

CAMINO REAL REGIONAL MOBILITY AUTHORITY BOARD RESOLUTION

WHEREAS, the Camino Real Regional Mobility Authority (CRRMA) selected Brown & Gay Engineers, Inc. (Engineer) to complete the environmental and preliminary engineering phases of the Loop 375 (Americas Avenue) Managed Lanes Project (the Project);

WHEREAS, the CRRMA and Engineer entered into an Agreement for Professional Engineering and Environmental Services dated April 4, 2013 (Agreement) whereby the Engineer was to provide the referenced environmental and preliminary engineering services to the CRRMA for the Project; and

WHEREAS, the Authority and Engineer amended the Agreement via Amendment No. 1 to the Agreement dated April 24, 2017, which expanded the scope of services to be rendered by the Engineer, to include such items as frontage roads and braided ramps; and

WHEREAS, in coordination with and at the request of the Texas Department of Transportation, the Authority now desires to further amend the Agreement in order for the Engineer to provide additional survey services as part of the Project and the Engineer desires to complete such services.

NOW, THEREFORE, BE IT RESOLVED BY THE CAMINO REAL REGIONAL MOBILITY AUTHORITY:

THAT, the Executive Director is authorized to execute an Amendment No. 2 to the Agreement for Professional Engineering and Environmental Services for the Loop 375 (Americas Avenue) Managed Lanes Project with Brown & Gay Engineers, Inc.

PASSED AND APPROVED THIS 9TH DAY OF AUGUST 2017.

**CAMINO REAL REGIONAL
MOBILITY AUTHORITY**

ATTEST:

Susan A. Melendez, Chair

Joe R. Fernandez, Secretary

APPROVED AS TO CONTENT:

Raymond L. Telles, Executive Director

**CAMINO REAL REGIONAL MOBILITY AUTHORITY
AGREEMENT FOR PROFESSIONAL ENGINEERING AND
ENVIRONMENTAL SERVICES**

AMENDMENT NO. 2

This **AMENDMENT NO. 2** to the Agreement for Professional Engineering and Environmental Services (the “Amendment”) is made as of this ____ day of _____, 2017, by and between the **CAMINO REAL REGIONAL MOBILITY AUTHORITY**, a political subdivision of the State of Texas, hereinafter called “Authority,” and **BROWN & GAY ENGINEERS, INC.**, a professional engineering firm registered in the State of Texas, hereinafter referred to as the “Engineer.”

WITNESSETH

WHEREAS, the Authority and Engineer entered into an Agreement for Professional Engineering and Environmental Services dated April 4, 2013 (the Agreement”) whereby the Engineer was to provide preliminary engineering and environmental services to the Authority for the Loop 375 (Americas Avenue) Managed Lanes Project (“Project”);

WHEREAS, the Authority and Engineer amended the Agreement via Amendment No. 1 to the Agreement dated April 24, 2017, which expanded the scope of services to be rendered by the Engineer, to include such items as frontage roads and braided ramps; and

WHEREAS, in coordination with and at the request of the Texas Department of Transportation, the Authority now desires to further amend the Agreement in order for the Engineer to provide additional survey services as part of the Project and the Engineer desires to complete such services.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the undersigned parties agree as follows:

1. Revision of Services to be Provided by Engineer. The parties hereby agree to add **Attachment “B-2”**, which is attached hereto and incorporated herein for all purposes, to the Agreement, such that the Services to be Provided by the Engineer are now inclusive of **Attachment “B”**, **Attachment “B-1”** and **Attachment “B-2”**.

2. Revision to the Project Schedule. The parties hereby agree to add **Attachment “C-2”**, which is attached hereto and incorporated herein for all purposes, to the Agreement, which will govern the schedule for completion of the additional services requested by **Attachment “B-2”**.

3. Revision to the Fee Proposal. The parties hereby agree to supplement the Fee Proposal identified as **Attachment “D”** of the Agreement and **Attachment “D-1”** of

Amendment No. 1, by adding **Attachment “D-2”**, which is attached hereto and incorporated herein for all purposes.

4. Ratification. Except as expressly amended by this Amendment, the Agreement and its attachments shall remain in full force and effect.

5. Execution in Counterparts. This Amendment may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall be considered fully executed as of the date first written above, when both parties have executed an identical counterpart, notwithstanding that all signatures may not appear on the same counterpart.

IN WITNESS WHEREOF, the Authority and the Engineer have executed and attested this Amendment by their officers thereunto duly authorized.

