

SECTION 02380
CAISSONS

PART 1 - GENERAL

1.1 SUMMARY:

A. Section Includes:

1. Caisson placement control.
2. Survey layout.
3. Measurement and payment.

B. Related Sections:

1. Section 01026 - Unit Prices.
2. Section 01400 - Quality Control.
3. Section 02200 - Earthwork.

1.2 WORK INSTALLED BUT FURNISHED BY OTHERS:

A. Caisson Reinforcing and Dowels: Furnished under Section 03300 Cast-in-Place Concrete.

B. Concrete for Caissons: Furnished under Section 03300 Cast-in Place Concrete.

1.3 MEASUREMENT AND PAYMENT:

A. Basis of Bids:

1. Bids shall be based as shown on the drawings, on the number of caissons, design length from top elevation to bottom of the shaft and the volume of the pier.
2. Should total variations in actual lengths vary from total indicated lengths by more than an average 12" per pier, contract price will be adjusted at agreed prices stated in the Contract and based on the net difference, plus or minus as follows:
 - a. Drilling and casing for 30" shaft diameter or smaller per lin. ft.
 - b. Drilling and casing for shaft diameters in excess of 30" per lin. ft.
 - c. Concrete in place per cu. yd. based on calculated volume (nominal diameter area x length).
 - d. Reinforcing steel, fabricated and placed, per lb.
 - e. Delete shear rings per pier hole.
3. No payment will be made for overruns not authorized by the Soils Engineer, nor for casings use for convenience but not required to control sloughing or water, nor for additional concrete needed to fill difference between design and actual pier diameters, nor for reinforcing steel cut off.

1.4 QUALITY ASSURANCE:

A. Caisson Placement Control and Inspection:

1. The Owner will engage the services of a Soils Engineer to control and inspect this work, evaluate soil bearing suitability, measure depths and approve holes as ready for concreting.
2. Any adjustment in contract price due to differences in actual depths versus indicated depths will be made solely on the basis of the Soils Engineer's reports. The Contractor will receive two copies of his reports, one of which will be retained for the Project Record Documents.

B. Concrete and Reinforcing Inspections: Batching and placing of concrete in piers is subject to provisions as specified in Section 03300 for the grades of concrete required.

A. Survey Work:

1. Engage a registered surveyor to perform all surveys, layouts, and measurements for caisson work. Conduct the layout work for each caisson to the lines and levels required before excavation, and record the actual measurements of each caisson's horizontal axial location, top elevation, deviations from specified tolerances, and other data as required.
2. Record and maintain all information pertinent to each caisson and cooperate with the testing and inspection personnel to provide data for required reports.

THIS MAY BE WAIVED AT THE DISCRETION OF UNIVERSITY PROJECT MANAGER FOR SMALL PROJECTS OR RENOVATIONS.

B. Existing Utilities:

1. Locate existing underground utilities by careful excavation before starting caisson excavation work. Protect utilities to remain. Do not interrupt existing utilities without utilities Owners approval and approval of affected users, per notification requirements of the contract documents.
2. Comply with Section 02200 requirements.

C. Obstructions:

1. The work of this section includes demolition and removal of rock, boulders, concrete, masonry, and other subsurface obstructions indicated by the contract documents or the subsurface exploration data.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 PLACING CONCRETE:

- A. Do not place concrete in hole until approved by Soils Engineer.

END OF SECTION 02380