

September 27, 2023

Ms. Alys Dobbins
City of Kingsport
Civil Engineer
Water Services Division
1113 Konnarock Rd
Kingsport, TN 37664

RE: TDOT PIN 112834.03 – S.R. 93, from south of Horse Creek to north of Derby Drive

Dear Ms. Dobbins:

Barge Design Solutions, Inc. is pleased to respond to your request for a proposal for engineering services to revise “A” date “Rainbow Drawings” and “B” date Construction Documents according to TDOT requirements for the referenced project. TDEC permitting is also included in the scope of services. Our effort is detailed in Exhibit A.

At your earliest convenience, please review our proposal and, if acceptable, provide a signed task order or other executed agreement. We will proceed with the design effort upon authorization from TDOT.

Sincerely,

Barge Design Solutions, Inc.



Andrew J. Clark, PE
Project Manager

c: Mr. Nelson Elam, Barge Design Solutions

Enclosures:

Scope of Services

Barge project # 36412-02

Barge Design Solutions, Inc. (Barge) will provide the following scope of services for the City of Kingsport (Client) for the PIN 112834.02 – Sullivan County - S.R. 93, from south of Horse Creek to north of Derby Drive. The scope of work is presented in the following elements:

- I. Project Description
- II. Scope of Services
- III. Project Schedule
- IV. Compensation

I. Project Description

The Tennessee Department of Transportation (TDOT) has planned a new road upgrade project for PIN 112834.02 - S.R. 93, from south of Horse Creek to north of Derby Drive in Sullivan County. The scope includes a total of 1.5 miles of roadway upgrades. This project will impact the City's existing water distribution system along this route which will need to be relocated, removed, and/or upgraded due to the construction activities. Barge will provide proposed routing and alignments for water infrastructure. Routing will consider excavations, embankments, roadway traffic control, and construction phasing.

II. Scope of Services

Barge will prepare the detailed construction documents to be included in the State highway construction contract. Barge's effort will consist of the following:

- Approximately 4,000 linear feet of water line replacement is assumed for this project.
- Barge will utilize TDOT electronic files for the basis of the roadway design as provided by TDOT. Updated CAD versions of the A-Date Rainbow Drawings sufficient for environmental permitting and location approval will be prepared. A constructability review will be performed in relation to TDOT's roadway construction.
- Barge will submit and review the drawings in a meeting with the City.
- Barge will prepare a TDOT Master Consultant Excel Spreadsheet (MCES). Item numbers (assigned by TDOT), description of items, unit of measure, quantities, and costs will be submitted electronically to TDOT. Opinion of probable construction costs will be based on TDOT unit bid prices.
- Barge will submit revised A-Date/rainbow drawings (PDF and DGN format), MCES, and City-provided cover letter, Engineering and Utility Relocation Estimate Form 2015-16, to TDOT. Chapter 86 Eligibility and Schedule of Calendar Days have been previously submitted to TDOT by the City.

- Barge will coordinate with TDOT, local utility companies, and their consultants to deconflict utilities. This will require direct correspondence with third party utilities during design and attendance at TDOT deconfliction meetings. Two 2-hour meetings are included in the scope of services.
- Reproducible detailed Utility Relocation drawings will be prepared to be included in the state highway construction package. Drawings will be sufficient for the state contractor to bid the utility portion of the project. Drawings will be 22" x 34", with the specified TDOT title block on each sheet. A cover sheet will show estimated quantities of materials and a drawing legend. Plans will be prepared in standard TDOT MicroStation CADD format and PDF format. Details and profiles for water lines will be provided as required for the project.
- Coordinate with the City to produce Phasing and Special Work Conditions to be placed on the plans.
- Attend TDOT Construction Field Review Meeting. One 4-hour meeting is included in the scope of services.
- Barge will submit revised B-Date plans (half-size unsealed color PDF, full size black and white sealed PDF and DGN format), MCES, and technical specifications.
- Barge will prepare and submit Tennessee Department of Environment and Conservation (TDEC) Authorization to Construct Permit.

