



	Approved	Denied
Date Action Taken:	8/9/10	
Other:		
Verified by:	<i>[Signature]</i>	

**WASILLA CITY COUNCIL ACTION MEMORANDUM**

**AM No. 10-24**

**TITLE: CONTRACT AMENDMENT TO HATTENBURG, DILLEY AND LINNELL IN THE AMOUNT OF \$537,913 FOR SOUTH MACK DRIVE ENGINEERING SERVICES THROUGH SEVENTY FIVE PERCENT DESIGN.**

**Agenda of:** August 9, 2010  
**Originator:** Public Works Director

**Date:** July 27, 2010

Route to:	Department	Signature/Date
X	Director of Public Works	<i>[Signature]</i> 7/29/10
X	Finance Director	<i>[Signature]</i> 7-29-10
X	Deputy Administrator	<i>[Signature]</i>
X	City Clerk	<i>[Signature]</i>

**REVIEWED BY MAYOR VERNE E. RUPRIGHT:** *[Signature]*

**FISCAL IMPACT:**  yes \$537,913 or  no Funds Available  yes  no

**Account name/number:** S. Mack Dr/160-4320-432.45-38

**Attachments:** Scope of Services

**SUMMARY STATEMENT:** The original contract was awarded by City Council on March 10, 2009 by AM 09-01 in the amount of \$427,108 in accordance with RFP 0704-0-2009/WM. The initial phase of the contact provides preliminary engineering services for the extension of S. Mack Drive to Knik-Goose Bay Road that included the evaluation of multiple routes. State grants are funding this project in the amount of \$4 million for the design and right-of-way acquisition. \$15 million will be needed for construction.

Amendment No. 1 of the contract was issued by Purchase Order No. 18510 on April 12, 2010 in the amount of \$39,994 for additional geotechnical work in accordance with Mayor's Authority under WMC 5.08.090.B.2. Amendment No. 2 was authorized by City Council on April 27, 2010 for a grade separated crossing of the Alaska Railroad near the Parks Highway in the amount of \$198,705.

Clapp Road has now been determined to be the best route for connection to Knik-Goose Bay Road with the realignment of Fairview Loop to create a new 4-way intersection. This amendment will take the engineering design to 75 percent for the selected route.

Total construction cost is \$15 million for S. Mack Drive Extension to Clapp Road with the re-alignment of Fairview Loop intersection. The grade separated crossing of the Alaska Railroad is estimated at another \$4 million or \$19 million total construction cost.

Engineer design ranges between 9 and 12 percent of construction cost for this type of project. Total engineering cost to date with this contract amendment is \$1,203,720. This is 6 percent of the estimated construction cost which will bring the design to 75 percent which is in line with the industry standard for engineering design services.

**STAFF RECOMMENDATION:** Authorize the Mayor to execute a contract amendment with Hattenburg, Dilley and Linnell in the amount of \$537,913 for South Mack Drive for engineering services through seventy five percent design.

July 28, 2010

File No. 09-006

Archie Giddings, Public Works Director  
City of Wasilla  
290 East Herning Avenue  
Wasilla, AK 99654-7091

Re: Amendment 3 – Design through Plans-In-Hand  
S. Mack Drive Extension Project

Dear Mr. Giddings:

Hattenburg Dilley & Linnell is pleased to present this fee proposal for additional professional services through the plans-in-hand phase of the project. Included in this amendment is surveying for right-of-way mapping, surveying for topographic mapping, geotechnical investigation for the roadway extension, geotechnical reporting and recommendations for the entire project, a utility conflict report, and design through the plans-in-hand (75% complete) submittal. Attached is a proposed amendment to the Statement of Services, which defines the right of way mapping and surveying services and adds the scope of services for the geotechnical investigation, report, and recommendations.

Our estimated fee for the additional services included in this amendment request is \$537,913.00 as shown on the attached fee proposal worksheet.

We look forward to continuing our work with the City on this project. If you have any questions, you can contact me at 746-5230.

Sincerely,

HATTENBURG DILLEY & LINNELL, LLC



David Lundin, P.E.  
Project Manager

Attach: Amendment 3 to the Statement of Services (6 pages)  
Amendment 3 Fee Proposal Worksheet (8 pages)

H:\jobs\09-006 Wasilla Mack Drive Extension (COW)\00-Contract\Amend 3\09-006 Amend 3 proposal ltr 7-28-10.doc

CIVIL  
ENGINEERING  
  
GEOTECHNICAL  
ENGINEERING  
  
TRANSPORTATION  
ENGINEERING  
  
ENVIRONMENTAL  
SERVICES  
  
PLANNING  
  
SURVEYING  
  
CONSTRUCTION  
ADMINISTRATION  
  
MATERIAL  
TESTING

**AMENDMENT 3**  
**to the**  
**STATEMENT OF SERVICES**  
South Mack Drive Extension

**ARTICLE 8 - TASK 2**  
**SURVEYING SERVICES**

**8.12 Right-of-Way Survey.** Delete the paragraph and substitute the following:

**8.12.1 Right-of-Way Boundary Survey.** The Contractor shall perform the following services to Third Order, Class II standards, as specified by the ASPLS Standards of Practice, with an allowable error of closure of 1:5,000 or better.