BROWN & GAY ENGINEERS, INC.

**CAMINO REAL REGIONAL
MOBILITY AUTHORITY**

Signature

Signature

Printed Name

Printed Name

Title

Title

Date

Date

ATTACHMENT B-2
SERVICES TO BE PROVIDED BY THE ENGINEER
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ATTACHMENT B-2
SERVICES TO BE PROVIDED BY THE ENGINEER

Design Surveys

Design Surveys include performance of surveys associated with the gathering of survey data for topography, cross-sections, and other related work in order to design a project.

1. PURPOSE

The purpose of a design survey is to provide field data in support of transportation systems design.

2. DEFINITIONS

A design survey is defined as the combined performance of research, field work, analysis, computation, and documentation necessary to provide detailed topographic (3-dimensional) mapping of a project site. A design survey may include, but need not be limited to locating existing right-of-way, cross-sections or data to create cross-sections and Digital Terrain Models (DTM), horizontal and vertical location of utilities and improvements, detailing of bridges and other structures, review of right-of-way maps, establishing control points, etc.

3. TASKS TO BE COMPLETED

3.1. Design Surveys

The State will request design surveys on an as needed basis. The Engineer's Surveyor shall perform tasks including, but not limited to the following:

- Obtain or collect data to create cross-sections and digital terrain models.
- Locate existing utilities.
- Locate topographical features and existing improvements.
- Provide details of existing bridge structures.
- Provide details of existing drainage features, (e.g., culverts, manholes, etc.).
- Establish additional and verify existing control points. Horizontal and Vertical control ties must be made and tabulated, to other control points in the vicinity, which were established by other sources such as, the National Geodetic Survey (NGS), and the Federal Emergency Management Agency (FEMA), and any other local entities as directed by the State.
- Locate existing right-of-ways.
- Review right-of-way maps.
- Locate boreholes.
- Use Mobil LiDAR to map the following project limits:

- Zaragoza to the centerline of intersection of IH-10 and Loop 375 (Main lanes and frontage roads).
 - Centerline intersection of IH-10 and Loop 375 to Pelicano (Main lanes only).
 - Underneath the Loop 375 bridge which crosses over IH-10.
 - 300' along all connector ramps .
- Update existing control data and prepare survey control data sheets for primary control, as directed by the State for inclusion into a construction plan set.

3.2. ROW Mapping

- Prepare ROW map for Loop 375, 500' East and West of the intersection of Loop 375 and the UP Rail Road crossing.
- Prepare Parcel Plats and descriptions for proposed ROW takings over the UP Rail Road ROW and Drainage Tract, (2) plats and descriptions.

The Engineer's Surveyors shall also prepare a Survey Control Index Sheet and a Horizontal and Vertical Control Sheet(s), signed, sealed and dated by the professional engineer in direct responsible charge of the surveying and the responsible RPLS for insertion into the plan set. The Survey Control Index Sheet shows an overall view of the project control and the relationship or primary monumentation and control used in the preparation of the project; whereas, the Horizontal and Vertical Control sheet(s) identifies the primary survey control and the survey control monumentation used in the preparation of the project. Both the Survey Control Index Sheet and the Horizontal and Vertical Control Sheet(s) must be used in conjunction with each other as a set. The State's forms for these sheets can be downloaded from the State's website.

The following information shall be shown on the Survey Control Index Sheet:

- Overall view of the project and primary control monuments set for control of the project.
- Identification of the control points.
- Baseline or centerline.
- Graphic (Bar) Scale.
- North Arrow.
- Placement of note "The survey control information has been accepted and incorporated into this PS&E" which shall be signed, sealed and dated by a Texas Professional Engineer.
- RPLS signature, seal, and date.
- The State's title block containing District Name, County, Highway, and CSJ.

The following information shall be shown on all Horizontal and Vertical Control Sheets:

- Location for each control point, showing baseline or centerline alignment and North arrow.
- Station and offset (with respect to the baseline or centerline alignments) of each identified control point.
- Basis of Datum for horizontal control (base control monument/benchmark name, number, datum).
- Basis of Datum for the vertical control (base control monument, benchmark name, number, datum).
- Date of current adjustment of the datum.

