through to Total Performance.
- .5 Schedule Substantial Performance and turn over to the City for re-occupancy upon completion of all Work specified and shown on Drawings.

1.3 PARTIAL CITY OF WINNIPEG OCCUPANCY – CONSTRUCTION AREAS

- .1 No Partial City of Winnipeg Occupancy – Construction Areas is planned.

1.4 WORK SEQUENCE

- .1 Schedule and construct *Work* in stages to accommodate the City's and public use of premises during construction.

- .2 Schedule and construct *Work* in stages to provide for continuous public usage. Do not close off public usage of facilities until use of one stage of *Work* will provide alternate usage.
- .3 Sequence *Work* as follows:
 - .1 Facilitate access for Contract Administrator investigation and identification of repairs at a portion of the elevation.
 - .2 Complete repairs identified by the Contract Administrator in the portion of the elevation investigated.
 - .3 Move to the next area of elevation to facilitate Contract Administrator investigation.

1.5 RESTRICTIONS ON USE OF PREMISES

- .1 Limit use of premises for *Work*, storage, and access, to allow:
 - .1 City and public occupancy within and throughout the Site.
 - .2 Work by other contractors.
 - .3 Public usage.
- .2 Include restrictions in the Site Accessibility Plan as specified in Part D.
- .3 Coordinate use of the Site under direction of the Contract Administrator.
- .4 Comply with City of Winnipeg facility use requirements.
- .5 Comply with City of Winnipeg smoking policy.
 - .1 No smoking permitted within the facility.
 - .2 Smoking is permitted only within designated areas of the Site.

1.6 RESTRICTED HOURS OF WORK IN OCCUPIED FACILITIES

- .1 Work is restricted to the following times:
 - .1 Monday through Friday:
 - .1 8:00 a.m. through 5:00 p.m.
 - .2 Saturdays:
 - .1 9:00 a.m. through 4:00 p.m.
 - .3 Sundays and Statutory Holidays:
 - .1 No Work permitted.
- .2 Allow for hours of work restrictions in construction progress schedule.

1.7 NOISY AND DISRUPTIVE WORK RESTRICTIONS

- .1 Schedule excessively noisy and disruptive work to avoid disturbance to building occupants and City committees and council meetings.
- .2 Noisy and disruptive *Work* is restricted to the following times:
 - .1 Monday through Friday:
 - .1 8:00 a.m. through 10:00 a.m. and 3:00 p.m. through 5:00 p.m.
 - .2 Saturdays:
 - .1 9:00 a.m. through 4:00 p.m.
 - .3 Sundays and Statutory Holidays:
 - .1 No Work permitted.
- .3 Notwithstanding the above, noisy and disruptive *Work* may be re-scheduled outside of these times where the *Work* disrupts with City of Winnipeg committee and council meetings.

- .4 Use powder actuated devices only with the Contract Administrator's written permission.
- .5 Notwithstanding the above, complete all Work in conformance with:
 - .1 City of Winnipeg Neighbourhood Livability By-Law no. 1/2008.
- .6 Allow for hours of work restrictions in construction progress schedule.

1.8 MAINTAINING LIFE SAFETY SYSTEMS IN OCCUPIED FACILITIES

- .1 Maintain operational life safety systems and public access to exits in occupied areas during all stages of the *Work*.
- .2 Determine nature and exact locations of existing fire and smoke sensors prior to the commencement of the *Work*. Avoid direct or indirect jarring while working in adjacent areas and exercise caution to avoid triggering these devices.
- .3 Be responsible for costs incurred by the City on account of false fire alarms activated as a result of the execution of the *Work* without adequate precautions.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Administrative and procedural requirements for unit prices further to requirements specified in Parts C and D.
 - .1 Measurement and payment criteria applicable to Work performed under a unit price payment method.

1.2 LUMP SUM PRICES

- .1 Description: Lump sum prices are an amount incorporated into the Contract for a specific product or portion of Work on a lump sum basis.
 - .1 Lump sum prices are identified on Form B - Prices where quantities of the prices are identified as one (1) unit, and the unit of measure is identified as lump sum.
- .2 Requirements: Refer to General Conditions.
- .3 Measurement and Payment Procedures:
 - .1 Refer to C12.
 - .2 Payment for lump sum price components of the Work will be measured as a percent completion of the total lump sum value.

1.3 UNIT PRICES

- .1 Description:
 - .1 Unit prices are an amount incorporated in the Contract for a specific product or portion of Work with a specified product on a per unit basis.
- .2 Requirements:
 - .1 Unit prices include requirements specified in C12.2.3, and:
 - .1 Labour and material.
 - .2 Cost for delivery.
 - .3 Handling.
 - .4 Temporary storage, including insurance.
 - .5 Demolition, surface preparation, and installation where specified, shown on Drawings to be included in a Unit Price.
 - .6 Fees for overhead and profit.
 - .7 Insurance, bonds and applicable taxes.
 - .2 Unit prices exclude the following which are to be included in the Total Price as allocated to a Lump Sum class of work in Form B: Prices:
 - .1 Access requirements,
 - .2 Site protection of existing building equipment and finishes,
 - .3 Barriers and enclosures for the unit price work,
 - .4 Safe Work procedure preparation, and
 - .5 Construction facilities, utilities and controls to facilitate Unit Price work.
 - .3 Refer to individual Sections for construction activities requiring unit prices.
- .3 Measurement and Payment Procedures:
 - .1 Unit prices are included in the Total Bid Price incorporating the estimated quantities provided.

- .1 Unit prices are part of the Total Bid Price contract amount and not to be allocated to cash allowances, if included in the Contract.
 - .2 Actual quantities will be identified by the Contract Administrator in the presence of and with the assistance of the Contractor. The quantity will be measured and agreed upon by the Contractor and the Contract Administrator prior to commencement of the specified Unit Price Work.
 - .3 If the quantity is increased over that originally measured without consultation and approval by the Contract Administrator, the Contractor will not be paid for the increased quantity.
 - .4 Increases in quantities of unit prices included in the Contract will be changed by a Change Work Order based on the unit prices included in the Contract and as entered on form B: Prices.
 - .5 Decreases in quantities of unit prices included in the Agreement will be changed by a Change Work Order based on the unit prices included in the Contract and as entered on form B: Prices.
- .4 Schedule of Unit Prices:
- .1 Refer to Form B: Prices.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 This section specifies administrative and procedural requirements for meetings.
- .2 Provide physical space and make arrangements for meetings.

1.2 PRE-CONSTRUCTION MEETING

- .1 Promptly after Contract award, the Contract Administrator will establish the time and location of a pre-construction meeting to review and discuss administrative procedures and responsibilities. Contract Administrator will notify Contractor at least seven (7) Calendar Days before the meeting.
 - .1 The Contractor shall arrange for the following senior representatives to be in attendance:
 - .1 Contractor's project manager and site superintendent.
 - .2 Major Subcontractors.
 - .2 The Contract Administrator will chair the pre-construction meeting and record and distribute the minutes.
- .2 Agenda:
 - .1 Introductions.
 - .2 Communications.
 - .3 Award of Contract.
 - .4 Scope of Work.
 - .5 Subcontractors.
 - .6 Commencement.
 - .7 Schedule.
 - .8 Construction Sequence.
 - .9 Utilities.
 - .10 Project Issues.
 - .11 Safety.
 - .12 Security.
 - .13 Environmental.
 - .14 Regulatory.
 - .15 Mock-ups.
 - .16 Other.

