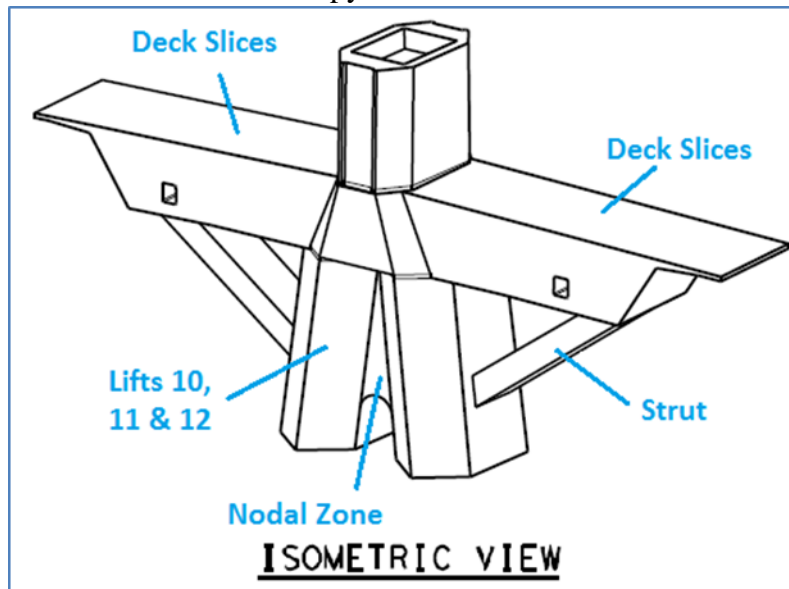




SCOPE OF WORK

This solicitation addresses the need to provide engineering services to design temporary support for the scaffolding and formwork to cast in place the Tower Table Struts, and its fabrication once approved.

FIGURE 1: One pylon with two struts shown.



A. Scope of Work

The scope of work consists of designing and providing PE stamped drawings for a temporary support platform for the scaffolding and formwork to cast in place two struts per pylon at two different pylons.

Price should be broken as follows:

1. Design engineering with PE stamped drawings for support platform.
2. Fabrication and supply of support system.

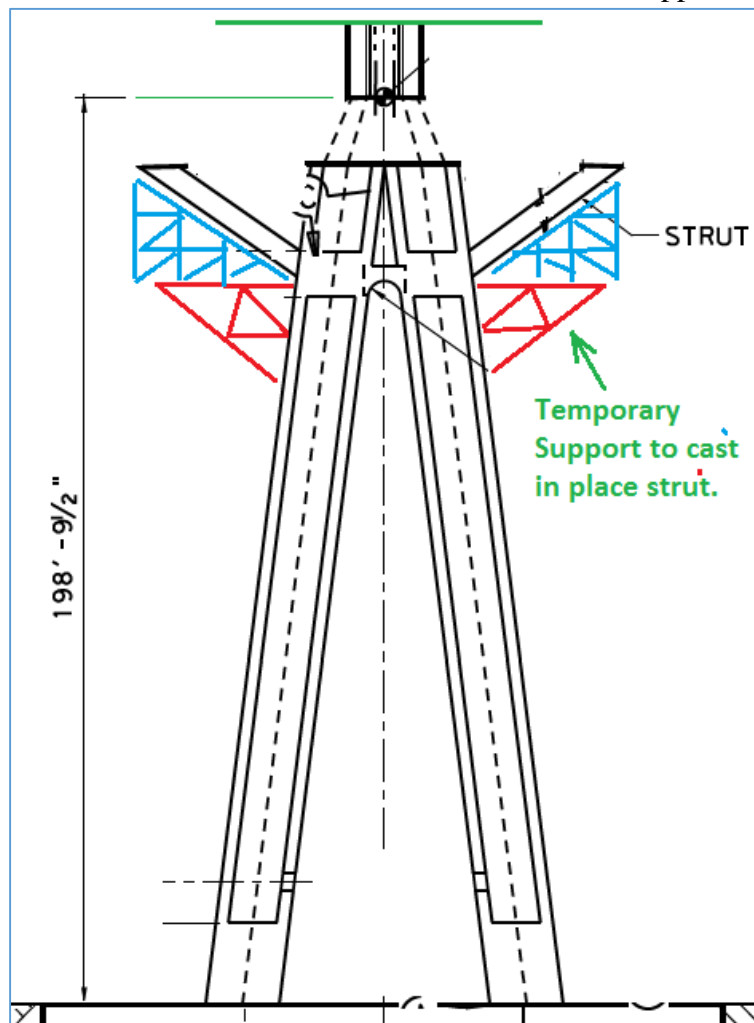
Bidder should specify estimated timeframe for design and estimated timeframe for fabrication and delivery with price proposal. **Although top and side formwork design and supply are not included in this scope nor any scaffolding**, bidder should consider the weight of such systems for the design of the support. **Bidder may elect to provide price proposal for any of the previous two line items but pricing for both is desirable.** Bidder should provide with price proposal a conceptual drawing of the system. The drawing should show an elevation view and side view of the system with the preliminary expected reaction loads at anchoring points on the pylon. Bidder should follow current applicable design codes including but not limited to: ACI 318 Building Code Requirements for Structural Concrete, ANSI/AISC Specification for Structural Steel Buildings, AWS Structural Welding Code.