**8.12.1.1** Prior to commencement of the survey, the Contractor will review any title documents and mapping in the Contracting Agency's possession which the Contractor considers relevant to the project. The Contractor will be responsible for researching additional relevant documentation from other sources. These documents may include but are not limited to the following:

Bureau of Land Management (BLM) and Department of Natural Resources (DNR) land status plats, BLM township survey plats, Mineral and U.S. Survey plats and field notes, any records of survey, subdivisions, and relevant engineering control surveys, United States Coast and Geodetic Survey (USC&GS)/ National Geodetic Survey (NGS) control diagrams-descriptions, DOT&PF right-of-way records and other easement or boundary documents of record, DOT&PF engineering as-builts, DNR surveys, and aerial photos.

One legible blueline or xerox copy of all of the above referenced reports, plats, notes and other source materials shall be submitted to the Contracting Agency weekly as they are gathered.

**8.12.1.2** Tie all Public Land Survey System monuments along both sides of the roadway right-of-way corridor. Additional PLSS monuments shall be recovered to allow section breakdown for property boundary determination as directed by the Contracting Agency. Tie adequate centerline monumentation on side streets to determine side street alignment for the affected portions of side streets. A minimum of one side street centerline monument will be tied. Include these corners on the SCD.

**8.12.1.3** Tie all subdivision and property corners located along the roadway right-of-way and those corners necessary to control impacted areas. This includes corners both inside the right-of-way and those within 50 feet of the right-of-way. The Contractor shall locate sufficient property corners to determine the boundaries of the parent parcels of lands required by the project. Include these corners on the SCD.

**8.12.2 Survey Point Plot.** The Contractor shall provide a Survey Point Plot showing all recovered monuments (including those recovered in the Control Surveys) with point numbers for the purpose of point number referencing. The scale shall be adequate to clearly show the relationship of the corners, and shall be tailored to the density of the points. A Printout of Adjusted Coordinates with descriptions of the corners shall accompany the plot along with the ASCII coordinate file with descriptors and AutoCAD drawing file. An ASCII file and hard copy printout listing all descriptors used and an expanded description of their meanings shall accompany all coordinate file submittals. The survey point plot shall be sealed, signed, and certified by the PLS responsible for the services, currently registered in the state of Alaska. The certification shall state the survey standard that was followed in performing the services.

**8.12.3 Additional Topography for Right-of-Way Acquisition.** The Contractor shall collect all topographic information that may affect the cost and/or schedule of defined right-of-way acquisitions for the project, such as culverts, land service or access roads, improvements, apparent contaminated soils or waters, fences and any structures. Septic system, well and building locations are examples of pertinent data, usually outside of the acquisition area, that may affect the value of the right-of-way to be acquired. Structures located on impacted parcels and within the specified distance (200 feet) of the right-of-way centerline shall have dimensions and ties to the centerline shown. For properties that have (or had) buried fuel tanks, collect data to the specified distance (200 feet) from centerline. The data collected for this survey shall be incorporated into the topographic AutoCAD drawing files, project coordinate file, and where applicable, the TIN.

**8.12.4 Deliverable Items.** The Contractor shall submit the following items related to the Right-of-Way Survey:

<u>Type of Document</u>	<u>Para</u>	<u>Copies</u>	<u>Originals</u>
Field Books	8.4	0	All
Project Coordinate File	8.6	1	0
Project Descriptor File	8.6	1	0
Survey Point Plot	8.12.2	1	1
Research Documents	8.12.1.1	1	0
GPS Vector Files	8.9.1.5	1	0

Add the following:

**8.13.1 Right-of-Way Mapping.** The Contractor shall perform the services necessary to prepare Record of Survey Maps; establish the Existing Right of Way Centerline; and prepare Base Maps, Right of Way Maps, and Parcel Plats, in accordance with the DOT&PF Right of Way Manual and specific instructions from the Contract Manager. Services by the Contractor to modify the PS&E assemblies, as required to accommodate the right of way negotiations, shall be performed as part of the PS & E task.