1.3 CONSTRUCTION PROGRESS MEETINGS

- .1 In accordance with Section D supplemented with the following:.
 - .1 Progress meetings to be scheduled every two weeks.
 - .2 Contract Administrator will chair the meetings, and record and distribute the minutes.
 - .3 The Contractor shall provide physical space and make arrangements for meetings.
 - .4 The Contractor shall ensure that Subcontractors attend when it is appropriate to the discussion of the progress of the Work.
 - .5 Agenda:

- .1 Review of last meeting minutes and action items,
- .2 Schedule,
- .3 Progress status,
- .4 Construction issues,
- .5 Utilities,
- .6 Project risks,
- .7 Environment,
- .8 Safety,
- .9 Submittals,
- .10 Work by others,
- .11 Change control,
- .12 Request for Information (RFI) log,
- .13 Site security,
- .14 Quality Control (QC) and Quality Assurance (QA),
- .15 Other Business, and
- .16 Date of Next Meeting.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 NOT USED

END OF SECTION

Part 1 General

1.1 SUMMARY

- .1 This Section specifies *Contractor's* responsibilities for preparation and submission of schedules and other documentation related to tracking construction progress.
- .2 The purpose of submitting progress schedules is to:
 - .1 Inform *the City* and *the Contract Administrator* of actual progress versus planned progress, and
 - .2 Provide assurance that scheduling issues are being proactively identified and addressed in a timely manner, and that planned progress is being maintained as closely as possible.

1.2 SUBMITTALS

- .1 Construction Schedule:
 - .1 Submit detailed work schedule and schedule revisions in accordance with Part D.
- .2 Submittals Schedule:
 - .1 Submittals schedule in accordance with this Section.
 - .2 Submit as follows in electronic PDF form to Contract Administrator as follows:
 - .1 Within twenty-one (21) Calendar Days after Contract award.
 - .2 As a submission to the Contract Administrator in accordance with Section 01 33 00 - Submittal Procedures.
- .3 Construction Photographs:
 - .1 Submit photographs in electronic version via the Contract Administrator's SharePoint site as a submission to the Contract Administrator in accordance with Section 01 33 00 Submittal Procedures.
 - .2 Pre-Construction: Submit prior to mobilizing on site.
 - .3 Construction Progress:
 - .1 Submit monthly.
 - .2 Submit upon completion of key milestone activities as requested by the Contract Administrator.

1.3 DETAILED WORK SCHEDULE

- .1 In accordance with Part D.

1.4 SCHEDULE MANAGEMENT

- .1 A schedule submitted as specified and accepted by the City and Contract Administrator shall become the baseline schedule and shall be used as the baseline for updates.
- .2 At each regular progress meeting, review and discuss current construction progress and submittals schedules with *the Contract Administrator* and the City, 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.

1.5 RECORDING ACTUAL SITE CONDITIONS ON AS-BUILT DRAWINGS

- .1 Print a hard copy set of construction Drawings and Specifications for the purpose of creating as-built Drawings and Specifications. Record information in red ink on the hard copies, clearly identifying as-built deviations from the originally obtained construction Drawings and Specifications.
- .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 Work Orders and Field Instructions. Reference Change Work Order and Field Instruction number.
 - .6 Clarifications made in Requests for Information (RFI). Reference RFI number.
 - .7 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 Conduct a pre-construction inspection of the existing Site conditions in the presence of the Contract Administrator to document existing conditions using digital photography. Pre-construction photographs will be used to evaluate pre-existing damage to finishes and responsibility of repair.
- .2 Arrange for periodic digital photography to document and provide a photographic record of the progress of the *Work*.
 - .1 At minimum, photographic record to include the following:
 - .1 Pre-demolition,
 - .2 Substrate conditions following demolition,
 - .3 Construction sequencing, and
 - .4 Final installation.
 - .3 Identify each photograph by project name and date taken.
 - .4 Do not use progress or any other Project photographs for promotional purposes without *the* Contract Administrator's written consent.
 - .5 Construction Progress:
 - .1 Submit monthly.
 - .2 Submit upon completion of key milestone activities as requested by the Contract Administrator.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

- .1 Not used

END OF SECTION

Part 1 General

1.1 DESCRIPTION

- .1 This section specifies administrative and procedural requirements for submittals.

1.2 ADMINISTRATIVE

- .1 Submit specified submittals to the Contract Administrator for review.
- .2 Submit with reasonable promptness and in orderly sequence so as to not cause delay in the *Work*.
- .3 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 the *Drawings* and *Specifications*.
- .4 Where required by authorities having jurisdiction, provide submittals to such authorities for review and approval.
- .5 Do not proceed with *Work* affected by a submittal until review is complete.
- .6 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.
- .7 Review submittals, provide verified field measurements where applicable, and affix *Contractor's* review stamp prior to submission to *the* Contract Administrator. The *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*.
- .8 Verify field measurements and that affected adjacent work is coordinated.
- .9 Submittals not meeting specified requirements will be returned with comments.
- .10 Upon approval by the Contract Administrator, reproduction of construction *Drawings* to serve as background for *Shop Drawings* is permitted. Obtain, complete, sign and submit to the Contract Administrator a file release letter for use of construction *Drawings*.
- .11 Do not propose Substitutions or deviations from *Contract Documents* via *Shop Drawing*, *Product* data and sample submittals.

1.3 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 information including:
 - .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 shall 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*.
- .6 Contract Administrator's review stamp: Allow sufficient space on each sheet of shop drawings for Contract Administrator's comments and review stamp without requiring the stamp to overwrite text of the Shop Drawing.
- .5 *Product* data submittals shall include safety data sheets (SDS) for all controlled Products.
- .6 Submit *Shop Drawings* where specified in the technical *Specifications in* electronic copy in PDF format.
- .7 Submit Product data sheets or brochures where specified in the technical *Specifications in* electronic copy in PDF format.
- .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 ten *Working Days* for the Contract Administrator's review of each submittal and incorporate in submittals schedule specified in Section 01 32 00 – Construction Progress Documentation.
 - .1 Allow additional seven Calendar Days where sub-*Consultant* or commissioning agent review is required.
- .11 If upon Contract Administrator'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 Contract Administrator's review significant errors or omissions are discovered, as so noted, copy will be returned for correction and resubmission. Do not commence fabrication or installation.
- .13 Contract Administrator's notations on submittals are intended to ensure compliance with the Contract Documents and are not intended to constitute a change in the Work requiring a change to the Contract Price or Contract Time. If the Contractor considers any Contract Administrator's notation to be a change in the Work, promptly notify the Contract Administrator 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 the Contract Administrator in writing of any revisions other than those requested by the Contract Administrator.

1.4 SAMPLES

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

1.5 HEALTH AND SAFETY SUBMITTALS.

- .1 In accordance with Section 01 35 29 – Safety Procedures.

1.6 SUBMISSIONS TO CONTRACT ADMINISTRATOR:

- .1 Electronic versions via e-mail to:
 - .1 Contract Administrator in accordance with Part D.
 - .2 Contract Administration: contractadmin@crosierkilgour.com.
- .2 Samples and hard copy versions to:
 - .1 Contract Administrator in accordance with Part D.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

- .1 Not used

END OF SECTION

Part 1 General

1.1 REFERENCE STANDARDS

- .1 Province of Manitoba
 - .1 The Workplace Safety and Health Act, Chapter W210 10/02 and associated regulations.
 - .2 Manitoba Workplace Safety and Health Regulation 217/2006.
 - .3 The Workers Compensation Act C.C.S.M c. W200.