Deliverables:

The following deliverables will be provided as part of this task:

1. A-Date Deliverable
 - a. Rainbow drawings in PDF format
 - b. TDOT Utility Engineering and Relocation Estimate spreadsheet with TDOT standard bid items with quantities
2. B-Date Deliverable
 - a. Construction drawings in PDF format (one black and white sealed set and one half size, unsealed color set)
 - b. DGN files of construction drawings
 - c. TDOT MCES with TDOT standard bid items with quantities
 - d. TDEC Authorization to Construct Permit

Assumptions and Exclusions:

The following assumptions are applicable to the above scope of services:

- The project will only include replacement of lines impacted by the roadway project. Additional water line design for from roadway station 330 to station 372 is not included in the scope of services. The design scope of services does not include design to cross Horse Creek near Derby Drive.
- More than one A-Date and B-Date re-submittal requested by TDOT will be additional services.
- Meeting attendance not specified above as requested by TDOT or the City will be additional services. Barge shall not be responsible for Value Engineering, nor shall Barge be responsible for contractor phasing that is different from TDOT traffic phasing plans.
- Barge shall not be responsible for the acts or omissions of the contractor, or of any subcontractor or supplier, or any of the contractor's or subcontractor's or supplier's agents or employees or any other persons (except Barge's employees or agents) at the site or otherwise furnishing or performing any of the contractor's work.
- The Project will be bid with the roadway project and not as a stand-alone project.
- It is assumed that all utility line relocations associated with this project will be located within TDOT rights of way.

The following services are not included in the Scope of Services but can be provided by Barge upon authorization of Owner and agreement on compensation to Barge.

- Field survey
- Preparation of Easements
- Preparation of specifications. City of Kingsport Standard Specifications and Details will be utilized and referenced on the plans.
- Preparation of Storm Water Pollution Prevention Plan (SWPPP) or Aquatic Resource Alteration Plan (ARAP). Water lines will be included in the TDOT roadway project and fall within the limits of the TDOT roadway construction SWPPP and ARAP.
- Assistance responding to RFI's, addenda preparation, etc. during Bidding Phase for construction project.
- Construction Administration during construction phase:
 - Submittal and Shop Drawing Review

- Requests for Information, Change Order Preparation and Changes to the Contract
- Review of Payments to the Contractor
- Pre-Construction and Progress Meeting Attendance
- Site Visits for Engineering Interpretations, Clarifications, and Project Coordination
- Substantial and Final Completion Observation
- Resident Project Representation
- TDOT utility diaries and daily reports
- As-built field surveys of the contractor’s finished work.
- Services related to development of Owner’s project financing and/or budget.

III. Project Schedule

The project schedule is shown in the table below.

Tasks	Date
A-Date submittal to TDOT	10/2/2023
B-Date submittal to TDOT	2/16/2024
TDOT Letting	8/16/2024

IV. Compensation

Client agrees to pay Barge for time worked on the project by various personnel plus applicable outside services and other expenses properly charged to the project in accordance with TDOT invoicing procedures up to the amount shown in the table below. The budget status will be summarized monthly in our progress report and invoice submittal.

Engineering Services	Fee
Water Engineering Services	\$42,900



UTILITY ENGINEERING AND RELOCATION ESTIMATE

UTILITY INFORMATION

Utility Name: City of Kingsport (WATER)

Utility Address: 1113 Konnarock Road

City, State: Kingsport, TN Zip Code: 37664

Phone: 423-343-9845

Contact Name: Alys Dobbins

Email: AlysDobbins@KingsportTN.gov

CONSULTANT INFORMATION

Consultant Name: Barge Design Solutions, Inc.