- Monumentation set for Control (Description, District name/number and Location ties).
- Surface Adjustment Factor and unit of measurement.
- Coordinates (State Plan Coordinates [SPC] Zone and surface or grid).
- Relevant metadata.
- Graphic (Bar) Scale.
- Placement of note “The survey control information has been accepted and incorporated into this PS&E” which shall be signed, sealed and dated by a Texas Professional Engineer.
- RPLS signature, seal and date.
- The State’s title block containing District Name, County, Highway, and CSJ.

4. TECHNICAL REQUIREMENTS

- 4.1. Design surveys must be performed under the supervision of a RPLS currently registered with the TBPLS.
- 4.2. Horizontal ground control used for design surveys, furnished to the Engineer’s Surveyor by the State or based on acceptable methods conducted by the Engineer’s Surveyor, must meet the standards of accuracy required by the State.

Reference may be made to standards of accuracy for horizontal control traverses, as described in the TxDOT Survey Manual, latest edition, or the TSPS Manual of Practice for Land Surveying in the State of Texas, as may be applicable.

- 4.3. Vertical ground control used for design surveys, furnished to the Engineer’s Surveyor by the State or based on acceptable methods conducted by the Engineer’s Surveyor, must meet the standards of accuracy required by the State.

Reference may be made to standards of accuracy for vertical control traverses, as described in the TxDOT Survey Manual, latest edition, or the TSPS Manual of Practice for Land Surveying in the State of Texas, as may be applicable.

- 4.4. Side shots or short traverse procedures used to determine horizontal and vertical locations must meet the following criteria:
 - i. Side shots or short traverses must begin and end on horizontal and vertical ground control as described above.
 - ii. Standards, procedures, and equipment (may be GPS Equipment, LiDAR, Total Stations, etc.) used must be such that horizontal locations relative to the control may be reported within the following limits:
 - Bridges and other roadway structures: less than 0.1 of one foot.
 - Utilities and improvements: less than 0.2 of one foot.
 - Cross-sections and profiles: less than 1 foot.
 - Bore holes: less than 3 feet.
 - iii. Standards, procedures, and equipment (may be GPS Equipment, LiDAR, Total Stations, etc.) used must be such that vertical locations relative to the control may be reported within the following limits:

- Bridges and other roadway structures: less than 0.02 of one foot.
- Utilities and improvements: less than 0.1 of one foot.
- Cross-sections and profiles: less than 0.2 of one foot.
- Bore holes: less than 0.5 of one foot.

5. AUTOMATION REQUIREMENTS

- Planimetric design files (DGN) must be fully compatible with the State's MicroStation V8i graphics program without further modification or conversion.
- Electronically collected and processed field survey data files must be fully compatible with the State's computer systems without further modification or conversion. All files must incorporate only those feature codes currently being used by the State.
- DTM must be fully compatible with the State's GEOPAK system without further modification or conversion. All DTM must be fully edited and rectified to provide a complete digital terrain model with all necessary break lines.

6. DELIVERABLES

The deliverables to be specified in individual work authorizations for design surveys shall be any combination of the following:

- Digital Terrain Models (DTM) and the Triangular Irregular Network (TIN) files in a format acceptable by the State.
- Maps, plans, or sketches prepared by the Engineer's Surveyor showing the results of field surveys.
- Computer printouts or other tabulations summarizing the results of field surveys.
- Digital files or media acceptable by the State containing field survey data (ASCII Data files).
- Maps, plans, sketches, or other documents acquired from utility companies, private corporations, or other public agencies, the contents of which are relevant to the survey.
- Field survey notes, as electronic and hard copies.
- An 8 ½ inch by 11 inch survey control data sheet for each control point which must include, but need not be limited to, a location sketch, a physical description of the point including a minimum of two reference ties, surface coordinates, a surface adjustment factor, elevation, and the Horizontal and Vertical datums used. A pre-formatted survey control data sheet form in Microsoft Office Word 2010 format will be provided by the State.
- A digital and hard copy of all computer printouts of horizontal and vertical conventional traverses, GPS analysis and results, and survey control data sheets.
- All GEOPAK GPK files.
- Survey reports in a format requested by the State.

ROW Mapping Deliverables:

- Four sets of (11" x 17") sheets of right-of-way map with cover sheet.
- Four sets of property description with original RPLS or LSLS seal and signature (8½"x11") sheets of each parcel to be acquired.
- Four sets of Parcel Plats with original RPLS or LSLS seal and signature (8½"x11") sheets of each parcel to be acquired.
- Four sets of Area calculation sheets (8½"x11") showing bearings and distances, area, and closure for the acquired parcel.
- Four sets of (11" x 17") signed and sealed Control recovery sheets on opaque Mylar with recovery sketches and photos of primary control with electronic dgn with a project cover sheet.