1.2 PRIME CONTRACTOR

- .1 Contractor shall be the Prime Contractor and serve as, and have the duties of the Prime Contractor in accordance with the Workplace Safety and Health Act (Manitoba).
- .2 Without limiting the generality of Part D, the Prime Contractor scope of services include all services indicated in The Workplace Safety and Health Act (Manitoba) and generally summarized below:
 - .1 Act as Safety Administrator.
 - .2 Conduct safety meetings for all contractors working on the Site.
 - .3 Conduct site safety orientations for all contractors working on the Site.
 - .4 Establish, implement and maintain an access control and screening method for the site.
 - .5 Conduct daily toolbox meetings with all contractors on site to review planned work, job hazard assessments and control measures and safe work plans being implemented.
 - .6 Receive, review and return contractor safe work plans.
 - .7 Coordinate and organize boundaries between Contractors.
 - .8 Ensure the facility is kept secure at all times.
 - .9 Schedule and manage security services.
 - .10 Building access control.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00- Submittal Procedures.
- .2 Submit, by presentation to the Contract Administrator, the safety orientation for all contractor's personnel. This presentation must be made before commencement of the Work.
- .3 Submit to the Contract Administrator one (1) copy of any Safety Data Sheet (SDS) as required. These sheets must be submitted before the controlled product is used on Site.
- .4 Submit to the Contract Administrator:
 - .1 A safe work plan in accordance with Part D,
 - .2 Minutes of the weekly (toolbox) safety meetings,
 - .3 Accident investigations (if applicable),
 - .4 Site safety inspections,
 - .5 Training records as appropriate, requested, and
 - .6 Qualifications of the environmental practitioner.
- .5 Submit proof of filing of notice of project in accordance with this section.

- .6 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .7 Submit copies of incident and accident reports.

1.4 FILING OF NOTICE

- .1 File Notice of Project with authorities having jurisdiction prior to beginning of Work.

1.5 SAFETY ASSESSMENT

- .1 Perform site specific safety hazard assessment related to project.
- .2 Safety assessment to form basis of safe work procedures and site-specific site safety plan.

1.6 MEETINGS

- .1 Schedule, administer and record minutes for:
 - .1 Safety meetings,
 - .2 Weekly safety (toolbox) meetings
- .2 Schedule meetings at minimum frequency required under legislation.
- .3 Discuss health and safety issues at each progress meeting in accordance with Section 01 31 19 – Project Meetings.

1.7 GENERAL SITE RULES

- .1 Follow all posted traffic control signs.
- .2 Ensure that all workers comply with "NO SMOKING" regulations in effect in areas of the Site.
- .3 Wear personal protective equipment (PPE) in accordance with the Safe Work Plan.
- .4 Use scaffolding that complies with regulations.
- .5 Obtain a valid certificate of inspection for all cranes and boom trucks before coming on Site.
- .6 Immediately remove any worker found to be impaired.
- .7 Immediately report all hazardous situations to the Contract Administrator.
- .8 Obtain and display at the Site SDS for all controlled products before the product is allowed on Site.

1.8 FIRST AID FACILITIES AND SERVICES

- .1 The Contractor shall provide first aid services at the Site, including their Subcontractors, until Substantial Performance is achieved. Provide qualified first aiders to man the first aid facilities.
- .2 Provide first aid coverage for the Site at all times, including periods outside of normal work hours (evenings, weekends, and holidays) as required to support the work of Subcontractors. Coordinate with others to establish required durations and levels of first aid to support regular and non-regular work hours.
- .3 Make all provisions and pay all installation, manpower, equipment, medical supplies, restocking and other costs for the first aid facilities in order to provide ongoing service for the Site in accordance with the requirements of this Specification.
- .4 Locate the first aid facility in a convenient location within the Site. The Contractor shall provide and maintain unobstructed emergency vehicle access to the main door of the first aid facility, including appropriate signage as required.
- .5 Arrange and supply transportation for injured workers both on and off Site.

- .6 The Contract Administrator will review the Contractor's first aid facility, personnel, procedures, and safety and health program. The Contract Administrator is to have full access to the Work and the Contractor's first aid facilities and records at all times.

1.9 GENERAL REQUIREMENTS

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.
- .2 Keep copy of the relevant construction occupational safety and health regulations on Site at all times. Post the policies and notices for the information of workers.
- .3 Ensure that workers are instructed and trained in safe and healthy working practices; take immediate action to correct any unsafe conditions and hold regular weekly safety (toolbox) meetings with all workers.
- .4 Establish Job Safety and Health Procedures and provide copies for the Contract Administrator's information.
- .5 Provide Safety Orientation for all individuals accessing the site during Work of this Contract.
 - .1 Including, but not limited to:
 - .1 Contractors,
 - .2 Service personnel,
 - .3 Contract Administrator personnel, AND
 - .4 City of Winnipeg staff.
 - .2 All individuals accessing the Site must attend a Safety Orientation before access to the Site is granted.
- .6 Ensure that the following essentials of the Workplace Hazardous Materials Information System are provided:
 - .1 Worker education on controlled Products.
 - .2 Workplace labelling and identification.
 - .3 Safety Data Sheets (SDS).
- .7 Conduct formal safety inspections of Site. Inspections to be performed by one person from management and one person representing workers.

1.10 RESPONSIBILITY

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

1.11 COMPLIANCE REQUIREMENTS

- .1 Comply with The Workers Compensation Act, Workplace Safety and Health Act Chapter W210 and Manitoba Workplace Safety and Health Regulation 217/2006.

1.12 UNFORSEEN HAZARDS

- .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province/Territory having jurisdiction and advise the Contract Administrator verbally and in writing.

1.13 HEALTH AND SAFETY CO-ORDINATOR

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator. Health and Safety Co-ordinator must:
 - .1 Have working knowledge of occupational safety and health regulations.
 - .2 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform Work.
 - .3 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.

1.14 POSTING OF DOCUMENTS

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province/Territory having jurisdiction.

1.15 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by the City and Contract Administrator.
- .2 Provide the Contract Administrator and City with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 If non-compliance of health and safety regulations is not corrected, the City and Contract Administrator may stop Work until corrected.

1.16 BLASTING

- .1 Blasting or other use of explosives is not permitted without prior receipt of written instruction by the Contract Administrator.

1.17 POWDER ACTUATED DEVICES

- .1 Use powder actuated devices only after receipt of written permission from the Contract Administrator.

1.18 WORK STOPPAGE

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

- .1 Not used

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 This section specifies administrative and procedural requirements for quality.
- .2 This Section describes administrative and procedural requirements for:
 - .1 Proactive Contractor Activities to assure the quality of construction before and during execution of the Work.
 - .2 Reactive activities to verify that work completed conforms to the Contract Documents.
- .3 Having inspection and testing agencies by Contractor or the City does not relieve the Contractor of their responsibility to perform Work in accordance with Contract Documents.

1.2 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 requirements. 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 *the* Contract Administrator for clarification.

1.3 ACTION AND INFORMATION SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Qualification statements: Upon request, submit statements verifying qualifications specified herein.
- .3 Certificates:
 - .1 Submit Product certificates as requested.
 - .2 Submit Product certificates as required in Contract Documents.