Consultant Address: Four Sheridan Square, Suite 100

Kingsport, TN Zip Code: 37660

Phone: 865-934-4146

Contact Name: Andrew Clark, PE

Email: andrew.clark@bargedesign.com

TDOT PROJECT INFORMATION

Project Description: S.R. 93, from south of Horse Creek to north of Derby Drive

Federal Project No.: STP-93(15)

State Project No.: 82010-3236-14

County(ies): Sullivan

Revision 02/09/2023



ESTIMATE OF ENGINEERING COST

TDOT Project Number(s): STP-93(15) 82010-3236-14

Utility Name & Address:
 City of Kingsport (WATER)
 1113 Konnarock Road
 Kingsport, TN 37664

County(ies): Sullivan

Consultant Name & Address:
 Barge Design Solutions, Inc.
 Four Sheridan Square, Suite 100
 Kingsport, TN 37660

CONSULTANT ENGINEERING ESTIMATE

Place an "X" in the appropriate box: **Standard Contract** **Continuing Contract** (attach copy of Contract for TDOT verification)

I. ENGINEERING SERVICES		PRE-CONSTRUCTION		CONSTRUCTION		CONSTRUCTION INSPECTION	
Classification	Rate/Hr	Hours	Total	Hours	Total	Hours	Total
Principal	\$ 90.00	2	\$ 180.00		\$ -		\$ -
Project Manager	\$ 80.00	37	\$ 2,960.00		\$ -		\$ -
Design Engineer	\$ 34.00	77	\$ 2,618.00		\$ -		\$ -
Designer / Senior Designer	\$ 60.00	55	\$ 3,300.00		\$ -		\$ -
Technician / Draftsperson	\$ 40.00	96	\$ 3,840.00		\$ -		\$ -
Administrative	\$ 35.00	4	\$ 140.00		\$ -		\$ -
Field Inspector			\$ -		\$ -		\$ -
Licensed Surveyor			\$ -		\$ -		\$ -
Rod Person			\$ -		\$ -		\$ -
	\$ -		\$ -		\$ -		\$ -
Total Engineering Services		271	\$ 13,038.00	0	\$ -	0	\$ -

II. REIMBURSABLE EXPENSES		PRE-CONSTRUCTION		CONSTRUCTION		CONSTRUCTION INSPECTION	
Classification	Cost/Unit	Quantity	Total	Quantity	Total	Quantity	Total
Transportation / Mile:	\$ 0.63	X 500	= \$ 315.00		\$ -		\$ -
Meals / Day:		X	= \$ -		\$ -		\$ -
Lodging / Day:		X	= \$ -		\$ -		\$ -
Printing / Shipping:			\$ -		\$ -		\$ -
Other (Specify):			\$ -		\$ -		\$ -
Other (Specify):			\$ -		\$ -		\$ -
Total Reimbursable Expenses			\$ 315.00		\$ -		\$ -

III. INDIRECT / OVERHEAD EXPENSES		PRE-CONSTRUCTION		CONSTRUCTION		CONSTRUCTION INSPECTION	
Indirect/Overhead Rate (not to exceed 145%):	206.93%	\$ 26,979.53		125.00%	\$ -	125.00%	\$ -
IV. PROFIT: (2.35x(1,2,3)x ALLOWABLE RATE)		PRE-CONSTRUCTION		CONSTRUCTION		CONSTRUCTION INSPECTION	
Allowable Rate (Maximum of 13%):	10.00%	\$ 3,063.93		10.00%	\$ -	10.00%	\$ -

(Expenses for Sections III and IV only apply to Consultant Engineering Services without a Continuing Contract agreement with the Utility)

TOTAL ENGINEERING / SURVEY COST:		INSPECTION (Standard)		INSPECTION (Continuing)	
Standard Consultant: (I+II+III+IV) =	\$ 43,396.46	Private:	\$ -	Private:	\$ -
Continuing Contract: (I+II) =	\$ -	Public:	\$ -	Public:	\$ -
TOTAL COST (Engineering and Inspection)					
		Standard Consultant:	\$ 43,396.46		
		Continuing Contract:	\$ -		

