EQUNDED 13		Approved Denied					
+ Constant	Date Action Taken:	3/23/09					
	Other:						
2		10					
	Verified by:	mite					
MASILA	venned by.						

## WASILLA CITY COUNCIL ACTION MEMORANDUM

AM No. 09-01

### TITLE: CONTRACT AWARD TO HATTENBURG, DILLEY, AND LINNELL, LLC IN THE AMOUNT OF \$427,108 FOR SOUTH MACK DRIVE EXTENSION ENGINEERING SERVICES.

Agenda of: March 23, 2009 Originator: Public Works Director Date: March 10, 2009

nie

Route to:	Department	Signature/Date
	Police Chief	
	Youth Court, Dispatch, Code Compliance	
	Culture and Recreation Services Director	
	Library, Museum, Sports Complex	<b>A</b>
Х	Public Works Director	3/1029
	Facility Maintenance, Utility, Roads & Airport	21001
Х	Chief Financial Officer	app o alil
	Finance, Risk Management, Purchasing & MIS	( 4 A D - 31/1/1
Х	Deputy Administrator	
	Planning, Economic Development,	Maria
	Human Resources	1 on the
Х	City Clerk	Homest

REVIEWED BY MAYOR VERNE E. RUPRIGHT:

**FISCAL IMPACT**: ⊠ yes \$427,108 or □ no Funds Available ⊠ yes □ no Account name/number: S. Mack Drive/160-4320-432.45-38

Attachments: RFP 0704-0-2009/WM Summary; HDL Proposal and Scope of Work (40 ff)

**SUMMARY STATEMENT:** This contract was advertised in September 2009 and six (6) engineering proposals were received. The written proposals were evaluated and ranked. The top two firms were selected for interviews and Hattenburg, Dilley, and Linnell, LLC was selected as the number one firm after the interviews. Subsequently, the contract scope was negotiated and a cost agreed upon to conduct public meetings and evaluate 2 routes to connect S. Mack Drive to Knik-Goose Bay Road and prepare a preliminary engineering report for the preferred route. Mack Drive and Clapp Road will be evaluated as the possible routes.

**ACTION:** Authorize the Mayor to execute a contract with Hattenburg, Dilley and Linnell, LLC in the amount of \$427,108 for S. Mack Drive Extension Engineering Services.

# **REQUEST FOR PROPOSALS PACKAGE**

(Procurement per Wasilla Municipal Code (WMC) Chapter 5.08)

### TABLE OF CONTENTS

Part A - Request for Proposals (RFP)

- Part B Submittal Checklist
- Part C Evaluation Criteria
- Part D Proposal Form
- Part E Indemnification & Insurance
- Part F Pre-Audit Statement
- Part G Proposed Statement of Services
- Part H Sample Contract

#### **Proposed Statement of Services**

The City of Wasilla is requesting proposals and intends to select a qualified firm or individuals interested in providing an environmental assessment, surveying, traffic and safety analysis, preliminary engineering report, public involvement assistance, utility analysis, and plans, specifications, and estimate (PS&E) for <u>South Mack Drive Extension</u> that consist of a grade-separated railroad crossing at the current at-grade crossing; and a 1.5 mile 2-lane arterial road extension matching existing alignment near the Multi-Use Sports Complex, crossing Lucille Creek and connecting with Knik-Goose Bay Road in Wasilla, Alaska. Alternative routes will be considered for the connection with Knik-Goose Bay Road that can provide for a future intersection with Fairview Loop.

#### **ISSUING OFFICE**

Agency Contact & Phone No	William Miller, Purchasing/Contracting Officer, (907) 373-9047
Contracting Department	City of Wasilla, Department of Public Works

#### PROJECT

RFP NUMBER	: 0704-0-2009/AG
Project Numbers-State	: 54987
Project Site (City, Village, etc.)	: Wasilla, Alaska
Project Title & Contract Description	: South Mack Drive Extension; Environmental Assessment, Surveying, Traffic and Safety Analysis, Preliminary Engineering, Public Involvement, Utilities, and Plans, Specifications & Estimate (PS&E).

This contract will be funded with a State Grant; the design will be performed to DOT&PF standards and procedures.