External Hard Drive with all Mapping and DTM files:

- A 2d (.dgn) master file of the abstract base map with all associated reference dgn files with ownership shown and updated planimetric file compatible with MicroStation v8i in both grid and surface coordinates.
- A 2d (.dgn) master file of the primary control set with all associated reference dgn files, updated planimetric file compatible with MicroStation v8i in both grid and surface coordinates.
- A 3d (.dgn) DTM file of the abstract base map, updated planimetric files of the existing road topography, and of the ROW parcel plats and maps with any and all structural improvements and encroachments compatible with MicroStation v8i in both grid and surface coordinates.
- All electronic copies of all Primary and Secondary Control set with recovery sketches and photos.
- All ASCII files with x y and z coordinates, feature code and description of all survey points in grid and surface coordinates.
- All ROW mapping deliverables in dgn format and documents in .DOC and .pdf format.
- All title report search documents in doc and pdf format.
- A survey report of the procedures and equipment used for mapping the primary control and ROW mapping of the project.

WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TASKS																				
Project Preparation																				
Establish Project Control & LiDAR Control																				
ROW Mapping (Existing ROW)																				
Mobil LiDAR mapping																				
Process LiDAR																				
Supplemental Topo																				
Survey Control Sheets																				
QA/QC																				

Brown & Gay Engineers, Inc.

Loop 375 Managed Lanes- Supplemental Agreement No. 2 for Design Survey

Company	Fee
Brown & Gay Engineers, Inc.	\$331,771.43
Blanton & Associates, Inc.	\$0.00
Raba Kistner, Inc.	\$0.00
SLI Engineers, Inc.	\$63,410.60
Villaverde, Inc.	\$0.00
Total	\$395,182.03

Brown & Gay Engineers, Inc.
 Loop 375 Managed Lanes- Supplemental Agreement No. 2 for Design Survey

Task	Brown & Gay	Blanton	Raba Kistner	SLI	Villaverde
A. Project Management and Administration	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
B. Survey	\$218,258.83	\$0.00	\$0.00	\$62,900.60	\$0.00
C. Schematic Design	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
D. Environmental Studies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
E. Public Involvement	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sub Totals	\$218,258.83	\$0.00	\$0.00	\$62,900.60	\$0.00
Direct Expenses	\$113,512.60	\$0.00	\$0.00	\$510.00	\$0.00
Totals	\$331,771.43	\$0.00	\$0.00	\$63,410.60	\$0.00
Grand Total				\$395,182.03	

Participation Percentage	83.95%	0.00%	0.00%	16.05%	0.00%
			DBE Percentage for Supplemental Agreement #2		16.05%

