

RESOLUTION NO. R2009-14

A RESOLUTION AUTHORIZING THE TOWN MANAGER TO ENTER INTO A CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES WITH CAWTHORNE ENGINEERING CO. INC. AND TO PROVIDE PAYMENT FOR PROFESSIONAL ENGINEERING SERVICES PERFORMED IN AN AMOUNT NOT TO EXCEED THIRTY FOUR THOUSAND AND 00/100 DOLLARS (\$34,000.00).

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BE IT RESOLVED by the Town Council of the Town of Signal Mountain, Tennessee that the Town Manager is authorized to enter into a contract for professional engineering services with Cawthorne Engineering Co. Inc. and to provide payment for professional engineering services in an amount not to exceed \$34,000.00. A copy of the proposed professional services contract is attached.

  
\_\_\_\_\_  
MAYOR

  
\_\_\_\_\_  
RECORDER

1/12/09  
\_\_\_\_\_  
DATE

1/12/09  
\_\_\_\_\_  
DATE



CAWTHORNE ENGINEERING CO. INC.

civil-environmental consultants

530 N. MARKET STREET  
CHATTANOOGA, TENNESSEE 37405  
PHONE (423) 267-2222  
FAX (423) 267-2343

December 10, 2008

Ms. Honna Rogers  
Town Manager  
Town of Signal Mountain  
1111 Ridgeway Ave.  
Signal Mountain, TN 37377

SUBJECT: Proposal for Professional Engineering Services for Design and Construction  
Phase Services for a New Water System along Palisades Drive

Dear, Ms. Rogers,

We appreciate the opportunity to offer this proposal to provide Consulting Engineering Services for the subject project.

Scope of Project

1. Connect New 6-inch ductile iron pipe (DIP) water main to existing DIP water main located on Balmoral Drive, extend new water main under HWY 127 and along Palisades Road.
2. Provide water service connections for existing customers to new water main.
3. Provide access in and out of area during construction.
4. Repair damage to roadways and driveways caused by construction activities.
5. Maintain water service to customers during construction.

Scope of Services

Phase I. -Preliminary Engineering of Proposed Water System

1. Conduct field measurements of existing roadway and water system and select best route for new water main.
2. Evaluate new water system flow rates and pressures
3. Prepare engineering report including preliminary design, hydraulic calculations and preliminary cost estimates for water system project.

Engineering Fees for Phase I of Water System project.....\$ 3,000.00

Phase II - Water System Design Phase

1. Prepare construction documents including plans, specifications, bidding information, bidding forms and construction contracts.
2. Prepare updated construction cost estimate based on system design.
3. Submit engineering report, construction plans, specifications and other construction documents to State of Tennessee for approval.
4. Prepare advertisement for construction contract bid.
5. Assist with bidding process.
6. Evaluate bids and make recommendations for accepting best bid.

Engineering Fees for Phase II of Water System project.....\$ 15,000.00

Phase III. Construction Phase

1. Provide Engineering surveillance (periodically) during construction.
2. Evaluate and approve submittals by contractor of shop drawings and construction materials.
3. Evaluate construction progress and approve partial payment requests by contractor.
4. Prepare change orders (if needed) for changes that may be required due to unforeseen circumstances that may arise during construction.
5. Evaluate damage to existing driveways and infrastructure during construction and assure that repairs are completed properly and timely.
6. Prepare final punch list of unfinished items or work and assure completion.
7. Perform final inspection and make recommendation for final payment to the contractor.

Engineering Fees for Phase III of Water System project.....\$ 3,500.00

Resident Construction Inspection of Water System

Resident Construction Inspection is very important for projects involving rock removal. Rock removal can be very costly and requires very close measurement and accounting to assure fair and accurate invoicing. The inspector will be with the construction crews of a daily basis and will submit daily inspection reports to the engineer.

The cost for resident inspection is based on a construction period of four months. If the construction time exceeds four months the inspection fee will not be increased.

Resident Inspection Fee.....\$ 12, 500.00

Total Engineering Fees for Water System Project.....\$ 34,000.00

Time of Completion of Engineering Work

- Phase I - 30 days from notice to proceed.
- Phase II - 60 days from notice to proceed.
- Phase III - Simultaneous with construction.

Items Requiring Special Considerations

Boring and Casing Under State Highway - The State will require boring and casing for the water main crossing under Hwy 127. The boring will require a State Permit. The Boring will be difficult due to presents of rock, thus selection of the right location will be critical. Also Private Construction Easements may be required.

Narrow Roads - Palisades Drive is a very narrow road with high embankments on the up-hill side at several locations. This condition makes access to residents in the area during construction very difficult and may require construction of a temporary access road. Private Construction Easements may be required.

High Percentage of Rock - Rock outcrops and exposed boulders indicates that rock will be present with much of the water main construction. Blasting with Dynamite for rock removal very likely will be required. Blasting permits, special insurance and pre-blast inspections may be required.

Comments

- A. We will invoice for Engineering Fees upon completion of each phase of work outlined in the proposal.
- B. Our Terms are Net within 30 Days for each invoice.

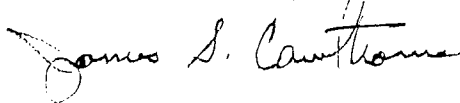
If this proposal meets your approval, please sign and return one copy. The return copy will serve as the notice to proceed.

Approved For:

Sincerely,

Town of Signal Mountain

Cawthorne Engineering Co., Inc.



\_\_\_\_\_  
Printed Name

James S. Cawthorne, P.E.  
Director of Engineering

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date