#### **SCHEDULE & PAYMENT**

Anticipated period for performance-Begin/End:	November 2009 through October 2010
Estimated amount of proposed contract: less than \$100,000 \$250,000 to \$500,000	\$100,000 to \$150,000       \$150,000 to \$250,000         \$500,000 to \$1,000,000       \$1,000,000 or greater
Proposed Method(s) of Payment: Fixed Price Plus Expenses (FPPE)	<ul> <li>Firm Fixed Price (FFP)</li> <li>Cost Plus Fixed Fee (CPFF)</li> <li>Other:</li> </ul>
SUBMITT	AL DEADLINE AND LOCATION
	ASSURE DELIVERY PRIOR TO DEADLINE (WMC 5.08.120(B)).
	OR TO THE FOLLOWING DATE AND TIME WILL BE OPENED.
	r 30, 2008 PREVAILING TIME: 2:00 PM
HAND DELIVE	ER ONLY TO FOLLOWING LOCATION:
	Public Works Counter
290 E. He	erning Avenue Wasilla, AK 99654

IMPORTANT NOTICE: A firm that submits a proposal MUST be on the official City of Wasilla plansholder list which is maintained at <u>http://www.demandstar.com/supplier/bids/agency\_inc/bid\_list.asp?f=search&mi=712050</u>. Failure of a firm to be on the list will be cause for their proposal to be deemed non-responsive. In addition, any copies of this proposal, attachments or addendums obtained from any source other than the City of Wasilla are not valid.



#### **SELECTION PROCEDURE**



1. Competitive Sealed Proposals will be evaluated by a committee (WMC 5.08.120(E)). Evaluation of responses to criteria set forth in Part C results in a numerical score for each proposal. Each criterion in Part C has an assigned weight for this RFP which demonstrates its relative importance. The total of all weights is 100 (100%). Each one-percent weight equates to a range of 0-5 points per Evaluator. The maximum points (score) obtainable for any proposal is equal to the product of 500 multiplied by the number of Evaluators.

2. Scoring of proposals will be accomplished as follows:

2.1 Each Evaluator will individually read and rate each Offeror's response to each criterion described in Part C -Section I - Technical Proposal. Ratings will be based solely on contents of proposal and per the City of Wasilla's standard Instructions for Evaluation Committee. Except as may be stated within any criterion description in Part C, a rating of "5" = Best Response from all Offerors; "4" to "1" = Progressively Less Responsive; "0" = Non-Responsive. Ratings are multiplied by the assigned weights for each criterion to obtain criteria scores.

2.2 After scoring Part C - Section I - Technical Proposal, criteria scores for Part C - Section II - Preferences, and Section III - Price (if applicable), will be determined as stated within such criteria descriptions.

2.3 After completion of individual ratings, the Evaluation Committee will meet to discuss proposals. Evaluators may then alter their ratings; however, any changes shall be based solely on the criteria set forth in Part C.

2.4 The total score for each Offeror will be obtained by summing the scores determined for each criterion in Sections I, II and III of Part C. The order of ranking for negotiations shall be as follows: highest scored Offeror will be ranked first, next highest scored second, and etcetera.

3. Evaluators may discuss factual knowledge of, and may investigate Offerors' and proposed Subcontractors' prior work experience and performance, including projects referenced in proposal, available written evaluations, etcetera, and may contact listed references or other persons knowledgeable of a Contractor's and/or a Subcontractor's past performance. Factors such as overall experience relative to the proposed contract, quality of work, control of cost, and ability to meet schedules may be addressed. If any issues of significant concern to the proposed contract are discovered, the Committee may:

- 3.1 Provide written recommendations for consideration during contract negotiations;
- 3.2 Recommend suspension of the Offeror from consideration for award of the contract (WMC 5.08.120(E)); or
- 3.3 Conduct discussions in accordance with paragraph 4, below.

4. The Committee may decide to conduct discussions (or "interviews") with responsible Offerors whose proposals are determined to be reasonably susceptible of being selected for award for the purpose of clarification to assure full understanding of, and responsiveness to, the solicitation requirements (5.08.120(E)). Offerors selected by the Committee for discussions may be permitted to submit Best and Final Offers (BAFO) for final Committee Evaluation. After discussions and any BAFO's, Evaluators will determine the final scoring and ranking for contract negotiations by evaluating written and oral responses using only the criteria set forth in Part C of this RFP.

5. All Offerors will be advised of the Offeror selected for negotiation and, after completion of negotiations, a Notice of Intent to Award will be provided to all Offerors. If contract negotiations are unsuccessful with Offeror(s) selected for negotiation, the City may either cancel the solicitation or negotiate with other Offerors in the order of ranking.