BGE, Inc. Survey Control
Loop 375

Task Description	Survey Project Manager	RPLS	Survey Tech.	Survey Tech. GPS	2-Person Survey Crew	3-Person Survey Crew	4-Person Survey Crew	Flagger	ADMIN / CLERICAL	TOTAL LABOR HOURS	TOTAL LABOR COST
A. Project Management and Administration										232	258
1. Project Management/Work Plan										80	80
1.1 Develop a Project Management/Work Plan										0	0
1.1.1 Organization and Responsibilities	16									16	16
1.1.2 Coordination and Communication Procedures	16									16	16
1.1.3 Deliverables	16									16	16
1.1.4 Graphic Production Standards										0	0
1.1.5 Quality Control (QC) Procedures/plan	16									16	16
1.1.6 Engineer/CRRMA Collaboration	16									16	16
2. Progress Reporting										72	88
2.1 Prepare and Submit Monthly Progress Reports for CRRMA										0	0
2.1.1 Activities Completed	8									8	8
2.1.2 Initiated and Ongoing Activities	8									8	8
2.1.3 Planned Activities	8									8	8
2.1.4 Problems Encountered/Problem Remedies	8									8	8
2.1.5 Overall Status including Tabulation of Percentage Complete by Task	8									8	8
2.1.6 Updated Project Schedule	8									8	8
2.2 Prepare and Submit Invoices										0	0
2.2.1 Financial and DBE Participation										0	0
2.2.2 Hours Worked by Individual										0	0
2.2.3 Hourly Rate										0	0
2.2.4 Monthly Invoice Amount as Compared to Baseline Monthly Estimate	8							16		24	40
2.2.5 Monthly Cumulative Invoice Amount as Compared to Baseline Monthly Cumulative Estimate										0	0
2.2.6 Reasons for Deviations from Baseline										0	0
3. Coordination/Administration										8	8
3.1 Maintain a Communication Tracking System (format to be approved by CRRMA)										0	0
3.2 Coordinate with CRRMA GEC Staff	8									8	8
3.3 Compile and Maintain a Comprehensive Administrative Record										0	0
4. Project Control/Scheduling										24	24
4.1 Develop and Maintain a Master Schedule										0	0
4.1.1 Task/Subtasks (Individual task/subtask durations not to exceed 30 days)	4									4	4
4.1.2 Critical Dates	4									4	4
4.1.3 Milestones	4									4	4
4.1.4 Deliverables	4									4	4
4.1.5 Review Requirements	4									4	4
4.2 Update and Schedule on a Monthly Basis	2									2	2
4.3 Include all CRRMA GEC, TxDOT and other 3rd Party Reviews in the Schedule	2									2	2
5. Subconsultant Management										32	40
5.1 Develop and Implement Plan to Manage Subconsultants (Part of Project Management Plan)										0	0
5.2 Prepare Subcontracts for Subconsultants	8								8	16	24
5.3 Monitor Subconsultant Activities (staff and schedule)	8									8	8
5.4 Review and Recommend Approval of Subconsultant Progress Reports and Invoices	8									8	8
6. Coordination Meetings										16	16
6.1 Coordination Meetings	16									16	16
Deliverables										0	0
1. Project Management Plan										0	0
2. Progress Reports and Invoices	8									8	8
3. Summaries of all meetings	8									8	8
4. Administrative Record										0	0
HOURS SUB-TOTALS	224	0	0	0	0	0	0	0	24	248	272
CONTRACT RATE PER HOUR	\$150.00	\$180.00	\$92.00	\$92.00	\$115.00	\$145.00	\$165.00	\$54.00	\$54.00		
TOTAL LABOR COSTS	\$33,600.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,296.00	\$34,896.00	\$36,192.00
% DISTRIBUTION OF STAFF HOURS	90.32%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.68%		
B. Survey										1135	\$ 183,362.59
1. Project Control										1093	
Recover and establish primary horizontal and vertical control	10	20	40			210			4	284	\$ 39,446.24
Establish 126 Chevrons for Mobil LIDAR	5	10	20			440			4	479	\$ 68,406.14
Control Sheets (Appx. 70)	10	106	210						4	330	\$ 40,117.08
Locate Existing ROW (Apparent ROW based upon ROW maps)		20	60			40			4	124	\$ 15,136.44
Prepare ROW Map		15	40						2	42	\$ 6,488.27
Prepare Parcel Plats (2)		10	20			10			2	42	\$ 5,198.12
										0	-
										0	-
3. Analyzing Topo, coordinating survey and merging DTM	5	20	40						10	75	\$ 8,570.30
										0	-
										0	-
										0	-
										0	-
										0	-
										0	-
HOURS SUB-TOTALS	30	201	430	0	0	700	0	0	30	1391	
CONTRACT RATE PER HOUR	\$150.00	\$179.99	\$92.01	\$92.01	\$115.01	\$145.00	\$165.00	\$54.01	\$54.01		
TOTAL LABOR COSTS	\$4,500.00	\$36,177.99	\$39,564.30	\$0.00	\$0.00	\$101,500.00	\$0.00	\$0.00	\$1,620.30	\$183,362.59	
% DISTRIBUTION OF STAFF HOURS	2.16%	14.45%	30.91%	0.00%	0.00%	50.32%	0.00%	0.00%	2.16%		
TOTAL PROJECT HOURS	254	201	430	0	0	700	0	0	54	1639	\$ 218,258.83
PROJECT TOTALS	\$38,100.00	\$36,177.99	\$39,564.30	\$0.00	\$0.00	\$101,500.00	\$0.00	\$0.00	\$2,916.30	\$218,258.59	
TOTAL PROJECT % DISTRIBUTION OF STAFF HOURS	15.50%	12.26%	26.24%	0.00%	0.00%	42.71%	0.00%	0.00%	3.29%		