SCOPE OF WORK

The support system (represented with red lines in FIGURE 2) should be sized in such a way that provides space on the sides for walking/working. The design should allow for easy assembly and easy dismantling. Given that the strut is 10 feet wide the horizontal platform on top of temporary support should be at least 15 feet wide. This platform might consist of an array of horizontal steel beam on which a lumber soffit will be set – Bidders shall design its own solution. Lumber soffit material is not part of this scope. The horizontal steel beams should be arranged and capable of supporting the scaffold system (represented with blue lines and not included in this scope) that will hold the formwork for the concrete strut. The length of the platform should be sufficient to accommodate the scaffolding for the concrete strut formwork. Again, the scope of work corresponding to this Request for Price Proposal only correspond to what is represented with red lines in FIGURE 2.

FIGURE 2: Elevation view of schematic strut support.





SCOPE OF WORK

In general terms the design and analysis should take into account the following:

1. Dead load of support system.
2. Weight of concrete strut.
3. Weight of formwork (estimated).
4. Live load as recommended by design codes.

Ultimately, the Bidder will be responsible to determine the complete array of loads acting on the system and to apply minimum safety factors as required by design codes. Bidder should aim for the most cost effective solution within code requirements.

B. Schedule

Execution of design (item 1) shall be performed within 3 weeks after agreement (or purchase order) has been awarded and executed or as coordinated with Contractor. Contractor encourages Bidder to sustain continuous communication through the design process. At least 1 submission for review will be required by Contractor to provide comments and feedback. Final approval of the design will be subject to an additional revision of final drawings by the corresponding Engineer of Record for Harbor Bridge Project.

C. General Requirements

Bidder's construction safe work practices, and job procedures are to conform to the following standards: Occupational Safety & Health Regulations (OSHA), Texas Department of Transportation "Standard Specification for Construction and Maintenance of Highway, Streets, and Bridges", Port of Corpus Christi and Contractor's health safety policies and standards.

Seller shall assume toward the Buyer all obligations and responsibilities which the Contractor has assumed toward the Owner under the Contract to the extent such obligations and liabilities relate to the Seller's Work. In case of conflict between the terms of this Purchase Order Agreement and Contract, the Purchase Order Agreement shall control. The Contract has been and remains available to the Seller for review via web link:

<http://www.txdot.gov/business/partnerships/current-cda/harbor-bridge/executed-version.html>

Subcontractor shall communicate and coordinate all aspects of its works with the Contractor's Authorized Representative. Bidder/Subcontractor is required to keep confidentiality in all communication and interaction with Flatiron/Dragados LLC. Bidder/Subcontractor is not allowed to disclose any information pertaining to this request for price proposal with third parties without written permission from Flatiron/Dragados LLC.

Bidder/Subcontractor should satisfy Texas Board of Professional Engineers laws and rules.



SCOPE OF WORK

Subcontractor shall comply with Contractor's safety plan and procedures and forms at all times.

Bidder will revise and complete the design to the satisfaction of Flatiron/Dragados LLC within the price provided.

D. Subcontractor's Report

For a progressive execution of the scope of work, Subcontractor shall submit a narrative progress report detailing: (a) all activities accomplished during the current period and; (b) all activities planned for the next period. Also, Subcontractor shall close its invoicing period by the 20th day of each month and submit the narrative progress report not later than the 22nd day of the month, with a draft proposed invoice that will be used to facilitate the revision and approval process prior to the Buyer submitting its monthly progress report to the Owner for the Owner's approval and payment.

If applicable, as per Section 11.2.2 (a) of the CDA, the Contractor is required to provide a monthly report of personnel hours. Subcontractor shall submit a man-hours report that details the number of employees working on the project and the number of hours reported during the period.

E. List of Subcontractors

Subcontractor shall provide lists of all Sub-Subcontractors are going to be providing services under this agreement. Sub-Subcontractors are subject to the approval of the Contractor. List provided below includes all the Sub-Subcontractors that will potentially being providing services. In case a new Sub-Subcontractor is identify during the execution of the services, Subcontractor shall request written approval from Contractor Authorized Representative prior to perform any work.

Sub-Subcontractor	Contact Info

F. Subcontractor's DBE Commitment:

Subcontractor's DBE agreed commitment under this agreement is 9%.

G. Deliverables

- Economical proposal for the scope of the work detailed
- Rates for labor and equipment



SCOPE OF WORK

- Preliminary Work Plan. (Including labor, equipment, material type and quantities).
- Schedule including the activities to perform the scope of work

H. Project Execution Plan

- 1. Schedule of Work:** to be provided by bidder as part of their proposal. Should include a narrative detailing: procurement plan, key personnel involved, location, etc. The expected time frame for delivery of materials is estimated to be the April 2019.