

ATTACHMENT A SCOPE OF SERVICES

H.W. LOCHNER, INC. FRANKLIN ROAD OVER LITTLE RIVER (NBI 09991) October 23, 2024

Additional Services

The additional services below are intended to complete the bridge design needed to construct the project.

1. BRIDGE DESIGN

The bridge over Little River will be replaced and consists of the Alternate 2 configuration as selected by the City from the Preliminary Engineering Report.

- Bridge A; Bridge Replacement (NBI 09991)
 - Existing 60' Steel I-Beam Span
 - 45'-45'-45' Continuous Concrete Slab Span

The anticipated plan sheets for the Bridge are:

1. General Notes & Pay Quantities
2. General Plan & Elevation
3. Foundation Report
4. Substructure Staking Diagram
5. Abutment Details
6. Substructure Excavation and Pipe Underdrain Details
7. Pier Details
8. Superstructure Details
9. Approach Slab Details

All design will be prepared in U.S. customary units and in accordance with the Oklahoma Department of Transportation (ODOT) Standard Specifications for Highway Construction, 2019.

Structural design of any new bridge components will be prepared in accordance with "AASHTO LRFD Bridge Design Specifications", 9th Edition and "ANSI / AASHTO / AWS D1.5 Bridge Welding Code".

2. GEOTECHNICAL

Refer to the attached exhibit from Red Rock Consulting.

Compensation

Compensation for the project shall be as outlined in the contract. Invoicing and payments shall be in accordance with progressive completion payments as outlined in the contract.

The format for the compensation shall be:

Bridge A Lump Sum
Bridge Geotechnical Unit Rate

The proposed fee schedule for these services is as follows:

Bridge A \$110,500.00
Bridge Geotechnical \$25,662.30
Total Fee \$136,162.30

RED ROCK CONSULTING

Scope of Work 10/15/2024

Project: Franklin Road Three Span Bridge Over Little River – Lochner
Number: K-2324-153
Location: Cleveland County, Oklahoma

BRIDGE

Red Rock Consulting, LLC will perform the geotechnical investigation for the replacement of the bridge over Little River on Franklin Road in Cleveland County, Oklahoma. The geotechnical investigation will be performed in general accordance with the Oklahoma Department of Transportation (ODOT) Specifications for the Geotechnical Investigation of Bridges and Related Structures.

For the three span bridge, four (4) bridge borings will be drilled under the full time supervision of an engineer. One boring will be drilled at each of the abutment and pier locations on alternating sides of the bridge, if possible. Bedrock has been estimated at a depth of 50 feet below the existing grade, for this proposal.

Overburden testing will be conducted in 3 of the 4 bridge borings with a split spoon using Standard Penetration Testing (SPT). The remaining bridge boring will be a non-sample hole with an SPT test at the top of rock only. Following SPT refusal in the borings, bedrock will be tested using the TCP at 5-foot intervals for a depth of 20 feet into bedrock, as per ODOT local government specifications.

In the laboratory, testing will include water content, Atterberg limits, and full sieve analysis, which will be performed to ODOT specifications on all recovered samples of the overburden material. Soil samples will be classified in accordance with the Unified (USCS) Soil Classification System.

Bulldozer and traffic control services are anticipated for this project.

Skin friction and end bearing design capacities based on the TCP results will be provided for the drilled piers. AASHTO seismic site classification will also be provided.

**RED ROCK
CONSULTING**

**Scope of Work
10/15/2024**

Franklin Road Three Span Bridge over Little River K-2324-153	Estimated Total Quantity	Unit Rate	Unit	Estimated Total Fee
Mobilization of Drill Rig	30	\$7.25	per mile	\$217.50
Soil Drilling	200	\$22.75	per foot	\$4,550.00
Rock Drilling	80	\$32.75	per foot	\$2,620.00
Standard Penetration Testing	34	\$27.50	per test	\$935.00
Texas Cone Penetrometer Testing	20	\$36.44	per test	\$728.80
Hole Abandonment	56	\$7.08	per foot	\$396.48
Field Engineer Logging	20	\$136.06	per hour	\$2,721.20
Soil Class (Grad. & PI)	34	\$123.25	per test	\$4,190.50
Moisture Content	34	\$8.91	per test	\$302.94
Site Access Mileage	90	\$1.81	per mile	\$162.90
Site Access On-Site	4	\$113.00	per hour	\$452.00
Traffic Control Services	16	\$225.00	per hour	\$3,600.00
Dozer Working Time	5	\$195.06	per hour	\$975.30
Report Preparation	28	\$136.06	per hour	\$3,809.68
		BRIDGE TOTAL		\$25,662.30