

April 19, 2022

Don Cole  
City of Crossville  
Engineering Department  
Phone: 931-456-2014  
don.cole@crossvilletn.gov

**Re: ENGINEERING SERVICES FOR DESIGN OF PEDESTRIAN BRIDGE  
PEDESTRIAN BRIDGE OVER LITTLE OBED RIVER  
CITY OF CROSSVILLE, CUMBERLAND CO., TN**

Dear Mr. Cole:

Neel-Schaffer, Inc. is pleased to offer Engineering Services for the design of a pedestrian bridge crossing Little Obed River, a portion of the Crossville Greenway, Little Obed River Segment near Industrial Blvd.

We understand:

1. The City of Crossville will be constructing the proposed timber/steel bridge with city forces.
2. The City of Crossville will be providing surveying.
3. Proposed pedestrian bridge in addition to pedestrians is to be designed to carry the following loads:
  - a. Backhoe: Gross weight 18,160lbs
  - b. Skidsteer: Gross weight 15,200 lbs
  - c. Row Tractor: Gross weight 17,840 lbs

### Scope of Work

**TASK 1:** Project coordination with City for proposed means and methods of construction and availability of materials.

**TASK 2:** Bridge design: Design pedestrian bridge for the requested loadings.

**TASK 3:** Bridge plans: Provide stamped design notes and bridge plans for construction.

**TASK 4:** Hydraulic analysis and hydraulic report to determine required bridge opening and low girder elevation to meet the FEMA requirements for the Little Obed River.

**TASK 5:** Permitting assistance and Request for Information (RFI).

**TASK 6:** Geotechnical Investigation: Neel-Schaffer has teamed with GoEngineers to provide the geotechnical investigation. GeoEngineers will observe up to four test pits excavated by the City of Crossville at the proposed foundation locations. Our engineer will conduct field penetrometer tests, collect grab samples of representative soils, and classify the soils according to the Unified Soil Classification System and visual-manual methods (ASTM D2488). Soil samples will be returned to the laboratory where tests will be performed on selected samples for water content

(ASTM D2216), plasticity (ASTM D4318), and percent fines (ASTM D1140). Once the laboratory testing is completed, we will prepare a written report summarizing the site and subsurface conditions encountered and geotechnical recommendations for foundations, retaining walls (if needed), and earthwork.

### Scope of Work Does Not Include

1. Daily onsite inspection of the construction of the proposed pedestrian bridge.
2. On Site survey by Neel Schaffer, Any Surveys need will be provided by the City of Crossville.

### Deliverables

1. Plans and calculations for the Pedestrian bridge.

### Information Provided by The City of Crossville

1. Roadway plans of Genesis Road in the area where the box culvert crosses the Little Obed River.
2. Contours and proposed location of Pedestrian Bridge. City prefers the Alternate location as noted on the contour drawing.
3. City of Crossville standard drawings and/or details applicable to the proposed pedestrian bridge.

### Fee Schedule

Engineering Tasks	Fee
Task 1: Project Coordination	\$1,300
Task 2: Bridge Design	\$8,600
Task 3: Bridge Plans	\$10,300
Task 4: Hydraulic Analysis and Report	\$5,500
Task 5: Permitting Assistance and Request for	\$1,400
Task 6: Geotechnical Investigation (GeoEngineers)	\$5,700

Total Lump Sum fee for Engineering Services: **\$32,800.00.**

Additional services outside of the above scope of work will not be performed without written authorization from the City of Crossville. Additional services will be performed on an hourly basis and in accordance with the General Terms and Conditions Professional Consultant Services.

### Limitations:

See General Terms and Conditions Professional Consultant Services presented in Attachment A



**Authorization**

Please return a signed original to Neel-Schaffer, Inc. to authorize this work. Should you have any questions and/or comments please do not hesitate to call.



Date: April 19, 2022

Richard Sullivan, P.E. Tennessee Operations Manager  
**Neel-Schaffer, Inc.**

Authorized By:

Date: \_\_\_\_\_

\_\_\_\_\_  
**City of Crossville**