1.4 QUALIFICATIONS

- .1 Contractor Qualifications:
 - .1 Engaged full time with knowledge and experience in the risks, environmental impacts, and all components of the line of work required by these Contract Documents.
 - .2 Demonstrated experience satisfactory to the Contract Administrator:
 - .1 Prime Contractor:
 - .1 Minimum of:
 - .1 Five projects over past five years as Prime Contractor as follows:

- .1 Successful completion of projects of similar value as that required by these Contract Documents, and
- .2 Successful completion of projects of similar nature, scope and complexity as that required by these Contract Documents.
- .2 Proposed project manager:
 - .1 Minimum of:
 - .1 Five projects over past five years as project manager as follows:
 - .1 Successful completion of projects of similar value as that required by these Contract Documents, and
 - .2 Successful completion of projects of similar nature, scope and complexity as that required by these Contract Documents.
 - .2 Successful completion of projects of similar nature, scope and complexity as that required by these Contract Documents.
 - .3 Proposed superintendent:
 - .1 Minimum of:
 - .1 Five projects over past five years as superintendent as follows:
 - .1 Successful completion of projects of similar value as that required by these Contract Documents, and
 - .2 Successful completion of projects of similar nature, scope and complexity as that required by these Contract Documents.
- .3 Certified under Certificate or Recognition (COR) or Small Employer Certificate of Recognition (SECOR).
- .2 Subcontractor Qualifications:
 - .1 Engaged full time with knowledge and experience in the risks, environmental impacts, and all components of the line of work required by these Contract Documents.
 - .2 As specified in technical sections.
 - .3 Installer qualifications: In accordance with Installer Qualifications of this Section.
 - .4 Certified under Certificate or Recognition (COR) or Small Employer Certificate of Recognition (SECOR).
- .3 Manufacturers' Qualifications:
 - .1 Specializes in manufacturing the products specified in the Technical Sections of the Contract Documents.
 - .2 Successful record of performance with minimum of:
 - .1 Five years documented experience.
- .4 Suppliers' qualifications:
 - .1 Authorized to distribute manufacturer's products.
 - .2 Has capacity to supply required products without delaying the project.
- .5 Fabricator's Qualifications:
 - .1 Experienced in producing products required by the contract Documents.
 - .2 Successful record of in-service performance.
 - .3 Sufficient capacity to fabricate required products without delaying the Project.

- .6 Installer Qualifications:
 - .1 Individual experienced in design and installation, application, and erection of materials to the extent required for this Project.
 - .1 Minimum of:
 - .1 Five projects over past five years as follows:
 - .1 Successful completion of projects of similar value as that required by these Contract Documents, and
 - .2 Successful completion of projects of similar nature, scope and complexity as that required by these Contract Documents.
 - .2 Successful record of in-service performance.
- .7 Testing and Inspection Agency Qualifications:
 - .1 Organizations accredited as specified in Technical Sections.
 - .2 Capable of reliably performing testing of building products and inspections of construction activities in accordance with Contract Documents.
- .8 Licenced Professionals Qualifications:
 - .1 Individual registered or licenced to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the province, territory or jurisdiction in which the Project is to be constructed.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

- .1 Not used

END OF SECTION

Part 1 General

1.1 TEMPORARY UTILITIES - GENERAL

- .1 Provide temporary utilities as specified and as otherwise necessary to perform the *Work* expeditiously.
- .2 Remove temporary utilities after use.

1.2 TEMPORARY WATER SUPPLY

- .1 Connect to and use existing water supply at the Site for temporary use during construction, subject to existing available volume and pressure.
 - .1 Usage at no cost to *Contractor*.
- .2 Arrange and pay for necessary water supply connections and disconnections.
- .3 Provide hoses, lines, connections, and other ancillary hardware required.
- .4 Return services to their original condition at the temporary locations, or left in an altered condition only as approved by the Contract Administrator.

1.3 TEMPORARY HEATING AND VENTILATION

- .1 Arrange and pay for temporary heating and ventilation required during construction.
- .2 Provide temporary heating required during construction period, including attendance, maintenance and fuel.
- .3 Vent construction heaters in enclosed spaces to the outside or use flameless type of construction heaters.
- .4 Provide temporary heat for the *Work* as required to:
 - .1 Facilitate progress of *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 Maintain interior temperature of minimum 10 degrees C.
- .5 Provide temporary ventilation for the *Work* as required to:
 - .1 Prevent accumulations 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 that hazardous, noxious, or volatile substances do not migrate to occupied spaces of the Site.
 - .3 Ventilate temporary sanitary facilities.
- .6 Do not use permanent building heating and ventilation systems during construction.

1.4 TEMPORARY ELECTRICAL POWER AND LIGHTING

- .1 Connect to and use existing electrical supply at the Site for temporary use during construction.
 - .1 Usage at no cost to *Contractor*.
- .2 Maximum power supply available for temporary use during construction is limited to existing power supply at the building.

- .3 Arrange and pay for necessary connections and disconnections of temporary power and lighting in accordance with regulatory requirements.

1.5 SHUT DOWN AND START-UP OF EXISTING UTILITIES AND HVAC SYSTEMS

- .1 Co-ordinate shut down and start-up of existing utilities and HVAC systems with the Contract Administrator.
- .2 Comply with facilities maintenance requirements at the Site for shut down and start-up of systems.
 - .1 Provide minimum 48 hours written notification to the Contract Administrator.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

- .1 Not used

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CSA S269.2-16, Access scaffolding for construction purposes.
 - .2 Z91-17, Health and safety code for suspended equipment operations.
 - .3 CSA Z271:20, Design of suspended access equipment.

1.2 SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit scaffolding shop drawings in accordance with this Section.
- .3 Submit swing stage shop drawings in accordance with this Section.
- .4 Submit site sign shop drawings in accordance with this Section.
- .5 Submit site storage layout plan in accordance with this Section.

1.3 CONSTRUCTION FACILITIES - GENERAL

- .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 the duration of the *Work*.
- .3 Remove temporary construction facilities from *Place of the Work* when no longer required.

1.4 CONSTRUCTION PARKING

- .1 No free parking is available at the Site. Arrange with the City of Winnipeg parking and traffic departments for parking and street closures.

1.5 VEHICULAR ACCESS

- .1 Provide and maintain adequate access to *the Site*. Do not disrupt existing site roads.
- .2 Restrict construction equipment and vehicular access to established roads on Site.

1.6 SITE OFFICES

- .1 Further to Part E, provide Contractor Site office as follows:
 - .1 Provide a temperature controlled and ventilated office, with suitable lighting, of sufficient size to accommodate site meetings and furnished with drawing laydown table.
 - .2 Locate site office:
 - .1 Within the Contractor compound.
 - .2 At location shown on Drawings.
 - .3 As approved by the Contract Administrator as discussed at the construction start-up conference.
 - .3 Obtain and pay for permits and approvals to locate site office on adjacent municipal streets.

1.7 SANITARY FACILITIES

- .1 Provide sanitary facilities for workers.

- .2 Do not use permanent washroom facilities during construction.
- .3 Keep sanitary facilities clean and fully stocked with the necessary supplies.

1.8 FIRE PROTECTION

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

1.9 USE OF EXISTING ELEVATORS

- .1 Existing elevators shall not be used for construction purposes.

1.10 SCAFFOLDING

- .1 Provide and maintain scaffolding as required for access throughout duration of the Work.
- .2 Design and erect scaffolding in accordance with Manitoba Regulation 217/2006 and CAN/CSA S269.2.
- .3 Repair landscape and building damage caused by use of scaffolding.
- .4 Submittals: Where Manitoba Regulation 217/2006 requires scaffolds to be designed by a professional engineer, submit shop drawings bearing the seal of professional engineer registered in the Province of Manitoba.

1.11 SUSPENDED ELEVATING PLATFORMS (SWINGSTAGE)

- .1 Existing roof areas are not equipped with certified roof anchors.
 - .1 Design and provide temporary anchorage for swing stage use.
 - .2 Swing stage and temporary anchors in accordance with Manitoba Regulation 217/2006 and CAN/CSA S269.2.
 - .3 Repair landscape and building damage caused by use of swing stage.
- .2 Submittals:
 - .1 Submit shop drawings as follows:
 - .1 Roof plan layout including:
 - .1 Fall arrest and swing stage anchor locations.
 - .2 Anchor substrate materials.
 - .3 Path of fall arrest lines and swing stage tie-back lines.
 - .2 Design loads required for each anchor.
 - .3 Details of each type of anchor designed.
 - .4 Design load and support anchor calculations.
 - .1 Including review of existing structure to support temporary loading.
 - .5 Swing stage outboard thrust, inboard thrust, number and configuration of counterweights.
 - .6 Shop drawings to be sealed by an engineer licensed to practice in Manitoba.
 - .2 Submit the following:
 - .1 Swing stage platform manufacturer's technical data indicating allowable load capacities.
 - .2 Outrigger manufacturer's, supplier's table of counterweights and allowable projections beyond fulcrum point for various loads.
 - .3 Submit swing stage permit issued by Manitoba Workplace Safety and Health.

