



*SULLIVAN ENGINEERING, INC.
1722B GENERAL GEORGE PATTON DR.
SUITE 400, BRENTWOOD, TN 37027
(615)377-3330
(FAX) 377-3616*

February 28, 2017

Mr. Jonathan Marston, P.E.
Franklin Assistant City Engineer
109 3rd Avenue South
Franklin, TN 37064

RE: McEwen Drive Extension, Supplement #1
From Wilson Pike (SR 252)/McEwen Drive Intersection
To Franklin's eastern City Limit
City of Franklin, Tennessee
Williamson County

Dear Jonathan,

Sullivan Engineering, Inc. (SEI) is submitting proposal "Supplement #1" for reimbursement of requested additional Engineering, Survey, and Geotechnical design services associated with the development of design plans for redesign of the previously approved Frontage Road, Sta. 481+00+/- LT and design of the new Side Road, Sta. 481+00+/- RT. None of these services were included or anticipated in the original scope of services and were added to the scope of services as directed and approved by City Staff, prior to execution of the work. At the time of this request, geotechnical and survey services had been completed for the project, which required our team to re-mobilize and amend previous work.

Regarding Frontage Road Sta. 481+00+/- LT, engineering was 90% complete inclusive of retaining walls within this area, inclusive of cross-sections and drainage along the mainline. Therefore, previously approved horizontal and vertical design criteria for the Frontage Road and Mainline had to be evaluated, prior to implementing modifications for the requested cul-de-sac located about midway of the approved Frontage Road layout. Once this was done the retaining wall design had to undergo the same process, inclusive of additional coordination with geotechnical engineers and evaluation of stability concerns. Once these evaluations had been completed, the design documents had to be updated inclusive of drainage design, cross sections, and earthwork calculations.

Similar to the additional redesign work associated with the Frontage Road, the previously designed driveways, south of Sta. 481+00-/ RT, additional property owner contact, field survey, geotechnical, retaining wall and roadway engineering design services had been completed with a change in design to a public road, from providing ingress/egress to property via existing driveways. As the project developed, City Staff felt that at some future point these properties would be subdivided for development. Therefore, City Staff felt that a short side road with a cul-de-sac should be constructed, to connect existing drives, with the side road better serve the property owners and future development potential. Therefore, additional geotechnical and field survey were required to update and amend previous work. The area to be accessed was a heavily wooded area, so prior to geotechnical work beginning the survey team was required to stake the centerline, allowing a construction crew to clear cut and mulch the area. Upon completion of clearing the site, our survey team had to return to the site to locate the proposed centerline and geotechnical boring locations. At this point engineering of existing drives, (hor/Ver) slopes, cross-sections, retaining walls, and geotechnical work was 90% complete. Therefore, previously approved design criteria had to be evaluated and modified for design of a short side road with a cul-de-sac, requiring all previously approved drives to be re-engineered. Once this was done the retaining wall design had to undergo the same process, inclusive of additional coordination with geotechnical engineers and evaluation of stability concerns. Once these evaluations had been completed, the design documents had to be updated inclusive of drainage design, cross sections, and earthwork calculations.

Because of the previously approved engineering and redesign, services requested by City Staff SEI's Design Team had to amend the following design development sheets as outlined below:

D) Additional Engineering Design Services

- 1) Topographic Survey
 - i) Property owner and utility owner contacts
 - ii) Obtain additional field data, Compile in a digital format and update the original topographic and boundary data collected, inclusive of the 3-D Model.

- 2) ***Geotechnical Investigation***
 - i) Review Geologic maps
 - ii) slope recommendations,
 - iii) Additional site boring
 - iv) Treatment of unstable soil,
 - v) Retaining wall design parameters

- 3) ***Roadway Design Documents***
 - i) Coordinate new Alignments with City Officials,
 - (1) Modify alignments in accordance with the city engineers' instruction
 - ii) Cross Sections at 50' intervals,
 - iii) Design new or modify previously designed retaining walls
 - iv) Initiate the following
 - (1) Utility notification of proposed roadway improvements,
 - v) Identify major drainage (500 cfs or greater) crossings
 - (1) Hydraulic analysis
 - (a) Storm Drainage
 - (i) Q10 Design
 - (b) Cross Drains
 - (i) Q50 Design
 - (2) Geotechnical assessment
 - vi) Identify Land Parcels impacted by construction,
- 4) Prepare exhibits and Attend additional project meetings