#### NOTICES



1. The City of Wasilla is an equal opportunity employer.

2. Copies of contract documents are available in Part H of this solicitation.

3. Offerors are specifically advised that a contract shall not be in effect until a written agreement is authorized by the Wasilla City Council and executed by the Mayor. The City shall not be liable for any cost incurred by an Offeror in response to this solicitation, including any work done, even in good faith, prior to execution of a contract and issuance of a Notice to Proceed.

4. The City expressly reserves the right to waive minor informalities, negotiate changes or reject any and all proposals and to not award the proposed contract, if in its best interest. "Minor Informalities" means matters of form rather than substance which are evident from the submittal, or are insignificant matters that have a negligible effect on price, quantity, quality, delivery, or contractual conditions and can be waived or corrected without prejudice to other Offerors (WMC 5.08.120(D)).

5. The proposal selected for award shall be open for public inspection (WMC 5.08.120(F)) after a Notice of Intent to Award is issued. Offerors should not include proprietary information in proposals if such information should not be disclosed to the public. Any language within a submittal purporting to render all or portions of a proposal confidential will be disregarded.

6. Substitution for any personnel named in a proposal may result in termination of negotiations.

7. If it is discovered that a selected Offeror is in arrears on taxes due the City of Wasilla or State of Alaska, a contract may not be awarded until the City of Wasilla Department of Finance or Alaska Department of Revenue approves the payment provisions for the contract.

# 8. Offerors and proposed subcontractors shall be in compliance with the statutory requirements for Alaska, City of Wasilla and Matanuska-Susitna Borough licensing included in the certification statement on Page 2 of Part D in this RFP package. Non-compliance shall result in rejection of proposal.

9. **PRICE COMPETITION:** Price will not be an Evaluation Criterion for this RFP unless the services required are repetitious in nature, and the nature and amount of services required are thoroughly defined by measurable and objective standards to reasonably enable firms or persons making proposals to compete with a clear understanding and interpretation of the services required. Also, a majority of the evaluation committee must be registered in Alaska to perform architectural, engineering, or land surveying services.

9.1 If services may be performed by other than A/E or LS, then all Offerors including any A/E or LS must provide Price Proposals.

10. An audit of the selected Offerors' and proposed Subcontractors' cost accounting systems and business records may be required to ascertain if systems are adequate for segregating contract costs; to establish a maximum allowable Indirect Cost Rate for the Agency's negotiator; and to investigate the accuracy of proposed labor rates and unit prices. In order not to unduly delay contract negotiation or award, be prepared to submit Pre-Audit Statement, DOT&PF Form 25A257 immediately for your firm and any subcontract which may exceed \$100,000. If selected for negotiation, failure to submit properly completed Pre-Audit Statement(s) in a timely manner may disqualify an Offeror from further consideration. Information from Pre-Audit Statements and any Audit conducted for the CITY OF WASILLA is considered proprietary and will be confidential.

11. Standard insurance provisions for Worker's Compensation, General and Automobile Liability, and Professional Liability are contained in Part E, Indemnification and Insurance. Coverages may be modified under very limited circumstances. Offeror should not assume any modification of coverages.

12. Professional Liability Insurance for the proposed contract is required as shown on Part E.

13. The proposed contract will be a Federally Assisted Program of the U.S. Department of Transportation. The Offeror shall insert the following notification in all subcontract solicitations for bids or proposals pertinent to this RFP:



"In accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, CFR, U.S. Department of Transportation (U.S. DOT), Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. DOT issued pursuant to such Act, in any Subcontract entered into pursuant to this RFP, Disadvantaged Business Enterprise firms will be afforded full opportunity to submit bids or proposals and will not be discriminated against on the grounds of race, color, sex, or national origin, in consideration for an award.

14. Pre-proposal Conference: 🛛 None 🗌 As follows:

	1	5.	Spec	ial M	Noti	ices:
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NONE

## SUBMITTAL CHECKLIST



#### Offeror may use left margin to check off items when completed.

Prime Contractor shall have a current Alaska Business License, City of Wasilla Business License, and Matanuska Susitna Borough Business License on date of submittal, reference item 1, page 2, Part D.