**8.13.2 Base Maps** shall be ink on vellum or mylar and shall show the entire project limits and shall include a DOT&PF standard Right-of-Way title sheet, symbol sheet, tract maps, and plan sheets, using Contracting Agency supplied AutoCAD format at the scale and layout specified by the Contracting Agency Project Manager. The plan sheets shall show the following information:

- a. Existing property boundaries, including all Public Land System survey lines.
- b. All subdivisions, including name, plat number, and lot and block designations or aliquot part description.
- c. Existing roadway centerline.
- d. Existing rights-of-way and easements.
- e. Improvements.
- f. Other features required by the Right-of-Way Manual and/or the Contracting Agency.

**8.13.2.1** When preparing Base Maps, the Contractor shall (a) resolve problems with existing Right-of-Way and boundary locations and (b) analyze preliminary engineering information to determine where additional survey ties are required. The Contractor shall provide a written summary of (any significant) boundary problems encountered in making specific boundary determinations, including rationale for the solution.

**8.13.2.2 Index Sheets.** The Contractor shall provide Base Map Index Sheets that depict the existing centerline and right-of-way lines, adjacent property lines including rectangular survey lines, and point numbers of all found and calculated points associated with said lines. The drawings shall be on vellum at a scale equal to the scale of the Base Maps.

**9.13.2.3** The Contractor shall not begin base map preparation without prior specific written authorization from the Contracting Agency.

**8.13.3 Right-of-Way Maps** shall be ink (or other Contracting Agency approved permanent markings) on mylar and shall include a title sheet, standard right-of-way symbols sheet, tract maps, and plan sheets for the entire project. The plan sheets shall show all the information required for the Base Maps plus the following information:

- a. Proposed Right-of-Way.
- b. Easements.
- c. Parcels.
- d. Parcel Information Block.
- e. Proposed slope limits needed for construction or future maintenance.
- f. Other features required by the Right-of-Way Manual and /or the Contracting Agency.

**8.13.3.1** During preparation of Right-of-Way Maps, the Contractor shall:

- a. Resolve problems with existing right-of-way and boundary locations.
- b. Analyze preliminary engineering information to determine where additional survey ties are required.
- c. Examine Title Reports and adjust preliminary boundaries as required.
- d. Compute the Take and Remain areas of each parcel based on right-of-way requirements supplied by the Contracting Agency. Provide in a notebook format, inverse information for properties affected by acquisition. Include inverses for the larger

parcel, take including easement, net take, and remain areas. Provide a plot of the immediate area showing property lines and associated point numbers.

**8.13.4 Parcel Plats.** The Contractor shall prepare plats for all parcels to be acquired for this project. Parcel plats shall contain the information required by the DOT&PF Right-of-Way Manual. Parcel Plats shall be prepared during the Right of Way Plan stage of development. The Contractor shall make revisions to Parcel Plats requested by the Contracting Agency. Plats shall be at a scale suitable for legibility and clarity of detail using Contracting Agency supplied AutoCAD format and shall contain information as required by the DOT&PF Right-of-Way Manual and the parcel plat checklist. Final plats are to be filed and approved by the Borough after acquisition of all parcels.

**8.13.5 Copies.** The Contractor shall provide a hard copy of all draft and final maps and parcel plats (with the script files used to generate the hard copy documents) and a copy on CDROM with project coordinate file with descriptors and AutoCad drawing file.

**8.13.6 Registration.** The Contractor's preparation of Base Maps, Right-of-Way Maps, and Parcel Plats shall be conducted by or under the direct supervision of a Professional Land Surveyor holding current registration in the State of Alaska. All final documents shall be sealed, signed, and certified by the Professional Land Surveyor responsible for the accuracy of the services.

**8.13.7 Presentation.** The Contractor shall make an oral presentation with visual displays of Right-of-Way requirements to the Contracting Agency's personnel when requested near the beginning of the Contracting Agency's Right-of-Way acquisition activities. The presentation shall provide a project overview and show the proposed project features and impact on adjoining properties. Features shall include side streets, roadways, sidewalks, medians, curb and gutter, slope limits, impacts to driveways, striping, illumination, and signalization. Property information shall include lot boundaries, buildings, driveways, and any other features that will help the Contracting Agency in negotiations with affected property owners, and others to assess project impacts. Visual displays shall be at a scale to clearly show all features without being cluttered. Different colors shall be used to differentiate between project features and adjoining property features.

**8.13.8 Reviews and Schedule.** The Contractor shall submit drafts of the Base Maps, Right of Way Maps and Parcel Plats, for the Contracting Agency's review, in accordance with the following: Base Maps shall be submitted with the Progress Review Assembly. Right of Way Maps including proposed takes for project construction shall be submitted with the Plans-In-Hand Review Assembly. Right of Way Maps including proposed takes for the project and all required utility relocations shall be submitted within four months of the Plans-In-Hand Review submittal. Current Right of Way Maps shall be submitted with the Pre PS&E Assembly. The Summary of Boundary Problems shall be submitted with the drafts of Base Maps. The Contracting Agency shall have a minimum of four weeks for the return of written comments. The Contractor shall address comments to the satisfaction of the Contracting Agency prior to submitting final documents. Final Right of Way Maps and Parcel Plats shall be submitted at the same time, after all parcels have been acquired.