BGE, Inc.
Loop 375

Other Direct Expenses	UNITS		RATE		
Lodging/Hotel (Taxes/fees not included)	213	night	85.00		\$18,105.00
Meals (overnight stay required)	213	day	36.00		\$7,668.00
Rental Car (Tax/fees not included)	2	day	65.00		\$130.00
Mileage	5960	mile	0.510		\$3,039.60
SUV or ATV Rental		day	100.00		\$0.00
Air Travel	1	each	400.00		\$400.00
Parking	0	day	10.00		\$0.00
Taxi/Cab fare	0	each	30.00		\$0.00
Standard Postage	0	letter	0.45		\$0.00
Overnight express-letter size	0	each	20.00		\$0.00
Overnight express-oversized box	0	each	30.00		\$0.00
Courier Services	0	each	30.00		\$0.00
8½"X11" B/W Paper Copies		each	0.10		\$0.00
11"X17" B/W Paper Copies	0	each	0.20		\$0.00
8½"X11" Color Paper Copies	0	each	1.00		\$0.00
11"X17" Color Paper Copies	0	each	1.20		\$0.00
CADD Plotting	0	linear foot	1.50		\$0.00
Digital Ortho Plotting	0	linear foot	2.00		\$0.00
Law Enforcement/Uniform Officer	20	hour/officer	40.00		\$800.00
Notebooks	0	each	2.00		\$0.00
Hazardous Materials Database Search	0	per search	500.00		\$0.00
Backhoe Rental	0	day	800.00		\$0.00
Boards for Public Meeting	0	each	100.00		\$0.00
LiDAR Chevron Materials	126	each	25.00		\$3,150.00
Interpreter	0	hour	40.00		\$0.00
Court Reporter	0	hour	40.00		\$0.00
Newspaper Advertisement	0	each	2,000.00		\$0.00
Railroad Insurance Expense	0	each	7,000.00		\$0.00
LIDAR Collection & Processing	1	each	54,920.00		\$54,920.00
Abstractor	1	each	2,500.00		\$2,500.00
Traffic Control	6	day	3,800.00		\$22,800.00
Other Direct Expense Total					\$113,512.60

CONTRACT NUMBER:
SLI Engineering, Inc. - Survey

LUMP SUM, UNIT COST AND/OR SPECIFIED RATE PAYMENT BASIS

Lump Sum, Unit Cost and/or Specified Rate Labor/Staff Classification		Negotiated Hourly Base Rate	Contract Rate
Survey Project Manager		\$ 48.83	\$ 150.00
Registered Professional Land Surveyor		\$ 58.59	\$ 179.99
Survey Technician		\$ 29.95	\$ 92.01
Survey Technician - GPS		\$ 29.95	\$ 92.01
2-man Survey Crew (Portal to Portal)		\$ 37.44	\$ 115.01
3-man Survey Crew (Portal to Portal)		\$ 47.20	\$ 145.00
4-man Survey Crew (Portal to Portal)		\$ 53.71	\$ 165.00
Flagger		\$ 17.58	\$ 54.01
Administrative/Clerical		\$ 17.58	\$ 54.01
Negotiated Overhead Rate:	179.27%		
Negotiated Profit Rate:	10.00%		
<p>Contract Rates include labor, overhead, and profit. All rates are negotiated rates and are not subject to change or adjustment. Physical percent complete to be billed. Documentation of hours work not required. Any staffing or other direct expense classification included in the contract, but not in a work authorization, is not eligible for payment under that work authorization.</p>			