- [ ] 1. Offerors must carefully review this RFP Package for defects and questionable material and become familiar with submittal requirements. Submit written comments to the address shown under "Submittal Deadline and Location" on page 1 of Part A RFP. Substantive issues will be addressed in a written addendum to all RFP recipients on record. Failure to comply with directions may result in lower score and may eliminate a submittal from consideration.
- [ ] 2. Review Part A RFP and the proposed Statement of Services and any other attached or referenced materials. If no Statement of Services is attached, telephone the Purchasing/Contracting Officer identified on page 1 of Part A.
- [ ] 3. Review Part C Evaluation Criteria. Read each criterion in light of the proposed Statement of Services. Note any project specific criteria which may have been added or any changes to standard criteria descriptions which may have been made. Be aware of the assigned weight for each criterion. If a weight is not entered for any criterion on Part C, notify the Purchasing/Contracting Officer. Plan your proposal to address the applicable criteria. Criteria Responses shall not exceed the number of pages stated below.
- [ ] 4. Prepare a distinct Response for each criterion that has a weight more than zero. Failure to respond directly to any criteria weighted more than zero will result in an evaluation score of zero for that criteria. Any Responses to criteria weighted zero will be disregarded. Acceptable Responses must be specific and directly related to the City's proposed Statement of Services. Marketing brochures, federal standard forms 254 and 255, marketing resumes, and other non-project specific materials will be discarded without evaluation and should not be submitted.
- [ ] 5. Each criterion Response must be titled, numbered and assembled in the order in which the criteria are listed in Part C, so the criterion to which information applies shall be plainly evident. Material not so identified or assembled may be discarded without evaluation.

[	]	6. Price is is not an evaluation criterion for the proposed contract.
[	]	7. Complete all entries on Part D - Proposal Form. Note the statutory requirements for Alaska Licenses and be sure to sign and date the Certification. Copies of licenses <u>shall be</u> provided with submittal.
l	]	<ul> <li>8. Attach Criteria Responses to Part D - Proposal Form. The maximum number of attached pages (<i>each printed side equals one page</i>) for Criteria Responses shall not exceed: <u>20 PAGES</u>. Attached page limit does not include the three-page Part D - Proposal Form or any Billing Rates or Price Proposals.</li> <li>Criteria Responses shall be presented in <i>8-1/2" X 11" format</i>, except for a minimal number of larger sheets (e.g. 11" x 17") that may be used (e.g. for schedules) if they are folded to 8-1/2" X 11" size. Large sheets will count as multiple pages at 93.5 square inches or fraction thereof per page, unless otherwise noted.</li> <li>CAUTION: Criteria Responses which do not comply with the required page limit or presentation size, may result in disqualification. Further, small print or typeface that is difficult to read may negatively influence evaluation of your submittal and affect scoring for "Quality of Proposal."</li> </ul>

CHECKLIST IS CONTINUED NEXT PAGE

[ ] 9. Parts A, B and C of this RFP and the proposed Statement of Services shall not be returned to the CITY OF WASILLA. *Submittals shall consist of the following applicable items assembled as follows and in the order listed:* 

- [ ] 9.1. Completed Part D Proposal Form (generally at least one copy with original signature) and Responses to all evaluation criteria attached. Each copy shall be fastened with one staple in the upper left corner. No other form of binding shall be used and no cover and no transmittal letter will be included. **CAUTION**: Failure to comply with this instruction will negatively influence evaluation of Submittal.
- [ ] 9.2 Number of copies of Part D (*both pages*) and Criteria Responses required is: Five (5)
- [ ] 9.3 Pre-Audit Statement, Part F, shall *not* be provided with Submittal. (See Notice #10 on page 3 of Part A RFP.)
- [ ] 9.4 **CAUTION:** If you replicate (other than by photocopy) Part D or any form in lieu of completing the forms provided by the City of Wasilla, provide a signed certification that lists such forms and attests that they are exact replicas of that issued by the City of Wasilla. Changed forms may result in rejection at the City of Wasilla's discretion. Any alteration other than completion of the required entries may be cause for rejection without recourse.
- [ ] 10. Deliver submittals in one sealed package to the location and before the submittal deadline cited in Part A -RFP. Mark the outside of the package to identify the Project and the Offeror. Proposals must be received prior to the specified date and time. Late proposals will not be opened (WMC 5.08.120(D)).

## **EVALUATION CRITERIA**

Criteria with a weight of zero are not applicable and should be disregarded. If a weight is not indicated for any criterion, telephone the Agency Contact person identified at the top of page 1 of Part A - RFP.

