

ITEM 08560.41 - TIMBER CENTERING FOR MASONRY ARCHES (TEMPORARY)

DESCRIPTION:

This work shall consist of designing and installing a timber centering system to support the existing stone masonry arch during construction and removing the centering system at the completion of construction. The location and size of the arched opening is shown in the plans. This temporary structure must allow the conveyance of water via channel or closed system and or be designed to withstand the hydraulic forces of a 10 year storm.

MATERIALS:

The Contractor shall assume all liability and responsibility for the materials required to provide an adequate and safe structure. Materials shall meet the requirements of the following subsections of section 700 - Materials.

Timber and Lumber	712-13
Steel Plates as required	715-01

All fasteners such as spikes, nails, screws, timber connectors, bolts, nuts and washers shall meet standard industrial fastener specifications for the intended applications. The Contractor, at his option, may substitute a structural steel centering system instead of the timber system specified herein. No extra payments shall be made for the use of this option.

CONSTRUCTION DETAILS:

The centering system shall provide full support to the entire intrados of the masonry arch noted on the plans for the duration of the contract. The system shall be designed for full Dead load and MS-18 Live Load by a registered New York State Professional Engineer. Details and design calculations shall be submitted to the Engineer for review and subsequent approval by the DCES. Drawings in this submission shall conform to the requirements of Section 2 of the Steel Construction Manual. The DCES shall be allowed the greater of the following times for review of the Contractor's submission:

- a. A minimum of 10 working days, or,
- b. Two working days for each drawing in the submission, plus two working days for each 8½"x11" single-sided page of calculations.

The system shall be completely self supporting and stable. No attachments of any kind shall be permitted to the existing masonry pieces and arch. Any damage caused to the existing masonry shall be repaired to the satisfaction of the Engineer. On completion of the contract work, the centering system shall be dismantled and removed in its entirety.

METHOD OF MEASUREMENT:

Payment for Timber Centering for Masonry Arches (Temporary) shall be made on a lump sum basis.

BASIS OF PAYMENT:

The lump sum price bid shall include all labor, material and equipment necessary to build, move, remove, dismantle and/or store the centering specified. Payment will be made at the lump sum price bid for the centering systems as follows:

- Seventy-five (75) percent when the centering systems are complete and useable.
- Twenty-five (25) percent when the centering systems are permanently removed.

