

1. GENERAL

Masonry repairs are required for all elevations of the Carnegie Building, 380 William Avenue including but not limited to the Tyndall stone cladding, sills, and cap stones, as well as brick veneer on the south face. The fixed price component of the Bid will include access to all exterior wall areas on the building.

1.1 Related Work

- .1 Section 04 11 50: Masonry Mortar
- .2 Section 04 40 10: Masonry Repair
- .4 Section 04 50 50: Removal of Stone Masonry

1.2 Standards

- .1 The Contractor or masonry subcontractor shall be fully qualified in the area of restoration of historical masonry and the unique considerations with respect to mortar materials and methods. The Contractor shall submit a minimum three (3) references which state that the Contractor (or subcontractor) and the personnel included with the project have experience with historical masonry restoration. At the Contract Administrator's discretion, an interview shall be conducted between the masonry Contractor and the Contract Administrators in order to satisfy the Contract Administrators and Owner that the masonry subcontractor is qualified to undertake the project.
- .2 Do masonry work in accordance with CAN3-A371 (latest edition) except where specified otherwise.
- .3 The Contractor is encouraged to discuss with the Contract Administrator material and method alternates with respect to repairs to the masonry.

1.3 Samples

- .1 Submit samples of each type of masonry unit specified, each type of masonry accessory specified, each type of masonry mortar, reinforcement and tie proposed for use to Contract Administrator for review prior to mobilization. Label samples as to origin and intended use of Work.
- .2 Deliver samples prepaid to Contract Administrator's business address.
- .3 Adjustments made on samples by the Contract Administrator are not intended to change the Contract Price. If adjustments affect the value of Work, state such in writing to the Contract Administrator prior to proceeding with the Work.
- .4 Make changes in samples which the Contract Administrator may require, consistent with Contract Documents.
- .5 Provide site mock-ups as described elsewhere in this Specification.

1.4 Product Delivery, Storage, and Handling

- .1 Deliver materials to job site in dry condition.
- .2 Keep materials dry until use, except where wetting of bricks or stone is specified.
- .3 Store under waterproof cover on pallets or plank platforms held off ground by means of plank or timber skids.

1.5 Cold Weather Requirements

- .1 Supplement Clause 5.15.2 of CAN3-A371-M84 with following requirements:
 - .1 Maintain temperature of mortar between 5°C and 30°C until used.

1.6 Hot Weather Requirements

- .1 Protect freshly laid masonry from drying too rapidly, by means of waterproof, non-staining coverings.

1.7 Source Quality Control

- .1 Submit laboratory test reports for all materials as per CSA A37 and A179, latest edition.
- .2 Submit laboratory text reports certifying compliance of masonry units and mortar ingredients with specification requirements.

1.8 Protection

- .1 Keep masonry dry using waterproof, non-staining coverings that extend over walls and down sides sufficient to protect walls from wind driven rain, until masonry work is completed and protected by flashings or other permanent construction.
- .2 Protect masonry and other work from marking and other damage. Protect completed work from mortar droppings. Use non-staining coverings.
- .3 Provide temporary bracing of masonry work during and after erection until permanent lateral support is in place.

2. PRODUCTS

2.1 Materials

- .1 Masonry materials are specified in related Sections indicated in Clause 1.1.

3. EXECUTION

3.1 Workmanship

- .1 Do masonry work in accordance with CAN3-A371 (latest edition) except where

specified otherwise.

- .2 Restore masonry plumb, level, and true to line, with vertical joints in alignment.

3.2 Tolerances

- .1 Tolerances in notes to Clause 5.3 of CAN3-A371 apply.

3.3 Exposed Masonry

- .1 Remove chipped, cracked, and otherwise damaged units in exposed masonry and replace with undamaged units, as directed by the Contract Administrator.

3.4 Jointing

- .1 Allow joints to set just enough to remove excess water, then tool with round jointer to provide smooth, compressed, uniformly concave joints where concave joints are indicated.

3.5 Testing

- .1 An independent testing company, appointed by the Contractor and approved by the Contract Administrator, shall take samples from typical mortar batches being used on job, for report on seven day and twenty-eight day strength tests.
- .2 Two 50 mm cubes shall be taken every second or third day from typical mortar batch being used. Seven day and twenty-eight day strength tests shall be reported by examining/testing company in same manner as concrete cylinder strength.
- .3 Provide 50 mm sheet metal cube forms. Make available at site.
- .4 Cooperate with examining/testing company for filling forms for testing.
- .5 Testing shall be done in accordance with CSA A170-M1976.

END OF SECTION