



May 14, 2013

D. Mack Kelly, Jr., PE, PLS, CFM
Director of Public Works
County Engineer
Oconee County
15022 Wells Highway
Seneca, South Carolina 29678

Re: Road Project (Stone Pond Subdivision)

Dear Mr. Kelly:

Davis & Floyd, Inc. is pleased to provide this proposal for engineering services for the subject project. We understand that the ultimate goal of the project is to improve roads in Stone Pond Subdivision to meet Oconee County public road standards, with the exception of Devonhurst Drive. Devonhurst Drive will be improved, but not to the extent of meeting Oconee County standards and will be maintained by others at the conclusion of the project. Our understanding of the scope of services required for this project is outlined below and is based upon our discussions and initial site visit with you and Mr. Kyle Reid on September 26, 2012. If our understanding of the scope is inconsistent with yours please inform us as soon as practical so that we may enter into discussion to ensure we provide all services required.

The scope of services required for this project will include the following:

TASK ONE: TOPOGRAPHIC SURVEY

This task will include a maximum of 100' strip ground survey (50' both sides of the center of the road) every 50' along existing road alignments locating all above ground features including trees, wood lines, fences, driveways, above ground utility features, mailboxes, storm drain structures and pipes, etc. We will not locate underground utilities unless they are already marked. We understand the county will request a utility locate to identify underground utilities and we will coordinate our survey with the marking of the utilities. This will also include a strip survey of any storm drain outfalls of such distance as necessary to understand the impacts of the storm drain outfalls (\$10,375.00).

TASK TWO: FIELD INVESTIGATION AND GEOTECH EXPLORATION

This task will include onsite investigations to walk the entire length of roadway identifying pavement areas which show signs of distress and would need to be repaired prior to pavement overlay and widening. Areas of trees will be marked in the field and located as part of the topographic survey. Upon completion of our inspection, we will review the areas identified with county representatives for an explanation of what types of failures were noted and discuss possible repairs. Concurrent with this effort, we will take up to twenty-one asphalt cores linearly spread along the roads within the subdivision. These shallow cores will give us

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an idea of the subgrade characteristics as well as pavement thickness data. The total fee for this task includes the sub-contracted work as shown on the cost estimate spreadsheet in the amount of \$5,350.00. (\$8,150.00)

TASK THREE: ROAD AND STORM DRAIN DESIGN

Based on the information determined from the site investigation, survey and geotechnical report, we will develop detailed engineering plans which will indicate all improvements required to bring the roads into compliance with Oconee County ordinance including pavement width and thickness, pavement and subgrade repairs, driveway culvert pipes, road culvert pipes, right of way encroachments which will need to be removed, cul-de-sac improvements, remedialing split road sections and driveway replacements. We will also develop an opinion of probable construction costs for purposes of Revenue Anticipation Bonds. (\$27,900.00)

TASK FOUR: PERMITTING

This task will include developing an erosion control and stormwater management plan which will be required to address potential site erosion as a result of the proposed construction. We will develop a stormwater/erosion control report and NOI application to be submitted to SCDHEC. This task will also include an encroachment permit application for any proposed work within the SCDDOT right of way at the subdivision entrance. (\$3,025.00)

TASK FIVE: UTILITY COORDINATION

This task will include making contact with the local utility providers to coordinate the proposed construction with potential conflicts with existing utilities within the subdivision. (\$1,630.00)

TASK SIX: PROJECT SPECIFICATIONS

This task will include developing both technical and front end specifications necessary based on the proposed improvements and may include earthwork, paving, storm drainage, demolition, clearing and grubbing. The front end specifications will include general conditions, bid forms, bond requirements and other sections as coordinated with Oconee County. (\$4,000.00)

TASK SEVEN: COMMUNITY MEETINGS

This task will include our attendance at up to two meetings during the final stages of plan development in support of the county in presenting the proposed improvements to the homeowners association. These meetings will take place in Oconee County. We will provide drawings at these meetings showing impacts to each property to accommodate the proposed roadway improvements. (\$6,780.00)

TASK EIGHT: PROJECT BIDDING

This task will include advertising the project, submitting bid documents to interested general contractors, conducting a prebid conference, addressing questions during the bid process, producing addendums as necessary, conducting a bid opening and submitting to the county certified bid tabulation. (\$7,275.00)

TASK NINE: CONSTRUCTION ADMINISTRATION

This task will include conducting a preconstruction conference with the selected bidder to review the contract requirements including erosion control requirements. We will also review and approve change order requests, Request for Information and pay requests. Upon completion of construction, we will provide a Certified Final Project Cost for Special Purpose Tax District Collection. (\$7,680.00)

TASK TEN: CONSTRUCTION SITE VISITS

NOT APPLICABLE

TASK ELEVEN: REPLACE PROPERTY CORNERS

Research public records and obtain copies of available plats. Perform a detailed search for all road front property corners prior to construction. Property corners that are found prior to construction and destroyed during construction will be set in the same location as they were found. Road front property corners that are not found prior to construction will be set based on adjoining front and rear property corners. (\$21,500.00)