**8.13.9 Deliverable Items.**

<u>Type of Document</u>	<u>Para</u>	<u>Copies</u>	<u>Originals</u>
Base Maps	8.13.2		
Draft	8.13.2	2	0
- Disc	8.13.2	1	0
Final	8.13.2	4	1
- Disc	8.13.2	1	0
Summary of Boundary Problems	8.13.2.1	1	0
Index Sheets	8.13.2.2	1	1
Right-of-Way Maps	8.13.3		
Draft	8.13.3	2	0
- Disc	8.13.3	1	0
Final	8.13.3	4	1
- Disc	8.13.3	1	0
Parcel Plats	8.13.4		
Draft	8.13.4	2	0
- Disc	8.13.4	1	0
Final	8.13.4	4	1
- Disc	8.13.4	1	0

**ARTICLE 13 – TASK 7**  
**GEOTECHNICAL INVESTIGATIONS**

**13.2 Geotechnical Investigation for Railroad and Lucille Creek.** Renumber this paragraph (added by Amendment 1) as 13.2.1.

Add the following:

**13.2.2 Geotechnical Investigation for Roadway.** The contractor will perform a geotechnical investigation for the roadway extension. This investigation will involve literature research, site visits, and subsurface test holes. It is anticipated that nineteen (19) test holes will be advanced to depths ranging from 15 to 35 feet deep. One-inch diameter PVC pipe will be installed in select borings in order to monitor groundwater elevations.

**13.3 Geotechnical Reporting.** Delete this paragraph (added by Amendment 1) and substitute the following paragraphs.

**13.3.1 Geotechnical Recommendations.** Following field investigations, the Contractor shall provide recommendations to evaluate engineering criteria. After review and/or as design proceeds, modifications to the Geotechnical Recommendations may be required. The Contractor shall implement required changes in a timely manner. The Geotechnical



Recommendations shall not be included, appended or otherwise identified in the Geotechnical Report. Geotechnical Recommendations become final concurrently with final design.

**13.3.2 Geotechnical Report.** The Contractor shall provide a Geotechnical Report that presents data collected during the geotechnical investigation. Information shall include at least the following: project location map, description of the project scope, presentation of the field investigations, station to station descriptions of the earth materials encountered during the field investigation, laboratory test results, and plan and profile sheets with test holes or pits shown in plan and profile views. The report shall be submitted to the Contracting Agency in both draft and final forms. The draft shall be made available concurrently with the distribution of the PIH Review. The final report shall be completed concurrently with the PS&E.



**COST ESTIMATE PER TASK**

FIRM: Hattenburg Dilley & Linnell				PROJECT TITLE: South Mack Extension - Amendment 3 Design through PIH										
TASK NO: 2		TASK DESCRIPTION: Surveying Services							DATE: 7/28/2010					
GROUP:		METHOD OF PAYMENT: FP <input type="checkbox"/> FPPE <input type="checkbox"/> T&E <input checked="" type="checkbox"/> CPFF <input type="checkbox"/>					PREPARED BY: Brad Rinckey							
SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION												
		Proj Mgr/ Civil Eng	Survey Manager	Survey Tech.XI	Survey Tech. IX	3-Man Crew	2-Man Crew	2-Man Crew OT	Admin. Asst.					
B8.9	Surveying for Preliminary Design													
	Research													
	Horizontal Control													
	Vertical Control													
	Monument Ties													
	Photogrammetry													
	Preliminary ROW Research													
B8.10	Topographic Design Survey	8							8					
	Topographic Field Survey		60					280	72					
	Topographic Drawing		24	100	24									
	TIN Certificate		8	24										
B8.12.3	Topography for ROW			24	8			40	10					
	Deliverables		8	16					4					
<b>TOTAL LABOR HOURS</b>		8	100	164	32	0	320	82	12	0	0	0		
<b>* LABOR RATES (\$/HR)</b>		\$145.00	\$130.00	\$85.00	\$75.00	\$230.00	\$185.00	\$215.00	\$65.00	\$0.00	\$0.00	\$0.00		
<b>LABOR COSTS (\$)</b>		\$1,160.00	\$13,000.00	\$13,940.00	\$2,400.00	\$0.00	\$59,200.00	\$17,630.00	\$780.00	\$0.00	\$0.00	\$0.00		
EXPENSES					<b>COMMENTS: Survey limits are S. of W. Sweet Birch Av. to the intersection of Fairview and N. from W. Bailey to the BOP. A profile survey will be performed in the remaining areas. DOT will supply survey data for Fairview intersection. Survey will include 200' on both sides of Lucille creek crossing. Assumes that survey control exists for the entire alignment.</b>									
SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE										
	Expenses	1	\$500.00	\$500.00										
				\$0.00										
				\$0.00										
				\$0.00										
				\$0.00										
Markup at 10%				\$50.00	<b>FIRM'S TOTAL COST OF LABOR (or Fixed Price): \$108,110</b> <b>IF CPFF, TOTAL INDIRECT COST @ 0.00% \$0</b>									
<b>TOTAL EXPENSES:</b>				<b>\$550</b>	<b>FIRM'S TOTAL EXPENSES \$550</b>									
<b>SUB-CONTRACTORS: Firm Initials and Price Per Task</b>					<b>FIRM'S TOTAL COST (no Subcontracts or Fee) \$108,660</b>									
FIRM:	MLA				Subtotal	10% Markup								
<b>AMOUNT:</b>	\$110,747				\$110,747	\$11,075	<b>TOTAL SUBCONTRACTOR PRICES:</b>					<b>\$121,822</b>		

