

December 21, 2018

**STATE OF ALABAMA  
CITY OF MONTEVALLO  
COUNTY OF SHELBY**

**Sealed Bids for the Shoal Creek Park North Property Line Pedestrian Bridge  
Montevallo, Alabama**

Sealed bids for one (1) pedestrian bridge as described below will be received by the Montevallo Development Cooperative District at the Shelby County Facilities and General Services Department Office Conference Room, 280 McDow Drive in Columbiana, Alabama 35051 (mailing address: P. O. Box 467), until **2:00 p.m. on January 10, 2019** at which time bids will be publicly opened and read. The Montevallo Development Cooperative District reserves the right to reject any or all bids and to waive informalities in awarding this bid to the lowest bidder. Bidders are to state that bids submitted are firm and that no claims for errors will be made after bids are opened and subsequent thereof.

If you have any questions concerning this bid, please contact Trey Gauntt at [trey@shelbyal.com](mailto:trey@shelbyal.com) or 205-475-7145.

**GENERAL INFORMATION**

Project consists of one fully engineered clear span pedestrian bridge for Shoal Creek Park in Montevallo, Shelby County, Alabama.

The bridge shall consist of the following features:

- Weathering steel construction
- 60' span (measured from each end of the bridge, out to out dimension, not including the backwall)
- 8' wide clear (measured from the inside face of the elements comprising of the safety system, grab rail or truss structural member)
- Bridge system shall be designed as a truss system such that has one diagonal per truss panel and plumb end vertical members. Interior vertical members shall be either plumb or perpendicular to the chord faces. Bridge shall be designed utilizing an H-Section configuration where the floor beams are placed up inside the trusses and attached to the truss verticals. The bridge manufacturer shall determine the distance from the top of the deck to the top and bottom truss members based upon structural and/or shipping requirements. The top of the top chord shall not be less than 54 inches above the deck (measured from the high point of the riding surface) as required for bike path structures.
- All members of the vertical trusses (top and bottom chords, verticals, and diagonals) shall be fabricated from square and/or rectangular structural steel tubing. Other structural members and bracing shall be fabricated from structural steel shapes or

square and rectangular structural steel tubing. Unless the floor and fastenings are specifically designed to provide adequate lateral support to the top flange of open shape stringers (w-shapes or channels), a minimum of one stiffener shall be provided in each stringer at every floor beam location.

- Safety rails or pickets shall be placed on the structure to a minimum height of 54" above the deck surface. The pickets shall be spaced so as to prevent a 4" sphere from passing through railing. Pickets shall be placed on the inside of the structure. The top of the pickets shall be continuous and smooth to prevent bridge users from cutting or scraping their hands. The picket safety system shall be designed for an infill loading of 200 pounds, applied horizontally at right angles, to a one square foot area at any point in the system. The bridge shall be supplied with a steel rectangular tubing toe rail mounted to the inside face of both trusses. The toe rail shall be a minimum of 4 inches high. Toe rail shall be welded to the truss members at a height adequate to provide a 2" gap between the bottom of the rail and the top of the deck. The bridge shall be supplied with a steel rub rail. The steel rub rail shall be a minimum of 4" high. Ends of each piece shall have their ends sealed and ground smooth so as to produce no sharp edges. Rub rails shall be welded flush to the inside face of the bridge truss verticals at each support location. The top of the rub rail shall be 38 inches above the top of the deck (measured at the outside edge of the deck).
- The bridge shall have a vertical maximum camber per ADA so as a round pipe handrail is not required. Minimum camber of 12" total is required such to provide an arched appearance.
- The bridge abutments shall be constructed at the same elevation on both ends of the bridge.
- Structural design of the bridge structure shall be performed by or under the direct supervision of a licensed professional engineer and done in accordance with recognized engineering practices and principles. The Licensed Professional Engineer is to hold a current P.E. or S.E. license in Alabama.
- In considering design and fabrication issues, this structure shall be assumed to be statically loaded. No dynamic analysis shall be required nor shall fabrication issues typically considered for dynamically loaded structures be considered for this bridge. The bridge structure design shall consider its own dead load (superstructure and specified concrete decking).
- Uniform Live Load - Pedestrian Live Load - Main Members: Main supporting members, including girders, trusses and arches shall be designed for a pedestrian live load of 85 pounds per square foot of bridge walkway area. The pedestrian live load shall be applied to those areas of the walkway so as to produce maximum factored load in the member being designed.
- Concentrated Loads - The bridge superstructure, floor system and decking shall be designed for a service vehicle load of 10,000 lbs.
- Wind Load - Horizontal Forces - The bridge shall be designed for a minimum wind load of 35 pounds per square foot on the full vertical projected area of the bridge as if enclosed. Wind load shall be considered in accordance with AASHTO Signs and Luminaires, but in no case will the wind load be taken as less than 35 pounds per square foot. The wind load shall be applied horizontally at right angles to the longitudinal axis of the structure. The wind loading shall be considered both in the design of the lateral load bracing system and in the design of the truss vertical members, floor beams and their connections. Overturning Forces - The effect of forces tending to overturn structures shall be calculated assuming that the wind direction is at right angles to the longitudinal

axis of the structure. In addition, an upward force shall be applied at the windward quarter point of the transverse superstructure width. This force shall be 20 pounds per square foot of deck.