SLI Survey
Loop 375

Task Description	Survey Project Manager	RPLS	Survey Tech.	Survey Tech. GPS	2-Person Survey Crew	3-Person Survey Crew	4-Person Survey Crew	Flagger	ADMIN / CLERICAL	TOTAL LABOR HOURS	TOTAL LABOR COST
B. Survey										0	\$ 62,900.60
1. Project Control										0	\$ -
Recover and establish primary horizontal and vertical control										0	\$ -
Control Sheets (Appx. 70)										0	\$ -
Locate Existing ROW (Apparent ROW based upon ROW maps)										0	\$ -
2. Supplemental Topo along feeder roads (No overnight stay)	20	40	100			300				0	\$ 62,900.60
										0	\$ -
										0	\$ -
										0	\$ -
3. Analyzing Topo, coordinating survey and merging DTM										0	\$ -
										0	\$ -
										0	\$ -
										0	\$ -
										0	\$ -
										0	\$ -
										0	\$ -
										0	\$ -
										0	\$ -
										0	\$ -
HOURS SUB-TOTALS	20	40	100	0	0	300	0	0	0	460	
CONTRACT RATE PER HOUR	\$150.00	\$179.99	\$92.01	\$92.01	\$115.01	\$145.00	\$165.00	\$54.01	\$54.01		
TOTAL LABOR COSTS	\$3,000.00	\$7,199.60	\$9,201.00	\$0.00	\$0.00	\$43,500.00	\$0.00	\$0.00	\$0.00	\$62,900.60	
% DISTRIBUTION OF STAFF HOURS	4.35%	8.70%	21.74%	0.00%	0.00%	65.22%	0.00%	0.00%	0.00%		
TOTAL PROJECT HOURS	20	40	100	0	0	300	0	0	0	460	\$ 62,900.60
PROJECT TOTALS	\$3,000.00	\$7,199.60	\$9,201.00	\$0.00	\$0.00	\$43,500.00	\$0.00	\$0.00	\$0.00	\$62,900.60	
TOTAL PROJECT % DISTRIBUTION OF STAFF HOURS	4.35%	8.70%	21.74%	0.00%	0.00%	65.22%	0.00%	0.00%	0.00%		

SLI
Loop 375

Other Direct Expenses	UNITS		RATE		
Lodging/Hotel (Taxes/fees not included)	0	night	85.00		\$0.00
Meals (overnight stay required)	0	day	36.00		\$0.00
Rental Car (Tax/fees not included)	0	day	65.00		\$0.00
Mileage	1000	mile	0.510		\$510.00
SUV or ATV Rental		day	100.00		\$0.00
Air Travel	0	each	400.00		\$0.00
Parking	0	day	10.00		\$0.00
Taxi/Cab fare	0	each	30.00		\$0.00
Standard Postage	0	letter	0.45		\$0.00
Overnight express-letter size	0	each	20.00		\$0.00
Overnight express-oversized box	0	each	30.00		\$0.00
Courier Services	0	each	30.00		\$0.00
8½"X11" B/W Paper Copies		each	0.10		\$0.00
11"X17" B/W Paper Copies	0	each	0.20		\$0.00
8½"X11" Color Paper Copies	0	each	1.00		\$0.00
11"X17" Color Paper Copies	0	each	1.20		\$0.00
CADD Plotting	0	linear foot	1.50		\$0.00
Digital Ortho Plotting	0	linear foot	2.00		\$0.00
Law Enforcement/Uniform Officer	0	hour/officer	40.00		\$0.00
Notebooks	0	each	2.00		\$0.00
Hazardous Materials Database Search	0	per search	500.00		\$0.00
Backhoe Rental	0	day	800.00		\$0.00
Boards for Public Meeting	0	each	100.00		\$0.00
Env. Field Supplies (lathes, stakes, flagging, spray paint, etc.)	0	day	20.00		\$0.00
Interpreter	0	hour	40.00		\$0.00
Court Reporter	0	hour	40.00		\$0.00
Newspaper Advertisement	0	each	2,000.00		\$0.00
Railroad Insurance Expense	0	each	7,000.00		\$0.00
Other Direct Expense Total					\$510.00

CONTRACT NUMBER:
SLI Engineering, Inc. - Survey

LUMP SUM, UNIT COST AND/OR SPECIFIED RATE PAYMENT BASIS

Lump Sum, Unit Cost and/or Specified Rate Labor/Staff Classification		Negotiated Hourly Base Rate	Contract Rate
Survey Project Manager		\$ 48.83	\$ 150.00
Registered Professional Land Surveyor		\$ 58.59	\$ 179.99
Survey Technician		\$ 29.95	\$ 92.01
Survey Technician - GPS		\$ 29.95	\$ 92.01
2-man Survey Crew (Portal to Portal)		\$ 37.44	\$ 115.01
3-man Survey Crew (Portal to Portal)		\$ 47.20	\$ 145.00
4-man Survey Crew (Portal to Portal)		\$ 53.71	\$ 165.00
Flagger		\$ 17.58	\$ 54.01
Administrative/Clerical		\$ 17.58	\$ 54.01
Negotiated Overhead Rate:	179.27%		
Negotiated Profit Rate:	10.00%		
<p>Contract Rates include labor, overhead, and profit. All rates are negotiated rates and are not subject to change or adjustment. Physical percent complete to be billed. Documentation of hours work not required. Any staffing or other direct expense classification included in the contract, but not in a work authorization, is not eligible for payment under that work authorization.</p>			