- .4 Submit proof of notification to Manitoba Workplace Safety and Health.
- .5 Submit a Manitoba Workplace Safety and Health serial number prior to swing stage set-up.

1.12 AERIAL DEVICES

- .1 Provide, use and maintain aerial devices in accordance with Manitoba Regulation 217/2006.
- .2 Provide traffic control and traffic permits for use of aerial device around perimeter of building.
- .3 Store aerial device within contractor compound.
- .4 Repair landscape damage caused by use of aerial device.

1.13 SITE STORAGE/LOADING

- .1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with weight or force that will endanger Work.

1.14 EQUIPMENT, TOOL AND MATERIALS STORAGE

- .1 Provide and maintain, in clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.
- .2 Locate materials not required to be stored in weatherproof sheds on site in manner to cause least interference with work activities.

1.15 CLEAN-UP

- .1 Remove construction debris, waste materials, packaging material from work site daily.
- .2 Clean dirt or mud tracked onto paved or surfaced roadways.
- .3 Store materials resulting from demolition activities that are salvageable.
- .4 Stack stored new or salvaged material not in construction facilities.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 BARRIERS AND ENCLOSURES - GENERAL

- .1 Provide temporary barriers and enclosures necessary to:
 - .1 Delineate Contractor construction areas from publicly occupied areas.
 - .2 Protect building occupants and public from construction activities.:
 - .3 Secure the Site during performance of the *Work*.
- .2 Comply with applicable regulatory requirements.
- .3 Maintain temporary barriers and enclosures in good condition for the duration of the *Work*.
- .4 Remove temporary barriers and enclosures from Site when no longer required.
- .5 Repair surface coatings, finishes which are damaged by temporary barriers and enclosures.
- .6 Provide adequate signage, fencing, and other informational systems to inform the public of the work being undertaken.

1.2 FENCING

- .1 Barricade area under construction with fencing to prevent the general public from improper access.
 - .1 Erect temporary site enclosure around site using 1.8 m high pre-fabricated welded galvanized steel tube and wire mesh fence panels.
 - .2 Provide metal bottom brackets with weights or other means to secure in place.
 - .3 Provide locking top pins to secure fence sections together.
 - .4 Secure fencing to adjacent structure for continuity of compound.
 - .5 Provide opaque screens to fence sections.
 - .1 Screens to be blank with no advertisements.
- .2 Maintain site fencing in good repair until removed.
- .3 Provide lockable access gates as required to facilitate construction access.

1.3 FIRE ROUTES

- .1 Maintain fire access routes, including overhead clearances, for use by emergency response vehicles.

1.4 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*.

1.5 PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY

- .1 Protect surrounding private and public property from damage during performance of *Work*.
- .2 Be responsible for damage incurred.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

.1 Not used

END OF SECTION

Part 1 General

1.1 TEMPORARY CONTROLS - GENERAL

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

1.2 PLANT PROTECTION

- .1 Protect trees and other plant material designated to remain on site, on adjacent properties, and where indicated on *Drawings*.
- .2 Protect trees and shrubs susceptible to damage during construction by encasing with protective wood framework from grade to height of two metres.
- .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 and vegetation.

1.3 DUST AND PARTICULATE CONTROL

- .1 Execute *Work* by methods that minimize dust from construction operations and spreading of dust on site or to adjacent properties.
- .2 Provide temporary enclosures to prevent extraneous materials resulting from sandblasting or similar operations from contaminating air beyond immediate work area.
- .3 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.
- .4 Use appropriate covers on trucks hauling fine, dusty, or loose materials.

1.4 DEWATERING

- .1 Provide temporary drainage and pumping as necessary to dewater excavations, trenches, foundations, and other parts of the *Work*. Maintain such areas free of water arising from groundwater or surface run-off, as required to keep them stable, dry, and protected from damage due to flooding.
- .2 Maintain standby equipment necessary to ensure continuous operation of dewatering system.
- .3 Do not pump water containing suspended materials or other harmful substances into waterways, sewers or surface drainage systems. Treat or dispose of such water in accordance with applicable regulatory requirements

1.5 SITE DRAINAGE

- .1 Maintain grades to ensure proper site drainage.
- .2 Prevent surface water runoff from leaving the site.
- .3 Prevent precipitation from infiltrating or from directly running off stockpiled waste and materials. Cover stockpiled waste and 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 that gutters are kept open and water is not directed across or over pavements or sidewalks, except through pipes or properly constructed troughs. Ensure that runoff from unfinished areas is intercepted and diverted to suitable outlets.

1.6 EROSION AND SEDIMENT CONTROL

- .1 Minimize amount of bare soil exposed at one time. Stabilize disturbed soils as quickly as practical to minimize erosion. Remove accumulated sediment resulting from construction activity from adjoining surfaces, drainage systems, and watercourses, and repair damage caused by soil erosion and sedimentation.
- .2 Provide and maintain appropriate temporary measures such as silt fences, straw bales, ditches, geotextiles, drains, berms, terracing, riprap, temporary drainage piping, sedimentation basins, vegetative cover, dikes, and other measures that may be required to prevent erosion and migration of silt, mud, sediment, and other debris.
- .3 Do not disturb existing embankments or embankment protection.
- .4 Periodically inspect erosion and sediment control measures to detect evidence of erosion and sedimentation. Promptly take corrective measures when necessary.
- .5 If soil and debris from site accumulate in ditches or other low areas, remove accumulation and restore area to original condition.

1.7 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 on site, to intercept, clean up, and dispose of spills or releases that may occur.
- .3 Promptly report spills and releases that may occur to:
 - .1 Authority having jurisdiction,
 - .2 Person causing or having control of pollution source, if known, and
 - .3 The Contract Administrator.
- .4 Contact manufacturer of pollutant, if known and applicable, to obtain material safety data sheets (MSDS) and ascertain hazards involved and precautions and measures required in cleanup or mitigating actions.
- .5 Take immediate action to contain and mitigate harmful effects of the spill or release.
- .6 The use of gas or diesel powered equipment within interior parkades is strictly prohibited.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

- .1 Not used

END OF SECTION

Part 1 General

1.1 GENERAL

- .1 Provide *Products* that are not damaged or defective, and suitable for purpose intended, subject to specified requirements. If requested by the Contract Administrator, furnish evidence as to type, source and quality of *Products* provided.
- .2 Unless otherwise specified, maintain uniformity of manufacture for like items throughout.
- .3 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.
- .4 Procurement policy is to acquire, in cost effective manner, items containing highest percentage of recycled and recovered materials practicable consistent with maintaining satisfactory levels of competition. Make reasonable efforts to use recycled and recovered materials and in otherwise utilizing recycled and recovered materials in execution of work.
- .5 Defective products, whenever identified prior to completion of Work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .6 Should disputes arise as to quality or fitness of products, decision rests strictly with the Contract Administrator based upon requirements of Contract Documents.

1.2 PRODUCT OPTIONS

- .1 Product options are subject to the provisions of B7 - Substitutes and are to be requested during bidding stage only:
 - .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 the Contract Administrator, submit information verifying that the proposed *Product* meets or exceeds the specified standard.
- .3 Wherever a *Product* is specified by descriptive or performance requirements only, provide any Product that meets or exceeds the specified requirements. If requested by *the* Contract Administrator, submit information verifying that the proposed *Product* meets or exceeds the specified requirements.
- .4 Wherever a Product is specified by descriptive or performance requirements and specific products are identified as basis of design, provide the Product identified as the basis of design or any Product that meets or exceeds the specified requirements. If requested by the Contract Administrator, submit information verifying that a proposed Product not identified as a basis of design meets or exceeds the specified requirements.