\* Labor Rates shall be direct labor (base pay) only if Method of Payment is CPFF; otherwise, Labor Rates shall be total rates (i.e. base pay + benefits + overhead + profit.)

**COST ESTIMATE PER TASK**

FIRM: Hattenburg Dilley & Linnell				PROJECT TITLE: South Mack Extension - Amendment 3 Design through PIH											
TASK NO: 6	TASK DESCRIPTION: Utilities							DATE: 7/28/2010							
GROUP:	METHOD OF PAYMENT: FP <input type="checkbox"/> FPPE <input type="checkbox"/> T&E <input checked="" type="checkbox"/> CPFF <input type="checkbox"/>					PREPARED BY: David Lundin									
SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION													
		Principal	Proj Mgr/ Civil Eng	Senior Staff Eng	Staff Engineer	Drafter	Admin. Asst.								
B12	General Mgmt & Coordination	8	4												
B12.2	Draft UCR - 35% design		2	16	60	60	8								
B12.2	Final UCR & Cost Est - PIH-PS&E		2	8	20	20	4								
B12.3	Utility Relocation Agreements	added by amendment													
B12.3.1	Coordination with Utilities		2	16	16		2								
<b>TOTAL LABOR HOURS</b>		8	10	40	96	80	14	0	0	0	0	0	0	0	0
<b>* LABOR RATES (\$/HR)</b>		\$165.00	\$150.00	\$110.00	\$95.00	\$95.00	\$70.00	\$0.00	\$0.00						
<b>LABOR COSTS (\$)</b>		\$1,320.00	\$1,500.00	\$4,400.00	\$9,120.00	\$7,600.00	\$980.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EXPENSES					<b>COMMENTS: Utility Conflict Report for alignment B1 including Fairview Loop. Coordination with Utilities for red-line request and preliminary coordination only. Additional coordination and Utility Relocation Agreements to be added by amendment.</b>										
SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE											
	Asbuilts, locates, misc.	0	\$1,000.00	\$0.00											
	Reproduction	1	\$500.00	\$500.00											
				\$0.00											
				\$0.00											
Markup at 10%					\$50.00										
<b>TOTAL EXPENSES:</b>					<b>\$550</b>										
<b>SUB-CONTRACTORS: Firm Initials and Price Per Task</b>															
FIRM:					Subtotal	10% Markup									
AMOUNT:					\$0	\$0	<b>TOTAL SUBCONTRACTOR PRICES:</b>								
							<b>\$0</b>								

\* Labor Rates shall be direct labor (base pay) only if Method of Payment is CPFF; otherwise, Labor Rates shall be total rates (i.e. base pay + benefits + overhead + profit.)