- Top Chord/Railing Loads - The top chord, truss verticals, and floor beams shall be designed for lateral wind loads (per section 3.1.4.1) and for any loads required to provide top chord stability as outlined in Section 3.3.6; however, in no case shall the load be less than 50 pounds per lineal foot or a 200 pound point load, whichever produces greater stresses, applied in any direction at any point along the top chord or at the top of the safety system (54" above deck level), if higher than the top chord.
- Design Load Combinations - The load combinations shall follow AASHTO LRFD "Standard Specifications for Highway Bridges" latest edition.
- Design Limitations – The vertical deflection of the main trusses due to service pedestrian live load shall not exceed 1/360 of the span. The deflection of the floor system members (floor beams and stringers) due to service pedestrian live load shall not exceed 1/360 of their respective spans. Deflection limits due to occasional vehicular traffic shall not be considered. The horizontal deflection of the structure due to lateral wind loads shall not exceed 1/360 of the span under design wind load.
- Minimum Metal Thickness - The minimum thickness of all structural steel members shall be 1/4" nominal and be in accordance with the AISC Manual of Steel Construction's "Standard Mill Practice Guidelines". For ASTM A500 and ASTM A847 tubing, the section properties used for design shall be per the Steel Tube Institute of North America's Hollow Structural Sections "Dimensions and Section Properties".
- Governing Design and Fabrication Codes and Standards - Structural Steel: American Association of State Highway and Transportation Officials (AASHTO) and shall be in accordance with "LRFD Guide Specification for the Design of Pedestrian Bridges" 2009 (AASHTO). Welded Tubular Connections: American Association of State Highway and Transportation Officials / American Welding Society (AASHTO/AWS) and the American Institute of Steel Construction (AISC). All welded tubular connections shall be checked, when within applicable limits, for the limiting failure modes outlined in AASHTO or in accordance with the "Manual of Steel Construction: LRFD; (Load Resistance Factor Design)" as published by the American Institute of Steel Construction (AISC). Bolted Connections: Bolted splice connections shall be in accordance with The Research Council on Structural Connections (RCSC) Specification for Structural Joints Using ASTM A325 or A490 Bolts. Additionally, Bolted splice connections shall use a mechanical nut capture detail to eliminate embrittlement of structural nuts and to be in compliance with AISC / AWS standards. Weld tacking structural nuts to a splice plate shall not be allowed.
- Materials Requirements – Steel: Unpainted Weathering Steel: high strength, low alloy, atmospheric corrosion resistant ASTM A847 cold formed welded square and rectangular tubing and/or ASTM A588, or ASTM A242, ASTM A606 plate and structural steel shapes ( $F_y = 50,000$  psi). The minimum corrosion index of atmospheric corrosion resistant steel, as determined in accordance with ASTM G101, shall be 6.0. To aid in providing a uniformly "weathered" appearance, all exposed surfaces of steel shall be blast cleaned in accordance with Steel Structures Painting Council Surface Preparation Specifications No. 7 Brush-Off Blast Cleaning, SSPC SP7 latest edition. Bridge Decking: The bridge must be furnished with edge deck supports and a stay-in-place galvanized steel form deck suitable for pouring a reinforced concrete slab (Concrete deck design shall be performed by the bridge manufacturer).