COMPENASTATION TABLES

Supplement #1 – Additional Engineering Design Services (Lump Sum)

McEwen Drive, (Phase 4, Cool Springs to (Wilson Pike)	
Supplement #1	
ENGINEERING TASK REQUIRED	BUDGET
Additional Services for Cul-de-Sac Sta 481+00+/- RT (Survey & Geotech Layout Stake Geotechnical bore locations (2 mobilizations max)	\$9,878.50
SUB-TOTAL SURVEY	\$9,878.50
Redesign Frontage Road to Cul-de-Sac Sta 481+00+/- LT (redesign of approved frontage, drives, walls, slopes)	\$20,000.00
Design new Cul-de-Sac Sta 481+00+/- RT (redesign of earlier drives, walls, slopes)	\$15,000.00

McEwen Drive, (Phase 4, Cool Springs to (Wilson Pike)	
Supplement #1	
ENGINEERING TASK REQUIRED	BUDGET
SUB-TOTAL ROADWAY	\$35,000.00
Geotechnical (Additional Services Related to Cul-De-Sac Revision at Sta. 481+00+/- RT)	\$39,100.00
Site Clearing and Grinding (Clearing and mulch operations for additional Geotechnical Services related to new side road Cul-De-Sac design, Sta. 481+00+/- RT)	\$10,719.71
Site Clearing (Removal of mulched material remaining from clearing Operations related to additional Geotechnical Services for new side road Cul-De-Sac Design, Sta. 481+00+/- RT)	\$6,335.44
SUB-TOTAL GEOTECHNICAL	\$56,155.16
Redesign Frontage Road to Cul-de-Sac Sta 481+00+/- LT (redesign of approved frontage, drives, walls, slopes)	\$13,110.00
Design new Cul-de-Sac Sta 481+00+/- RT (redesign of earlier drives, walls, slopes)	\$6,555.00
SUB-TOTAL RETAINING WALLS	\$19,665.00
Additional Project meetings and correspondence	\$1,000.00
Reproduction (PDF's/Prints for Meetings, all major printing by the City)	\$300.00
SUB-TOTAL MISCELLANEOUS	\$1,300.00
TOTAL	\$121,998.66

This project will be developed in accordance with City of Franklin Guidelines, with the design fee based on a lump sum basis. The fee for this project shall include all items listed in the Scope of Work, computer plotting, and travel expenses. All printing for reviews and meetings will be the responsibility of Sullivan Engineering, Inc. and all major printing shall be by the City of Franklin All documents shall be computer generated and printed in black and white on bond paper for City review and approval. Final construction documents shall be submitted to the City in digital PDF format.

I hope this proposal meets with your approval. Please phone after you have had a chance to review this proposal or if there are any questions.

Sincerely,
Sullivan Engineering, Inc.

Paul Collins

Paul V. Collins, Jr.
 Vice President

Cc: Mr. Richard Sullivan, PE, President Sullivan Engineering, Inc.

Additional services:

The following is SEI's hourly rates for any additional services, which may be required.

Reimbursable Expenses Schedule

Reimbursable expenses for services performed on the date of the Agreement are:

FAX	\$0.25/page
8"x11" Copies/Impression	\$0.10/page
Blue Print Copies	\$0.50/sq. ft.
Reproducible Copies (24" x 36" Mylar)	\$15.00/page
Reproducible Copies (24" x 36" Vellum)	\$10.00/page
Reproducible Copies (24" x 36" Bond)	\$5.00/page
Mileage (auto)	\$0.49/mile
Long Distance Phone Calls	at cost
Meals and Lodging	at cost

Standard Hourly Rates Schedule

Reimbursable hourly rates for services performed on the date of the Agreement are:

Billing Class	Staff	Rate	Increment
Billing Class 10	Professional Engineer II	\$171.40	Hour
Billing Class 9	Professional Engineer I	\$144.71	Hour
Billing Class 8	Staff Associate/Project Coordinator	\$127.08	Hour
Billing Class 7	Project Manager	\$107.11	Hour
Billing Class 6	Roadway Designer II	\$102.51	Hour
Billing Class 5	Roadway Designer I	\$93.09	Hour
Billing Class 4	CADD Technician	\$96.99	Hour
Billing Class 3	Stormwater Inspection	\$91.80	Hour
Billing Class 2	Secretary	\$70.90	Hour
Billing Class 1	Office Helper	\$34.74	Hour