**COST ESTIMATE PER TASK**

FIRM: Hattenburg Dilley & Linnell				PROJECT TITLE: South Mack Extension - Amendment 3 Design through PIH								
TASK NO: 7		TASK DESCRIPTION: Geotechnical Investigation							DATE: 7/28/2010			
GROUP:		METHOD OF PAYMENT: FP <input type="checkbox"/> FPPE <input type="checkbox"/> T&E <input checked="" type="checkbox"/> CPFF <input type="checkbox"/>				PREPARED BY: David Lundin						
SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION										
		Principal	Proj Mgr/ Civil Eng	Principal Geotech	Geotech Engineer	Geologist	Staff Engineer	Drafter	Admin. Asst.			
B13.2	Coordination and management	4	8	8					8			
B13.2	Site visits				12	12						
B13.2	Geotech fieldwork				4	68						
B13.2	Laboratory testing			2	8	44						
B13.3	Engineering Analysis and Draft Report		4	12	48	20		12	4			
B13.3	Final Report		4	8	12			4	4			
<b>TOTAL LABOR HOURS</b>		4	16	30	84	144	0	16	16	0	0	0
<b>* LABOR RATES (\$/HR)</b>		\$165.00	\$145.00	\$165.00	\$105.00	\$85.00	\$80.00	\$95.00	\$70.00			
<b>LABOR COSTS (\$)</b>		\$660.00	\$2,320.00	\$4,950.00	\$8,820.00	\$12,240.00	\$0.00	\$1,520.00	\$1,120.00	\$0.00	\$0.00	\$0.00
EXPENSES						<b>COMMENTS: Final portion of geotechnical field investigation for proposed alignment. 19 borings will be advanced to depths of 15 to 35 feet between STA 36+00 and STA 127+00. It will include a final geotechnical report and recommendations. Discovery Drilling has a tree removal subcontractor included in proposal.</b>						
SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE								
13.1	Field Supplies	1	\$500.00	\$500.00								
13.1	Truck Rental	6	\$75.00	\$450.00								
				\$0.00								
				\$0.00								
Markup at 10%					\$95.00							
<b>TOTAL EXPENSES:</b>					<b>\$1,045</b>							
SUB-CONTRACTORS: Firm Initials and Price Per Task						FIRM'S TOTAL COST OF LABOR (or Fixed Price):						
FIRM:	Discovery Drilling				Subtotal	10% Markup						\$30,510
AMOUNT:	\$23,750				\$23,750	\$2,375	FIRM'S TOTAL INDIRECT COST @ 0.00%					\$0
						FIRM'S TOTAL EXPENSES						\$1,045
						FIRM'S TOTAL COST (no Subcontracts or Fee)						\$31,555
						TOTAL SUBCONTRACTOR PRICES:						\$26,125

\* Labor Rates shall be direct labor (base pay) only if Method of Payment is CPFF; otherwise, Labor Rates shall be total rates (i.e. base pay + benefits + overhead + profit.)

**COST ESTIMATE PER TASK**

FIRM: Hattenburg Dilley & Linnell			PROJECT TITLE: South Mack Extension - Amendment 3 Design through PIH									
TASK NO:	8	TASK DESCRIPTION: Plans, Specifications, and Estimate								DATE:	7/28/2010	
GROUP:	METHOD OF PAYMENT: FP <input type="checkbox"/> FPPE <input type="checkbox"/> T&E <input checked="" type="checkbox"/> CPFF <input type="checkbox"/>						PREPARED BY: David Lundin					
SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION										
		Principal	Proj Mgr/ Civil Eng	Senior Staff Eng	Staff Engineer	Drafter	Admin. Asst.	Envmtl Manager				Sheets
B14.1	General Mgmt & Coordination	16	80				24					
B14.1	Title/Legend/Layout		3	3		6						3
B14.1	Survey Control		2	4		2						2
B14.1	Typical Sections		3	36		24						3
B14.1	Estimate of Quantities		2	4		8						1
B14.1	Summary Sheets		3	8	12	24						3
B14.1	Detail Sheets		12	24	24	48						6
B14.1	Erosion and Sediment Control		4	32		32	8	40				8
B14.1	Plan and Profile - Mack, Fairview, Old Fairview		120	240	90	240						15
B14.1	Approach Profiles		4	8	16	32						2
B14.1	Signing & Striping		4	16	32	64						8
B14.1	Retaining Walls		8	48		48						4
B14.1	Illumination & Signalization		12	12		8						6
B14.1	Traffic Control Plan		To be added by amendment									
B14.1	ROW Maps		15	15		15						15
B14.1	Specifications		16	16	40		24					
B14.1	Estimate & Quantities		16	24	40	40						
B14.1	Cross Sections		2	8		16						
B14.1	Progress Review (35%)		4	8	8	8						
B14.2	Plans-in-hand Review (75%)		4	8	8	8						
	Peer Review	16										
B14.3	Pre-PS&E Review		To be added by amendment									
B14.4	Final PS&E		To be added by amendment									
<b>TOTAL LABOR HOURS</b>		32	314	514	270	623	56	40	0	0	0	76
<b>* LABOR RATES (\$/HR)</b>		\$165.00	\$150.00	\$110.00	\$95.00	\$90.00	\$70.00	\$120.00	\$0.00			
<b>LABOR COSTS (\$)</b>		\$5,280	\$47,100	\$56,540	\$25,650	\$56,070	\$3,920	\$4,800	\$0	\$0	\$0	
<b>EXPENSES</b>												
SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE	<b>COMMENTS: Includes design of Alternative B1 to Plans-In-Hand (75%). Final PS&amp;E to be added by amendment.</b>							
	Reproductions, misc.			\$0.00								
				\$0.00								
				\$0.00								
				\$0.00								
				\$0.00								
				\$0.00	<b>FIRM'S TOTAL COST OF LABOR (or Fixed Price):</b>		<b>\$199,360</b>					
				\$0.00	<b>IF CPFF, TOTAL INDIRECT COST @</b>		<b>0.00%</b>		<b>\$0</b>			
					<b>TOTAL EXPENSES:</b>		<b>\$0</b>		<b>FIRM'S TOTAL EXPENSES</b>		<b>\$0</b>	
<b>SUB-CONTRACTORS: Firm Initials and Price Per Task</b>												
					<b>Subtotal</b>		<b>10% Markup</b>		<b>FIRM'S TOTAL COST (no Subcontracts or Fee)</b>		<b>\$199,360</b>	
FIRM:	EDC											
AMOUNT:	\$22,655				\$22,655	\$2,266	<b>TOTAL SUBCONTRACTOR PRICES:</b>		<b>\$24,921</b>			