1.3 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 or has become unavailable due to unforeseen circumstances, submit a substitution request in the format of an RFI, along with an appended substitution request form located in Section 01 61 00.10 – Substitution Request Form. Product substitutions without cause and that should have been proposed during the bid stage as outlined in 1.2.1 will not be contemplated by the Contract Administrator.
 - .1 If the alternative product is accepted for use in the Contract for reasonable cause, the Contract Administrator will prepare a Proposed Change Notice (PCN) and associated Change Work Order (CWO) to document the product change.
 - .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 Contract Administrator's review and acceptance.
- .3 If delivery delays are foreseeable, for any reason, promptly notify the Contract Administrator
 - .1 If a delivery delay is beyond Contractor's control, the Contract Administrator will provide direction.
 - .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 the Contract Administrator's review and acceptance.
- .4 In event of failure to notify the Contract Administrator at commencement of Work and should it subsequently appear that Work may be delayed for such reason, the Contract Administrator reserves right to substitute more readily available products of similar character, at no increase in Contract Price or Contract Time.

1.4 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 bundled Products in original and undamaged condition with manufacturer's seals and labels intact. Do not remove from packaging or bundling until required in *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 labeling and the provision of material safety data sheets (MSDS).
- .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 cementitious products clear of earth or concrete floors, and away from walls.
- .8 Keep sand, when used for grout or mortar materials, clean and dry. Store sand on wooden platforms and cover with waterproof tarpaulins during inclement weather.
- .9 Remove and replace damaged *Products*.
- .10 Touch-up damaged factory finished surfaces to the Contract Administrator's satisfaction. Use touch-up materials to match original. Do not paint over name plates.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

.1 Not used

END OF SECTION

Part 1 General

1.1 SUBMITTED BY:

- .1 Company Name: _____
- .2 Business Address: _____
- .3 Submitter Name: _____
- .4 Submitter E-mail address: _____
- .5 Submitter Telephone #: _____
- .6 Date Submitted: _____

1.2 MANUFACTURER INFORMATION

- .1 Manufacturer Name: _____
- .2 Manufacturer Website Address: _____

1.3 SUBMITTED TO (CONTRACT ADMINISTRATOR):

- .1 Crosier Kilgour
610 - 234 Donald Street
Winnipeg, Manitoba R3C 1M8
- .2 Attention: Daniel Mulaire
- .3 E-mail address: daniel.mulaire@crosierkilgour.com

1.4 SPECIFICATION REFERENCE:

- .1 Specification Section No.: _____
- .2 Specification Section Name: _____

1.5 REASON FOR SUBSTITUTION (SELECT ONE)

- .1 Substitution for Cause
- .2 Substitution for Convenience

1.6 PRODUCT DATA AND PERFORMANCE

- .1 Provide side-by-side comparison of specified and substitution product data including applicable standard reference. Provide manufacturer technical data sheet for both the specified and the substitute product as attachment to this form.

	Specified Product		Substitute Product	
<i>Manufacturer Name:</i>				
<i>Product Name:</i>				
Performance Data:	Results	Standard Reference	Results	Standard Reference
e.g. Compressive Strength	e.g. 55 MPa	e.g. ASTM C496	e.g. 55 MPa	e.g. ASTM C496
1.				
2.				
3.				
4.				
5.				

- .1 Submitted by (Printed): _____
- .2 Submitted by (Signature): _____

END OF SECTION

Part 1 General

1.1 DESCRIPTION

- .1 This section specifies the cleaning and waste management requirements to be adhered to through the course of the Work.

1.2 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.

1.3 GENERAL CLEANING REQUIREMENTS

- .1 Provide adequate ventilation during use of volatile or noxious substances.
 - .1 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 the cleaning process.
- .4 Notify the Contract Administrator of the need for cleaning caused by the City or other contractors.

1.4 PROGRESSIVE CLEANING AND WASTE MANAGEMENT

- .1 Maintain the *Work* in a 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.
 - .1 Locate containers:
 - .1 Where indicated during pre-construction meeting.
 - .2 Where indicated on *Drawings*.
- .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 the site 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.
- .7 Clear snow and ice from public sidewalks within the areas of Work as required to comply with applicable municipal regulatory requirements.

1.5 FINAL CLEANING

- .1 Remove from Site surplus products, waste materials, recyclables, *Temporary Work*, and *Construction Equipment* not required to perform any remaining work.
- .2 Clean areas of work by workers trained in cleaning procedures.
- .3 Restrict access to each room or area after completing final cleaning in that area.
- .4 Re-clean as necessary areas that have been accessed by *Contractor's* workers prior to City occupancy.

- .5 Remove stains, spots, marks, and dirt from exterior facades within areas of Work.
- .6 Clean exterior window glass and frames within areas of Work.
- .7 Sweep clean, power wash, remove snow and ice from exterior sidewalks, steps, driveways, roads, parking lots, and other paved surfaces within areas of Work.
- .8 Use leaf blowers to clean landscaped surfaces within areas of Work.
- .9 Broom clean and wash exterior walks, steps and surfaces within areas of Work.

1.6 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 the Site.
- .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 the Site, 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.

Part 2 Products

2.1 NOT USED

- .1 Not used

Part 3 Execution

3.1 NOT USED

- .1 Not used

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Procedures and requirements for Substantial Performance and Total Performance of the Work.

1.2 SUBMITTALS

- .1 Substantial Performance:
 - .1 Submit written application for review of Substantial Performance, including attachments specified in this section in electronic PDF format via e-mail.
 - .2 Submit to:
 - .1 The Contract Administrator:
 - .1 In accordance with Part D, and
 - .2 Contract administration: contractadmin@crossierkilgour.com.
 - .2 The City's representative at e-mail address identified at the pre-construction meeting.
 - .2 Total Performance:
 - .1 Submit written application for review of Total Performance, including attachments specified in this section in electronic PDF format via e-mail.
 - .2 Submit to:
 - .1 The Contract Administrator:
 - .1 In accordance with Part D, and
 - .2 Contract Administration: contractadmin@crossierkilgour.com.
 - .2 The City's representative at e-mail address identified at pre-construction meeting.