- Bearing Devices - Bridge bearings shall consist of a steel setting or slide plate placed on the abutment and a fabric reinforced elastomeric pad with Teflon and stainless steel placed on top of the setting plate. The bridge bearing plate which is welded to the bridge structure shall bear on bearing pad and setting plate. One end of the bridge will be fixed by fully tightening the nuts on the anchor bolts at that end. The opposite end will have finger tight only nuts to allow movement under thermal expansion or contraction. Bridge shall be supplied with a fabric reinforced elastomeric pad and required anchor bolts. The bearing seat shall be a minimum of 12" wide. The step height (from bottom of bearing to top-of-deck) shall be determined by the bridge manufacturer.
- Welding Requirements - Welding and weld procedure qualification tests shall conform to the provisions of ANSI/AWS D1.1 "Structural Welding Code", latest edition. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification. For exposed, bare, unpainted applications of corrosion resistant steels (i.e. ASTM A588 and A847), the filler metal shall be in accordance with AWS D1.1.
- Delivery – The delivery is required to be made to the project site located in Montevallo, Alabama. The site will be prepared by the owner such that it is accessible to normal over-the-road tractor/trailer equipment. All trucks delivering bridge materials will be unloaded at the time of arrival by the owner.
- Warranty - The bridge manufacturer shall warrant the structure free of design, material and workmanship defects for a period of ten years from the date of delivery. This warranty shall not cover defects in the bridge caused by abuse, misuse, overloading or accident.

The successful low bidder shall provide within 20 working days from the date of award the following information for review and approval by the owner: design calculations, superstructure and handrail details / shop drawings, bridge and abutment / foundation plans all of which shall be signed and sealed by a Professional Engineer registered in the State of Alabama. The owner will provide the allowable soil bearing capacity for use in the design of the bridge foundations. All relative design information such as member sizes, assembly notes, erection and lifting details and general notes shall be clearly specified on the drawings. Structural calculations for the bridge superstructure shall be submitted by the bridge manufacturer and reviewed by the owner for approval. All designs shall comply with all of the above requirements unless otherwise approved in writing by the owner.

Price shall include shipment to the jobsite and unloaded by the owner.

A certified check or bid bond for the lesser of five percent (5%) of bid or \$10,000 made payable to the Montevallo Development Cooperative District and must accompany each bid as evidence of good faith. The bidder's proposal must be submitted on a complete original proposal available as provided above. Bidders are required to be licensed in accordance with State law. The right to reject any or all bids is reserved. If you have any questions concerning this bid please contact Trey Gauntt at [trey@shelbyal.com](mailto:trey@shelbyal.com) or at 205-475-7145.

All bidders must use the attached form for submitting their bid. All bids must be sealed and marked "BID-Shoal Creek Park North Property Line Pedestrian Bridge, with the opening date and time. Late bids will not be opened. Records showing successful bidder(s) and prices quoted will be placed on file and may be examined upon request. If contract is awarded to

someone other than the lowest bidder, a note of explanation will appear in the bid file and the Board Minutes.

The contractor, person, firm, or corporation undertaking or contracting to undertake the herein described project agrees to use in the execution of the contract materials, supplies, and products manufactured, mined, processed, or otherwise produced in the United States or its territories, if the same are available at reasonable and competitive prices and are not contrary to any sole source specification implemented under subsection (f) of Section 39-2-2, Code of Alabama(1975), as amended. In the event the contractor breaches the agreement to use domestic products, and domestic products are not used, there shall be a downward adjustment in the contract price equal to any realized savings or benefits to the contractor.

### **Disqualification of Bids**

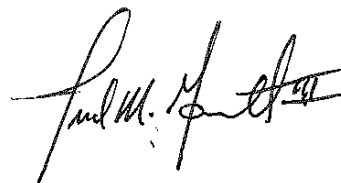
Bids may be disqualified before awarding of the contract for any of the following:

- A. Failure to mark envelope as required;
- B. Failure to sign the bid document;
- C. Failure to include requested information or other details of the bid; or
- D. Failure to include the Bid Bond.

### **Method of Award**

The award will be made to the lowest responsive bidder meeting specifications on the Bid plus accepted alternates. It is not the policy of the owner to purchase on the basis of low bid only. Quality, conformity with the specifications, purpose for which required, terms of delivery, and past service and experience are among the factors that may be considered in determining the responsive bidder.

The Montevallo Development Cooperative District reserves the right to award in the best interest of the Montevallo Development Cooperative District. Upon the awarding of this contract and bid, the Montevallo Development Cooperative District reserves the sole right to end said contract at their sole discretion.



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Fred M. Gauntt III  
Chief Engineer, Shelby County  
MDCD Representative

**BID FORM**

MONTEVALLO DEVELOPMENT COOPERATIVE DISTRICT  
Shoal Creek Park North Property Line Pedestrian Bridge  
Montevallo, Alabama

**Bid Date:** January 10, 2019

**Bid Time:** 2:00 p.m. Local Time

**Total Bid** \$ \_\_\_\_\_

The undersigned offers these prices, terms and delivery as per stated specifications.

Name of Company: \_\_\_\_\_

Signature: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: (Include area code) \_\_\_\_\_ Bid Bond: \_\_\_\_\_

Sworn to and subscribed before me this  
The \_\_\_\_\_ day of \_\_\_\_\_, 2019

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_