\* Labor Rates shall be direct labor (base pay) only if Method of Payment is CPFF; otherwise, Labor Rates shall be total rates (i.e. base pay + benefits + overhead + profit.)

**COST ESTIMATE PER TASK**

FIRM: <b>McClintock Land Associates.</b>		PROJECT TITLE: <b>South Mack Road</b>	
TASK NO: <b>2</b>	TASK DESCRIPTION: <b>Control and Right of Way Survey &amp; Mapping</b>		DATE: <b>7/28/2010</b>
GROUP: <b>MLA</b>	METHOD OF PAYMENT: <input type="checkbox"/> FP <input type="checkbox"/> FPPE <input checked="" type="checkbox"/> T&E <input type="checkbox"/> CPFF		PREPARED BY: <b>Bill McClintock</b>

SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION										
		MLA Principal PLS	MLA Project Manager	PLS Survey Party Chief ST	PLS Survey Party Chief OT	Survey Tech ST	Survey Tech OT	PLS Land Surveyor	Staff Office Tech ST	Photogrammetrist ST	MLA Principal Planner	Clerical / Expeditor ST
BACKGROUND RESEARCH												
1	Obtain Documents		2.0	0.0	0.0	0.0	0.0	32.0				
	Provide Copies to ADOT			0.0	0.0	0.0	0.0					
2	Horizontal Control		2.0	15.0	17.5	15.0	15.0					
3	Vertical Control		2.0	18.0	21.0	18.0	18.0					
4	Monument Recoveries		2.0	30.0	35.0	30.0	30.0					
5	Data Reduction/QC		2.0	0.0	0.0	0.0	0.0	16.0				
6	ROW Research		2.0	0.0	0.0	0.0	0.0	80.0				
7	Compute ROW/Parcel Plats/Review		40.0	0.0	0.0	0.0	0.0	370.0				
<b>TOTAL LABOR HOURS</b>		0.0	54.0	69.0	73.5	63.0	63.0	498.0	0.0	0.0	0.0	0.0
<b>* LABOR RATES (\$/HR)</b>		\$0.00	\$130.00	\$130.00	\$130.00	\$84.00	\$84.00	\$116.00	\$19.00	\$30.00	\$42.00	\$14.00
<b>LABOR COSTS (\$)</b>		\$0	\$7,020	\$8,970	\$9,555	\$5,292	\$5,292	\$57,768	\$0	\$0	\$0	\$0

Crew Days	PLS Survey Party Chief ST	PLS Survey Party Chief OT	Survey Crew ST	Survey Crew OT
	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0
2.5	15.0	17.5	15.0	15.0
3.0	18.0	21.0	18.0	18.0
5.0	30.0	35.0	30.0	30.0
	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0
10.5	63.0	73.5	63.0	63.0

EXPENSES					COMMENTS:
SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE	
1	Deep rod monuments	3	\$450	\$1,350	See seperate scope document
2	Title Reports		\$15,000	\$15,000	
3	Mileage 1000 miles @ 0.50 per mile		\$500	\$500	
				\$0	
				\$0	
				\$0	
				\$0	
				\$0	
				\$0	
				\$0	
<b>TOTAL EXPENSES:</b>				<b>\$16,850</b>	
<b>SUB-CONTRACTORS: Firm Initials and Price Per Task</b>					<b>FIRM'S TOTAL COST OF LABOR (or Fixed Price):</b> \$93,897
					<b>IF CPFF, TOTAL INDIRECT COST @ 0.00%:</b> \$0
					<b>FIRM'S TOTAL EXPENSES:</b> \$16,850
					<b>FIRM'S TOTAL COST (no Subcontracts or Fee):</b> \$110,747
					<b>FIXED FEE 0% X \$93,897:</b> \$0
					<b>TOTAL SUBCONTRACTOR PRICES + 5%:</b> \$0
<b>AMOUNT:</b>					<b>TOTAL COST + FIXED FEE INCL. EXPENSE &amp; SUBS:</b> \$110,747



P.O. Box 111165  
Anchorage, Alaska 99511  
(907)344-6431

July 27, 2010

Quote #194

Mr. John Thornley  
Hattenburg, Dilley & Linnell, LLC  
3335 Arctic Blvd., Suite 100  
Anchorage, AK 99503

Discovery Drilling Inc. is pleased to submit this cost estimate for geotechnical drilling near Mac Road in Wasilla. We plan to drill this project with a truck and nodwell mounted CME 75 drill rig and a 2 man crew.