1.3 SUBSTANTIAL PERFORMANCE OF THE WORK

- .1 The prerequisites to, and the procedures for, attaining substantial performance of the *Work*, or similar such milestone as provided for in the lien legislation applicable to the place of the Work, shall be:
 - .1 In accordance with the lien legislation applicable to the place of the Work.
 - .2 As specified in this section.
- .2 Further to Part D, the Contractor shall:
 - .1 Schedule reviews for Substantial Performance as specified below at the following frequencies:
 - .1 When seasonal weather conditions outside of the Contractor's control prevent progress on or completion of the Work requiring the remainder of the work being postponed until seasonal weather conditions suitable for construction have resumed.
 - .2 Upon completion of each phase as shown on Drawings.
 - .2 *Contractor's Inspection*:
 - .1 Before applying for the Contract Administrator's review to establish *Substantial Performance*:
 - .1 Ensure that the specified prerequisites to Substantial Performance 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, and
 - .4 Provide an anticipated schedule and costs for items to be completed or corrected.
- .3 Contract Administrator's Review:
- .1 Submit to the Contract Administrator a written application for review of Substantial Performance.
 - .2 Include the following in the application:
 - .1 Project name and City tender number,
 - .2 Name of Contractor submitting the request,
 - .3 Description of the Work Substantial Performance is being requested,
 - .4 Date request submitted,
 - .5 Date review requested, and
 - .6 Results of Contractor Inspection, including:
 - .1 List of items to be completed or corrected.
 - .2 Verification that items have been completed or corrected, or
 - .3 Schedule and costs for items to be completed or corrected.
 - .3 Upon receipt of the *Contractor's* application for review, together with the *Contractor's* list of items to be completed or corrected, the Contract Administrator, *the City*, and the *Contractor* shall jointly review the *Work* being requested for Substantial Performance.
 - .4 The Contract Administrator will advise the *Contractor* whether or not the *Work* being requested for Substantial Performance is *considered to have attained Substantial Performance*. The Contract Administrator will add additional items, if any, to the *Contractor's* list of items to be completed or corrected. Provide the Contract Administrator with a copy of the revised list.
 - .5 Maintain the list of items to be completed or corrected and promptly correct or complete defective, deficient and incomplete work. The Contractor's inspection and Contract Administrator's review procedures specified above shall be repeated until the *Work* being requested for Substantial Performance is considered to have attained *Substantial Performance* and no items remain on the *Contractor's* list of items to be completed or corrected.
 - .6 When the Contract Administrator determines that the *Work* being requested for Substantial Performance has attained Substantial Performance, the Contract Administrator will issue a Certificate of Substantial Performance for the *Work* being requested for Substantial Performance.
- .3 Certificate of Substantial Performance
- .1 The Certificate of Substantial Performance will document the deadline for application of liens and release of statutory holdback requirements in accordance with lien legislation applicable to the place of the *Work*

1.4 TOTAL PERFORMANCE

- .1 The prerequisites to attaining Total Performance of the *Work* are described in Parts C - General Conditions and Part D - Supplementary Conditions
- .2 Review Before Total Performance:
 - .1 Schedule a review for Total Performance as specified below upon completion of the prerequisites for Total Performance as specified in Parts C - General Conditions and D – Supplementary Conditions.
 - .2 Schedule reviews with appropriate notice and time to allow for verification of Total Performance by the specified date of Total Performance identified in the Contract Documents as amended by Change Order.
 - .3 *Contractor's* Inspection:
 - .1 Before applying for the Contract Administrator's review to establish Total Performance:
 - .1 Review any previously issued Certificates of Substantial Performance and associated lists of items for completion and correction.
 - .1 Ensure Items on lists are now complete.
 - .2 Create an updated list of items to be completed or corrected.
 - .2 Ensure that the specified prerequisites to Total Performance are completed.
 - .3 Conduct an inspection of the *Work* to identify defective, deficient, or incomplete work.
 - .4 Prepare a comprehensive and detailed list of items to be completed or corrected.
 - .5 Provide an anticipated schedule and costs for items to be completed or corrected.
 - .2 Contract Administrator's Review:
 - .1 Submit a written application for review of Total Performance.
 - .2 Include the following in application:
 - .1 Project name and City tender number,
 - .2 Name of Contractor submitting the request,
 - .3 Date request submitted,
 - .4 Date review requested, and
 - .5 Results of Contractor Inspection, including:
 - .1 Updated lists from previously issued Certificates of Substantial Performance.
 - .2 List of items to be completed or corrected.
 - .3 Verification that items have been completed or corrected, or
 - .4 Schedule and costs for items to be completed or corrected.
 - .6 Verification that Startup, testing required by the Contract Documents have been completed and results submitted to the Contract Administrator.
 - .7 Verification that demonstration and training required by the contract documents have been conducted.
 - .3 Upon receipt of the *Contractor's* application for review, together with the *Contractor's* list of items to be completed or corrected and verifications of

completed pre-requisites for Total Performance, the Contract Administrator, *the City*, and the *Contractor* shall jointly review the *Work* for Total Performance.

- .4 The Contract Administrator will advise the Contractor whether or not the Work has attained Total Performance. Add additional items, if any, to the Contractor's list of items to be completed or corrected. Provide the Contract Administrator with a copy of the revised list.
 - .1 Include on the list verifications for the following if required by the Contract Documents:
 - .1 Close-out submittals.
 - .2 Startup, testing.
 - .3 Demonstration and training.
 - .5 Maintain the list of items to be completed or corrected and promptly correct or complete defective, deficient and incomplete work.
 - .6 The Contractor's inspection and Contract Administrator's review procedures specified above shall be repeated until the *Work* attains Total Performance and no items remain on the *Contractor's* list of items to be completed or corrected.
 - .7 When the Contract Administrator determines that the Work has attained Total Performance, the Contract Administrator will issue a Certificate of Total Performance.
- .3 Certificate of Total Performance:
 - .1 The Certificate of Total Performance will document the:
 - .1 Date of Total Performance, and
 - .2 Commencement of warranty period.

1.5 FINAL PAYMENT

- .1 In accordance with C12.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Methods and procedures for deconstruction of structures and parts of structures.

1.2 MEASUREMENT PROCEDURE

- .1 No measurement will be made for demolition of items to facilitate Work identified as fixed price component.
- .2 Include demolition costs for demolition required to facilitate Work identified as a unit price component.

1.3 QUALITY ASSURANCE

- .1 Qualifications:
 - .1 Train workers and subcontractors to carry out work in accordance with appropriate deconstruction techniques.
 - .2 Project supervisor to have previous deconstruction experience and must be present on site throughout project.

1.4 SITE CONDITIONS

- .1 Hazardous Materials:
 - .1 Should material resembling asbestos or other hazardous material be encountered, stop work, take preventative measures, and notify the Contract Administrator immediately.
 - .1 Do not proceed until written instructions have been received from the Contract Administrator.
 - .2 Notify the Contract Administrator before disrupting building access or services.
- .2 Existing Conditions:
 - .1 Ensure that materials, equipment and procedures safely supporting existing structure and construction live loads; that allow work to be accomplished and that minimize risk of damage to historic and archaeological elements.
 - .2 The building will be occupied continuously over the duration of the Work. Access to the building to be maintained. Protect entrance and egresses to the building.
 - .3 Vehicle and barrier free access to the building entrances and exits must be maintained at all times during the course of the work.
 - .4 Provide Contract Administrator a minimum seven days advance notice prior to commencement of repairs.
- .3 Protection:
 - .1 Protect existing structures and services designated to remain and items designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of the Contract Administrator and at no change in Contract price or time.
 - .2 In all circumstances ensure that demolition work does not adversely affect adjacent areas and operations below Work Area.
 - .3 Do not dispose of waste of volatile materials such as, mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers. Ensure proper disposal procedures are maintained throughout the project.

- .4 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers or onto adjacent properties.
- .5 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities.
- .6 Prevent movement, settlement or damage of adjacent structures, services. Provide bracing, shoring. Repair damage caused by deconstruction.
- .7 Support affected structures and, if safety of structure being deconstructed and adjacent structures appears to be endangered, take preventative measures. Cease operations and immediately notify the Contract Administrator.
- .8 Prevent debris from blocking surface drainage system, elevators, mechanical and electrical systems.

Part 2 Products

2.1 EQUIPMENT

- .1 Leave equipment and machinery running only while in use, except where extreme temperatures prohibit shutting down.
- .2 Where possible use water efficient wetting equipment/attachments when minimizing dust.
- .3 Protect existing items designated to remain and materials designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of the Contract Administrator and at no change in Contract price or time.
- .4 Demonstrate that tools are being used in manner which allows for salvage of materials in best condition possible.
- .5 Locate and protect any utility lines which may be affected by the work and if necessary, notify utility companies before starting demolition.
- .6 The parking deck has a structural live load capacity of 50 pounds per square foot; thus, equipment and stockpiling of material must not exceed this limit.

Part 3 Execution

3.1 EXAMINATION

- .1 Before starting work, verify existing conditions and variations. Notify the Contract Administrator of discrepancies.
- .2 Conduct inspection with the Contract Administrator to determine extent of masonry and concrete repair areas.