TASK TWELVE: AS-BUILT SURVEY

The as-built will include survey of the newly constructed road including locations of driveways, mailboxes, pipes and any other features that may be within the right of way. The resulting as-built plan will show all items surveyed with periodic measurements of the pavement width and invert elevations of storm drain pipes. (\$7,700.00)

TASK THIRTEEN: SEDIMENT AND EROSION CONTROL INSPECTIONS

NOT APPLICABLE

TASK FOURTEEN: FULL TIME INSPECTION SERVICES

This task will include providing full time construction and inspection services using an SCDOT certified senior inspector over a twenty-four week, forty hour per week construction schedule. We will monitor the contractor's daily activities for compliance with project specifications and provide accurate and timely documentation of these activities. We will monitor all construction activities including demolition, pavement repairs, culvert pipe installation, pavement base installation, pavement surface overlay and concrete work as may be required.

This task will also include providing a CEPSCI certified inspector to provide the mandatory erosion control inspections required by the DHCC permit specifically to inspect the installation, condition and maintenance of the installed erosion control features. Each visit will be documented by an inspection report noting the overall condition of the site, deficient items and corrective measures. Any deficiencies will be noted onsite with the contractor so that needed repairs can be implemented prior to the next week's erosion control inspection. (\$96,000.00)

Reimbursable expenses include mileage, hotel, subsistence and printing cost associated with our design efforts. These expenses are shown on the individual spreadsheets and will be invoiced separately from our survey, design and construction administration fees. The total not to exceed amount for this project including reimbursable expenses and sub-contracted work is \$207,585.00. See attached cost spreadsheet for hourly estimate.

If we are authorized to commence with our services on or before June 19, 2013, the following would be the approximate project schedule:

TASK	START	END
1 & 2	07/01/13	07/26/13
3, 5 & 7	07/23/13	08/20/13
4 & 6	09/20/13	11/31/13
8	11/01/13	02/02/14
9 & 14	02/03/14	07/21/14
11	07/21/14	08/11/14
12	08/13/14	08/25/14

Davis & Floyd, Inc. appreciates the opportunity to provide this proposal and looks forward to working with Oconee County on this project. The procurement of our services will be according to the Professional Services Agreement dated March 21, 2012 filed Category C Roadway and Bridge Services. We are ready to commence with our design services immediately. Please do not hesitate to call if you have any questions or comments.

Sincerely,

DAVIS & FLOYD, INC.



Brent P. Robertson, PE
Vice President

Attachments: Engineering Cost Estimate for Stone Pond Subdivision



CLIENT: Orange County
PROJECT: Stone Pond Subdivision

B&F IN: 110.02
CALC BY: BPR
DATE: 05/15/13

Scope of Engineering Services:

Task		
1 Topographic Survey	9 Construction Administration	
2 Field Investigation and Geotech Exploration	10 Construction Site Visits	
3 Road and Stormdrain Design	11 Replace Property Corners	
4 Permitting	12 As-Built Survey	
5 Utility Coordination	13 Erosion Control Inspections	
6 Project Specifications	14 Full Time Inspection Services	
7 Community Meetings		
8 Project Bidding		

Engineering Cost Estimate

Task	Principal	Proj. Mng.	Engr.	Spec Writer	Comp Tech	Survey Crew	Sr. Inspector	Designer	Clerical
1	1	6	6		18	60			
2	10		10						
3	12	44	190						
4	1	4	22						
5	1	2	12						
6	4	12		6					16
7		18	24		12				
8	6	16	13	6					32
9	6	32	22						
10									
11		40				100		40	
12		4				40		24	
13									
14							980	1	
15									
16									
Total	40	178	299	12	30	200	960	64	48

Principal	40	@	\$175.00	/ hour =	\$ 7,000.00
Project Manager	178	@	\$135.00	/ hour =	\$ 24,030.00
Engineer	299	@	\$105.00	/ hour =	\$ 31,385.00
Specifications Writer	12	@	\$130.00	/ hour =	\$ 1,560.00
Computer Technician	30	@	\$ 70.00	/ hour =	\$ 2,100.00
Survey Crew Chief	200	@	\$ 70.00	/ hour =	\$ 14,000.00
Survey Field Technician	200	@	\$ 65.00	/ hour =	\$ 11,000.00
Senior Inspector	960	@	\$100.00	/ hour =	\$ 96,000.00
Designer	64	@	\$ 90.00	/ hour =	\$ 5,760.00
Clerical	48	@	\$ 60.00	/ hour =	\$ 2,880.00

In-House Labor Sub Total = \$ 196,728.00
 Sub-contracted work, Lump Sum = \$ 5,350.00
 Total Labor = \$ 201,075.00
 Expenses = \$ 6,510.00
 Grand Total = \$ 207,585.00