Part 1 GENERAL

1.1 SUMMARY

1. This section to conform to Section 01 01 00, General Requirements.

2. This section describes the general standards and requirements applicable to all related sections of work.

1.2 RELATED WORK SPECIFIED ELSEWHERE

1. Mortar and Masonry Grout: Section 04 04 05

2. Masonry Anchorage and Reinforcement: Section 04 04 15

3. Unit Masonry: Section 04 20 00

4. Masonry Restoration: Section 04 05 20 91

5. Masonry Cleaning: Section 04 01 20 52

1.3 REFERENCES

1. The following general standards apply to all work carried out in this and related sections:

    1. CSA A179: Mortar and grout for unit masonry.

    2. CAN3-A371: Masonry Construction for buildings.

    3. CAN3-A370: Connectors for masonry.

2. Additional material standards as relevant are referenced in related sections.

3. Definitions as relevant are referenced in related sections.

1.4 SCOPE AND INTENT OF WORK

1. Work in this section involves the restoration and repair of existing masonry. The work shall include but not be limited to the following:

    1. Identifying the location of all existing masonry where it is required to be replaced, infilled, modified or repaired.

    2. Raking out of mortar joints with the collection, and disposal of existing mortar.

    3. Replacement and repair of damaged masonry elements.

    4. Installation of new masonry supports and connectors.

    5. Installation of new flashings at masonry including reglets.

6. Backpointing of joints, the consolidation of voids in masonry and pointing of joints in new and repaired masonry. Pointing of scaffold tie holds.

7. Removal of metal fixings.

8. Salvage and reuse of existing masonry units.

9. Removal of paint coating from masonry; removal of atmospheric soiling from masonry; removal of cementitous based coating from selected areas of masonry, and light cleaning of brick or stone and complete building clean down on completion of work.

2. Provide all labour, material and equipment and perform all operations required to carry out all masonry work as described herein, as described on the drawings, or as required for the proper completion of the work.

3. Fully co-ordinate work with that of other trades.

1.5 SEQUENCE OF WORK

1. Submit sequence of work to Consultant for approval.

1.6 SUBMISSIONS

1. Samples

Submit samples of all materials to be used in the work, including:

1. One of each type of masonry unit and masonry accessory specified. Include proposed masonry to match existing masonry units.

2. One of all proposed mortar ingredients in 500 ml plastic container with screw top lid and with contents clearly marked.

3. Sieve analyses from approved testing company of custom blended aggregate for mortar.

4. Additional material samples where specified elsewhere.

2. Mock-Ups

1. Prepare mock-ups of the following items of work:

1. Raking out, 2 lineal metres to masonry types, to include horizontal and vertical joints. Repointing to 1 lineal metre.

2. All cleaning methods. [approx.1 square metre per procedure]

3. Repair mortar methods. [1 of each type]

4. Reglet of metal flashing at mortar joint

2. Mock-ups shall be repeated until satisfactory results are obtained to the satisfaction of the Consultant.

3. Approved mock-ups shall form the standard for the method and quality of work to be performed throughout the project.

4. All mock-ups shall be prepared in the presence of the Consultant.

3. Other Submissions

1. Submit manufacturers literature for all products.

2. Submit details of all tools, machinery and equipment required to complete the work. Remove rejected items from site.

4. Approvals

1. Approval of samples, mock-ups and submissions shall be made in writing by the Consultant.

1.7 QUALIFICATIONS

1. Provide competent trade foreperson, well skilled and experienced in the specialized type of work required, for continuous supervision, to remain unchanged throughout the course of the Work.

2. Provide specialized skilled and competent tradesmen who shall have had considerable experience in this type of work.

3. Submit, if requested, a detailed list of projects and experience relating to any of the above workers.

1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

1. Deliver materials to job site in dry condition.

2. Store all materials on pallets held off the ground by means of planks or timber skids and protect with waterproof non-staining covers.

3. Maintain all materials in dry condition until use, except where specified otherwise.

1.9 ENVIRONMENTAL REQUIREMENTS

1. Cold Weather Requirements

1. No masonry work shall be carried out when air temperatures fall below 5°C. unless the following provisions are made.

2. When air temperatures fall below 5°C, provide a weathertight, heated enclosure in which to carry out work, store all materials and mix mortars, in which the air temperature is maintained above 10°C. at all times.
3. Maintain these conditions for a minimum 3 weeks following completion of any masonry work.
4. Do not remove heat or enclosure where masonry is not thoroughly dried out. Request and obtain permission of Consultant before removing heat or enclosure.
5. Maintain minimum/maximum thermometers and relative humidity gauges on site and in all enclosures and maintain a daily record of temperature and humidity.

2. Hot Weather Requirements

1. When wall surfaces or ambient temperatures reach 25°C protect new work from rapid drying by providing burlap and plastic protection kept misted as necessary to control drying and shrinkage.

3. Transportation, Use and Disposal of Chemical Materials

1. Comply with the requirements of all Federal and Provincial Legislation related to the transportation, use and disposal of all chemical type of materials and all revisions and other relevant legislation as applicable to this work.

4. Removal of Existing Pointing Mortar

1. Attention is drawn to the fact that significantly substantial quantities of silica exist in the existing pointing mortar, classifying it as a hazardous material.

2. The contractor shall be responsible for all testing of the existing mortar and to determine the requirements for its containment, collection, safe removal and the health and safety of the building occupants, site operatives, and other trades.

3. The contractor shall comply with current and proposed legislation to provide protective clothing, breathing apparatus, and all other necessary measures. The Contractor shall ensure all operatives are fully informed of the hazards, and trained in required procedures, prior to commencing work.

4. The contractor shall ensure that their operatives wear and maintain this equipment and follow all necessary procedures at all times when involved with such hazards.

5. The contractor shall be responsible for the containment of all existing mortar waste on the scaffold lift where removed and shall be responsible for its removal from each scaffold lift and the ground level on a minimum daily basis.

1.10 PROTECTION

1. Keep masonry dry using waterproof, non-staining coverings that fully protect new work from wind driven rain, until masonry work is complete and protected by flashings or other permanent construction.

2. All completed or existing work shall be protected at all times from damage, marking and mortar droppings. Maintain non-staining coverings until completion of work.

3. Provide temporary bracing of masonry work during and after erection until permanent lateral support is in place.

4. Take special protective measures to existing painted finishes including glass at sash and storm windows and doors.

5. Refer to additional protection requirements in relevant sections.

1.11 ACCESS

1. Access to all surfaces to be provided by scaffolding to enable proper work, supervision and inspection to be carried out.

Part 2 PRODUCTS

2.1 MATERIALS

1. Materials are specified in related sections.

Part 3 EXECUTION

3.1 PREPARATION

1. Seal and protect all openings, doors, windows and adjacent areas to prevent damage and the spread of construction dust, water or other materials into the building or onto adjacent property and sidewalks.

3.2 WORKMANSHIP

1. Build masonry plumb, level and true to line, with vertical joints in alignment.

2. Layout coursing and bond to match existing walling.

End of Section 04 03 05 01