3.2 PREPARATION

- .1 Remove items adjacent to area of demolition to provide clear workspace. Store in area designated by the Contract Administrator.
- .2 Take pre-demolition photographs of Work Area prior to demolition.

3.3 DISASSEMBLY

- .1 Conduct demolition to minimize interference with adjacent building areas.
- .2 Maintain protected, wheelchair accessible egress and access at all times to the building entrance.
- .3 Remove debris created by the execution of the Work progressively from the site to appropriate disposal grounds. Do not damage adjacent finishes or surfaces.
- .4 Do not disturb adjacent items designated to remain in place.
- .5 Salvage Materials:

- .1 Carefully remove and store reusable site materials.
- .2 Dismantle items containing materials for salvage.
- .3 Stockpile salvaged materials at locations as approved by the Contract Administrator.
- .6 Deconstruct in accordance with Manitoba Regulation 217/2006 and other applicable safety standards.

3.4 REMOVAL FROM SITE

- .1 Transport material designated for disposal to approved facilities in accordance with applicable regulations.
- .2 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.

3.5 CLEANING AND RESTORATION

- .1 Keep site clean and organized throughout deconstruction.
- .2 Upon completion of demolition, remove debris, trim surfaces and leave work site clean.
- .3 Upon completion of project, reinstate parking surfaces, walkways, affected by Work to condition which existed prior to beginning of Work and match condition of adjacent, undisturbed areas.
- .4 In addition to the progressive removal of waste materials and debris from building and site, leave the site clean, perform the following before final inspection by the Contract Administrator.
 - .1 spray-wash all exterior building finishes in construction area and any adjacent building areas soiled by the construction processes.
 - .2 Broom clean and wash exterior walks, steps and platforms soiled from delivery or removal materials.
 - .3 Remove all dirt and other disfigurements from exterior surfaces.
 - .4 Sweep clean all paved areas.

END OF SECTION

Part 1 General

1.1 SUMMARY

- .1 This Section includes the restoration of stone masonry construction as shown on Drawings.

1.2 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-A371-14, Masonry Construction for Buildings.

1.3 MEASUREMENT PROCEDURES

- .1 The repair areas will be identified by the Contract Administrator on-site in the presence of, and with the assistance of the Contractor. The areas will then be measured and agreed upon by the Contractor and Contract Administrator prior to commencement of work. These measurements will form the basis of payment for the area.
- .2 Unit prices must include all supervision, labour and materials, and equipment.
- .3 The Contractor is to note that if the area of the repair is increased over that originally measured without consultation with the Contract Administrator, then the Contractor will not be paid for the increased area.
- .4 Method Masonry Unit Stabilization with Helifix anchor ties.
 - .1 Unit price per anchor. Minimum unit payment is one (1) anchor.
- .5 Method Masonry Unit Stabilization with stainless steel threaded rods.
 - .1 Unit price per anchor. Minimum unit payment is one (1) anchor.
- .6 Method Stone panel removal:
 - .1 Unit price per panel Minimum unit payment is one (1) panel.
- .7 Method Masonry Unit Stabilization with Hilti Kwik Bolt 3 Strapping.
 - .1 Unit price per anchor. Minimum unit payment is one (1) anchor.
- .8 Method Partial Removal of Sections of Stone Panel.
 - .1 Included in the fixed/lump sum price component.

1.4 SUBMITTALS

- .1 Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Upon request, submit the following submittals demonstrating compliance with qualifications specified in this Section.
 - .1 Masonry Contractor:
 - .1 Company profile including:
 - .1 Years in business as a historic stone masonry contractor.
 - .2 Number of masons with greater than 10 years experience.
 - .2 Provide minimum 5 examples of local projects demonstrating successful performance historic stone masonry repairs of similar size and complexity to specified Work within the last 3 years.
 - .3 Provide minimum 3 references exhibiting successful performance historic stone masonry repairs within the last 3 years.
 - .2 Masons: For each mason, submit:
 - .1 Resume demonstrating training, qualifications and experience.

- .2 Certificate of Qualification.
- .3 Provide minimum 5 examples of local projects demonstrating successful performance historic stone masonry repairs of similar size and complexity to specified Work within the last 3 years.

1.5 QUALITY ASSURANCE

- .1 Masonry Contractor:
 - .1 Use single Masonry Contractor for all masonry work.
 - .2 Masonry contractor to have 10 years experience minimum in historic stone masonry restoration work.
 - .3 Masonry contractor to have good level of understanding of structural behaviour of masonry walls when masonry work involves replacing or repairing stones which are part of structural masonry work.
- .2 Masons:
 - .1 Mason to have certificate of qualification with 10 years minimum experience in historic stone masonry restoration work.
 - .2 Ensure all personnel involved with historic stone masonry restoration is adequately trained and familiar with the requirements of this Section.
 - .3 Minimum of one (1) red seal certified mason shall be on-site at all times during the Work.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Comply with Section 01 61 00.
- .2 Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- .3 Store tightly sealed materials off ground and away from moisture, direct sunlight, extreme heat, and freezing temperatures.
- .4 Keep materials in manufacturer's original, unopened containers and packaging until installation.
- .5 Protect materials during storage, handling, and application to prevent contamination or damage.

1.7 PROJECT CONDITIONS

- .1 Environmental Requirements:
 - .1 Ensure that substrate surface and ambient air temperature are minimum of 4°C and rising at application time and remain above 4°C for at least 24 hours after application. Ensure that frost or frozen surfaces are thawed and dry.
 - .2 Ensure that substrate surface and ambient air temperature are below of 32°C and remain below 32°C for at least 8 hours after application.
 - .3 Do not apply material if snow, rain, fog, and mist are anticipated within 12 hours after application. Allow surfaces to attain temperature and conditions specified before proceeding with application.

Part 2 Products

2.1 MATERIALS

- .1 Refer to Drawings.
 - .1 Substitutions as specified in Tender documents.

Part 3 Execution

3.1 GENERAL

- .1 Do masonry work in accordance with CSA-A371 except where specified otherwise.
- .2 Manufacturer's Instructions: Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 EXAMINATION

- .1 The location number and extent of repairs shown on Drawings are indicative only. Repairs areas will be identified on-site by the Contract Administrator in the presence of and with the assistance of the Contractor. The approximately periphery of the repair will be marked on the surface of the member and the location and extent recorded on drawings
- .2 Allow time in the Schedule for survey and inspection work carried out by the Contract Administrator ahead of repairs. Provide sufficient safe access to enable review of all areas designated for repairs.
- .3 The Contractor shall make available as required throughout the Contract labour to carry out the following under the direction of the Contract Administrator:
 - .1 Identification of repairs.
 - .2 Sample chipping and/or drilling.
 - .3 Operators for access equipment.

3.3 PREPARATION

- .1 All necessary measures shall be taken to provide protection to the general public, occupants of the building.
- .2 Remove or protect all surface attachments (e.g. signs, notices, electrical fittings) from the areas to be repaired or from positions that obstruct access or which may be damaged from Work.
- .3 Carefully store items removed during the course of the works. Reinstall when restoration work is complete.
- .4 The Contractor shall make good or rectify any damage caused as a result of insufficient protection.
- .5 Provide temporary access required to facilitate Work.

3.4 REPAIR METHODS

- .1 Refer to Drawings for repair methods.

3.5 CLEANING

- .1 Do further cleaning using stiff natural bristle brushes after mortar has obtained its initial set and has not fully cured.
- .2 Clean masonry with stiff natural bristle brushes and plain water only if mortar has fully cured.
- .3 Clean masonry with low pressure 15 to 45 psi clean water and soft natural bristle brush.
- .4 Obtain approval of Contract Administrator prior to using other cleaning methods for persistent stains.

END OF SECTION