We understand the scope of work to be as follows;

- Mobilize a truck and nodwell mounted CME 75 auger drill with 2 man crew to Wasilla.
- Drill, sample and backfill 9 borings to 15 feet in depth with the nodwell mounted drill.
- Drill, sample and backfill 10 borings, 15 to 35 feet (total 205) in depth with the truck mounted drill.
- Sample at 2.5 foot intervals to 10 feet in depth and then every 5 feet to bottom.
- Install 100 feet of 1" PVC in selected borings and backfill with cuttings.
- Install flush monuments on 5 borings in the street.

Discovery Drilling assumes the following regarding this work

- Any ROW permits and or traffic control required Drill sites are truck accessible.
- Utilities will be located and marked as necessary.
- No wage requirements apply to this work.

Mobilization/Demobilization Truck and nodwell mounted auger rig, equipment and crew	\$2,850
Drill, sample and backfill track mounted borings – estimate 2 day @ \$3200/day	\$6,400
Drill, sample and backfill truck mounted borings – estimate 2.5 days @ \$3200/day	\$8,000
1" PVC – estimate 100 feet @ \$1/ft	\$ 100
Flush vaults – 5 @ \$75 Ea.	\$375
Greatland Tree Service 2 man crew and equipment – 3406 Ft @ \$1.65/Ft	\$5,620
Asphalt Patch – Estimated 9 holes @ \$45 Ea.	\$405
<b>Estimated Project Total</b>	<b>\$23,750</b>

We look forward to working with you on this project, please call with any questions you may have.  
Sincerely,

Kyle Brown  
Discovery Drilling Inc.



**COST ESTIMATE PER TASK**

<b>FIRM:</b> EDC, Inc.			<b>PROJECT TITLE:</b> South Mack Extension - Amendment 3 Design through PIH									
<b>TASK NO:</b> 8		<b>TASK DESCRIPTION:</b> Plans, Specifications, and Estimate								<b>DATE:</b> 7/27/2009		
<b>GROUP:</b>		<b>METHOD OF PAYMENT:</b> FP <input type="checkbox"/> FPPE <input type="checkbox"/> T&E <input checked="" type="checkbox"/> CPFF <input type="checkbox"/>					<b>PREPARED BY:</b> John Pepe					
SUB-TASK NO.	SUB-TASK DESCRIPTION	LABOR HOURS PER JOB CLASSIFICATION										
		Principal/Manager	Project Manager	Senior Engineer	Staff Engineer	Drafter						
35%	Meetings	1		1								
	Plans	8		20		20						
	Specifications	1		8								
	Estimate	1		6								
	Calculations	2		8								
75%	Meetings	2		2								
	Plans	12		55		50						
	Specifications	1		4								
	Estimate	1		1								
	Calculations	1		2								
<b>TOTAL LABOR HOURS</b>		30	0	107	0	70	0	0	0	0	0	0
<b>* LABOR RATES (\$/HR)</b>		\$135.00		\$115.00	\$100.00	\$90.00						
<b>LABOR COSTS (\$)</b>		\$4,050.00	\$0.00	\$12,305.00	\$0.00	\$6,300.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EXPENSES						COMMENTS:						
SUB-TASK NO.	ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE								
				\$0.00								
				\$0.00								
				\$0.00								
				\$0.00								
				\$0.00								
				\$0.00								
				\$0.00								
				\$0.00								
<b>TOTAL EXPENSES:</b>				\$0	<b>FIRM'S TOTAL COST OF LABOR (or Fixed Price):</b>	\$22,655						
				\$0.00	<b>IF CPFF, TOTAL INDIRECT COST @</b>	0.00%	\$0					
					<b>FIRM'S TOTAL EXPENSES</b>	\$0						
<b>SUB-CONTRACTORS: Firm Initials and Price Per Task</b>					<b>FIRM'S TOTAL COST (no Subcontracts or Fee)</b>	\$22,655						
<b>FIRM:</b>												
<b>AMOUNT:</b>					<b>TOTAL SUBCONTRACTOR PRICES:</b>	\$0						

\* Labor Rates shall be direct labor (base pay) only if Method of Payment is CPFF; otherwise, Labor Rates shall be total rates (i.e. base pay + benefits + overhead + profit.)