IN-HOUSE ENGINEERING ESTIMATE

I. ENGINEERING SERVICES		PRE-CONSTRUCTION		CONSTRUCTION		CONSTRUCTION INSPECTION	
Classification	Rate/Hr	Hours	Total	Hours	Total	Hours	Total
Project Manager			\$ -		\$ -		\$ -
Engineer			\$ -		\$ -		\$ -
Draftsperson			\$ -		\$ -		\$ -
Administrative			\$ -		\$ -		\$ -
Field Inspector			\$ -		\$ -		\$ -
Licensed Surveyor			\$ -		\$ -		\$ -
Rod Person			\$ -		\$ -		\$ -
	\$ -		\$ -		\$ -		\$ -
Total Engineering Services		0	\$ -	0	\$ -	0	\$ -

II. REIMBURSABLE EXPENSES		PRE-CONSTRUCTION		CONSTRUCTION		CONSTRUCTION INSPECTION	
Classification	Cost/Unit	Quantity	Total	Quantity	Total	Quantity	Total
Transportation / Mile:		X	= \$ -		\$ -		\$ -
Meals / Day:		X	= \$ -		\$ -		\$ -
Lodging / Day:		X	= \$ -		\$ -		\$ -
Printing / Shipping:			\$ -		\$ -		\$ -
Other (Specify):			\$ -		\$ -		\$ -
Other (Specify):			\$ -		\$ -		\$ -
Total Reimbursable Expenses			\$ -		\$ -		\$ -

III. INDIRECT / OVERHEAD EXPENSES		PRE-CONSTRUCTION		CONSTRUCTION		CONSTRUCTION INSPECTION	
Indirect/Overhead Rate (not to exceed 145%):	0.00%	\$ -		0.00%	\$ -	0.00%	\$ -

TOTAL ENGINEERING COST:		TOTAL INSPECTION COST:	
	\$ -	Private:	\$ -
		Public:	\$ -

STP-93(15)
SULLIVAN
PIN 112834.03



Memorandum of Understanding (For Consultant Engineering Services)

It is agreed hereto by and between the parties as follows:

The Utility and Consultant shall follow the procedures for the "Use of Consultant Engineers by Utilities" as outlined in the current issue of the Department's Standard "Utility Procedures Manual, Section 2.1 and 2.2.

All plans and adjustments, reallocations or locations of utilities within highway rights-of-way will conform to the current issue of the Department's "Rules and Regulations for Accommodating Utilities Within Highway Rights-of-way" and amendments thereto.

If the Engineer finds that it is necessary to increase the ceiling amount of the estimated engineering fee, or any part thereof, the Utility shall make a written request to the State setting forth the anticipated overrun by category of engineering services and the reasons for the overrun, subject to the approval of the State prior to incurring such costs. The profit figure as shown on the engineer's estimate will not be changed unless the scope of the work is changed. No increase shall be binding upon the State unless written prior approval is given by the State.

The plans and estimate shall be completed and submitted for review and approval in accordance with the State's project schedule. Failure of the Utility and/or the Consultant Engineer to meet the State's schedule shall result in damages assessed against the Utility in the amount of \$200.00 per working day.

The standard Certification of Consultant Form, the estimate of engineering fees and a statement of the scope of work involved are attached hereto and made a part of this memorandum.

City of Kingsport

Utility

By: Date: 6/2/16
Utility Signature

Barge Waggoner Sumner & Cannon, Inc.

