

1. GENERAL

1.1 Precautions

1. Should operations be sufficiently limited and storage areas large enough, it would be worthwhile to store stones to reflect their position in structure, and even their orientation. This would facilitate direct checking and make it possible to detect and avoid faults.
2. Take precautions necessary to protect stones and facilitate their resetting.

1.2 Control

- .1 If stone pieces are designated for removal, the Contractor must obtain written approval from the Engineer before commencing. In all instances stones are to be removed intact.
- .2 Mark the following:
 - .1 Stones and other elements or components to show identity and position.
 - .2 Wood platforms or other equipment used to transport and store stones.
 - .3 Work and storage areas.
 - .4 Spaces from which stones are removed.
- .3 Prepare chart or card index to help locate any stone or unit when necessary, and to control availability of platforms and work and storage areas.
- .4 Keep chart or card index up-to-date and, if required, produce copy every day.
- .5 Ensure that chart or card index contains relevant information.
- .6 Submit up-to-date copies of chart or card index, as well as chronological information concerning each numbered unit (individual cards of units), when requested.

2. EXECUTION

2.1 Inspection

- .1 Record, and report to Engineer, site conditions not described in contract.

2.2 Temporary Marking

- .1 Mark stone, on face, before removal using either a ball-point pen on diachylon glued to stone or waxless chalk directly on stone.
- .2 Do marking on faces of stones before removal operations.
- .3 Ensuring that temporary marking will remain in use resistant to weather handling and cleaning until final marking of stones.
- .4 Ensure that markings and adhesive are removable by brushing with vegetable fibre brush used either dry or with water, use no solvent, acid or other chemical product.

2.3 Support

- .1 Construct shoring and cradling, and other temporary framing work needed to support structure, or parts of it, during removing operations, and in anticipation of resetting, according to approved drawings, bearing seal and signature of qualified engineer licensed to practice in Manitoba.

2.4 Loosening Stones

- .1 Loosen stones using approved methods which will cause no damage to either the stones or other architectural elements.
- .2 Do not use circular millstone or saw, pneumatic chisel or hammer, steel tools exerting concentrated pressure on edge of stone.

2.5 Handling

- .1 Maintain stones in original orientation at all times.
- .2 Place detached stone onto wood surfaces during handling. Prevent contact with metal.
- .3 When stones are lowered to ground, place them directly on wooden platform that will be used for transport or storage.
- .4 Transport and keep stones on wooden platforms.
- .5 Ensure that sharp edges of stones do not come into contact with any hard object.
- .6 Do not place stones directly on ground or vegetation.

2.6 Temporary Storage

- .1 Place stones in designated area of site for cleaning, detailed inspection, and for final marking before storage.
- .2 Ensure that stones are accessible and easily removed, and placed so as to be located quickly, when required.

2.7 Cleaning

- .1 Unless permitted by Engineer, clean stoned by wet scrubbing (with vegetable fibre brush). Do not use high pressure water jet.
- .2 Removal of excess mortar may be done with hand or chisel, provided faces and edges are not damaged.
- .3 Drying process of stones may be accelerated by fans or unit heaters. Heat must not exceed 80°F.

2.8 Final Marking

- .1 Do final marking after cleaning, on surface that supports good adhesion and legibility and will not be visible after resetting.
- .2 Do marking in colour and dimensions to be legible from distance of 2 metres.
- .3 Ensure that product used will not affect mortar to stone adhesion when resetting.
- .4 Ensure that product used for marking will survive storage until resetting of stone.
- .5 Ensure that product will not "bleed" through stone.

2.9 Final Storage

- .1 When stones are placed in longer term storage, shelter must be designed to keep condensation formed on the internal surfaces from coming in contact with stones or dropping on them, and to ensure adequate ventilation.
- .2 Layout storage so that each stone will have faces visible, and be accessible or removable without having to move adjacent stones.
- .3 Show layout of stones to be stored on record drawing and submit a copy to the Engineer.

3.0 Unit Price

- .1 The Contractor shall supply a unit price for removal and re-installation of stones as directed by Contract Administrator. The unit price for each removal and re-installation shall be per unit of stone veneer. The unit price shall include all labour, material, access, equipment, supervision and incidentals required to remove and replace stones. The areas of repair must be measured and agreed to between the Contract Administrator and Contractor, prior to proceeding. This measurement shall form the basis of payment. Should the number of units differ at all from the amount estimated, there shall be no change in the unit price.

END OF SECTION