Consultant Engineer

By: Nelson Elam Digitally signed by Nelson Elam
DN: cn=Nelson Elam, ou=Laptops, ou=Kingsport, ou=BWSC Users,
ou=BWSC, DC=com, DC=bwsc, DC=net
Date: 2016.05.19 14:12:04-0400 Date: 05/19/2016
Consultant Signature

Approved: Date: 6/7/16
State Utilities Office

APPROVED
DATE 6/23/16
Debra Meyer



Certification of Consultant

I hereby certify that I am the Vice President and duly authorized
(title)
 representative of the firm of Barge Waggoner Sumner & Cannon, Inc.
(firm name)
 whose address is Four Sheridan Square, Suite 100, Kingsport, TN 37660
(firm address)
 and

That, except as expressly stated and described herein, neither I nor the firm of
Barge Waggoner Sumner & Cannon, Inc. has, in connection with its contract with
(firm name)
City of Kingsport, entered
(utility name)
 into pursuant to provisions of an agreement between the aforementioned utility and the
 State of Tennessee, as a part of Federal-aid project STP-33(15) 112834.03
(project number)

(a) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm, company, or person, other than a bona fide employee working solely for me or the aforementioned firm, to solicit or secure the contract, or

(b) agreed, as an expense or implied condition for obtaining the award of the contract, to employ or retain the services of any firm, company, or person in connection with the carrying out of the contract, or

(c) paid, or agreed to pay, to any firm, company, or organization, or person, other than a bona fide employee working solely for me or the aforementioned firm, any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the contract.

(Statement and explanation of exception, if any):

I acknowledge that this certificate is to be furnished to the State highway Department and the Federal Highway Administration, U.S. Department of Transportation, in connection with the aforementioned project involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

May 19th. 2016
(Date)

Nelson Elam
(Signature)

APPROVED
 DATE 6/23/16
Nelson Elam



CAD Plan files Disclaimer and Limitation of Liability Agreement

The Tennessee Department of Transportation (TDOT) is committed to providing electronic access to files. TDOT does not possess a staff that is available to provide technical support to outside parties who receive CAD files. It is important, therefore, that all potential users of these files read the following disclaimer and accept its terms as prerequisite to the use of the files.

1. TDOT makes no warranty of any kind, express or implied, with respect to the file(s) subject to this agreement, and specifically makes no warranty that said file(s) shall be fit for any particular purpose. Furthermore, any description of said file(s) shall not be deemed to create an express warranty that such file(s) shall conform to said description.
2. Receiver assumes all risk and liability for any losses, damages, claims or expenses resulting from the use or possession of any file(s) furnished by TDOT pursuant to this agreement.
3. Receiver agrees to indemnify, defend and hold harmless to the extent permitted by law TDOT, its officers, agents, and employees from and against any and all claims, suits, losses, damages and costs, including reasonable attorney's fees, arising from or by reason of receiver's use or possession with respect to any of the file(s) furnished by TDOT pursuant to this agreement, and such indemnification shall survive acceptance of said file(s) by receiver.
4. All design files are MicroStation™ drawing files (*.dgn). Receiver agrees that TDOT cannot provide the files in other file formats, and agrees to accept the file(s) in the format provided. Receiver agrees that TDOT cannot be held responsible for problems arising from files which have been converted for use in non-native applications (e.g. MicroStation design files to Autocad).
5. Since revisions or additions to the design file(s) may occur at any time, the receiver agrees to indemnify, defend and hold harmless to the extent permitted by law TDOT, its officers, agents, and employees from and against any and all claims, suits, losses, damages or costs, including reasonable attorney's fees, arising from the use of outdated design files, and such indemnification shall survive acceptance of said file(s) by receiver.
6. The design files are copyrighted by the Tennessee Department of Transportation and may not be resold.
7. Receiver agrees to provide TDOT with electronic files for utility relocation plans concerning the subject project.
8. These terms and conditions constitute the complete and final agreement of the parties hereto.
9. The undersigned is authorized by Barge Design Solutions, Inc. to execute this agreement on its behalf. (Firm/Agency)

I accept the aforementioned terms and conditions.

Project: TDOT PIN 112834.03 – S.R. 93, from south of Horse Creek to north of Derby Drive

File (s): All pertinent project related files

Andrew Clark

Signature (Receiver)

Barge Design Solutions, Inc.

Firm /Agency

09/27/2023

Date