#### **SECTION I - TECHNICAL PROPOSAL**

#### 1. Objectives and Services

Response must **demonstrate your comprehension of the objectives and services** for the proposed contract. Do not merely duplicate the Statement of Services provided with this RFP. Also, consider if Statement of Services is sufficiently explicit; are expressed or implied schedules attainable/economically feasible; etcetera? Explain. **Define any assumptions made** in formulating Criteria Response. If design services for a construction project are included, express any opinions regarding alternative design considerations that could impact construction costs.

#### 2. Methods

Response must outline the methods for accomplishing the proposed contract or, if methodology is contained in the proposed Statement of Services, address its adequacy. Describe what, when, where, how, and in what sequence the work will be done. Identify the amount and type of work to be performed by any Subcontractors. Consider how each task may be carried out; what services or interaction required from/with the City of Wasilla; etcetera. Suggest alternatives, if appropriate. Identify any **distinct and substantive qualifications** for undertaking the proposed contract such as the availability of specialized equipment or unique approaches or concepts **relevant to the required services** which the firms may use.

#### 3. Management

Response must describe the administrative and operational structures that will be used for performing the proposed contract. For example consider: who will have overall responsibility for the contract? Who will have direct responsibility for specific disciplines? What will the lines of authority be? For any individual who would be in "responsible-charge" (reference AS 08.48) as an Architect or Civil (including Structural), Electrical, Mechanical Engineer, or Land Surveyor, so state and list his/her Alaska professional registration number. A graphic depiction is preferred in your response to this criterion. Additionally, the City of Wasilla may want to inspect work products in progress and have a close ongoing working relationship with your Project Staff. Accordingly, your response should also identify where the various contract services will be performed and how communications will be maintained between your Project Staff, the City of Wasilla, and (as applicable) any other government agencies or the public.

#### 4. Proposed Project Staff

Response must name the individuals to perform the following **FUNCTIONS** plus any other professional/technical functions you deem essential to perform the services:

- 1. Contract Manager (contract compliance)
- 2. Project Manager (single point-of-contact directly engaged in contract performance)
- 3. Lead Civil Designer (engineer who will lead design effort)
- 4. Public Facilitator (person who will lead public involvement effort)
- 5. Environmental Analyst (person charged with identifying environmental impacts)
- 6. Traffic Engineer (person who will lead traffic impact analysis)
- 7. Lead Surveyor (person who will lead surveying effort)

\*All personnel acting in responsible charge for all Land Surveying, Architectural and Engineering functions require Alaska Registration.

15

## 4. Weight: 30

2. Weight: 10

3. Weight:

10

1. Weight:

Response will be scored: Rating x Number of Evaluators x Weight = Criterion Score. Rating will be as follows: Assign a rating of "5" if the Project Manager's office is located within 25 radial miles of the project site. Assign a rating of "4" if the Project Manager's office is located within 50 radial miles of the project site. Assign a rating of "3" if the Project Manager's office is located within 75 radial miles of the project site. Assign a rating of "2" if the Project Manager's office is located within 100 radial miles of the project site. Assign a rating of "1" if the Project Manager's office is located over 250 radial miles from the project site.

5. Workload and Resources

project experience is relevant to the proposed contract.

Response must: (1) discuss both current and potential time commitments of your proposed Project Staff to all clients; (2) discuss the projected workload of each firm (Offeror and Proposed Subcontractors) for all clients; and (3) demonstrate adequate support personnel, facilities and other resources to provide the services required. Provide a list of current contracts with the City of Wasilla, Matanuska-Susitna Borough, and State of Alaska in which your proposed Project Staff are participating. Include all contracts within regions, divisions, etc., of the State of Alaska.

Describe the work to be performed by the individuals you name to perform essential functions and detail their specific qualifications and substantive experience directly related to the proposed contract. A response prepared specifically for this proposal is required. Marketing resumes often include non-relevant information which may detract from the evaluation of proposal. Lists of projects are not useful. Focus on individual's specific duties and responsibilities and how

For each person named, identify their: employer, professional discipline or job classification and state of residency. List

at least 3 professional references (contact persons and telephone numbers) for each person.

Briefly address capabilities for providing additional services and/or services under an accelerated schedule. Address capacity to reassign personnel, equipment and facilities whenever the proposed contract would not require such capabilities or was delayed.

#### 6. Business History

Response must identify the period of time firms (Offeror and/or Subcontractors) have been in business under current organization and name. Discuss any prior work relationships among the firms. Discuss prior contracts that were similar to the work proposed by this RFP. Indicate which of the proposed firms and Project Staff were involved in such contracts. For each contract, list the contracting entity and a reference (contact person and a telephone number).

#### 7. Quality of Proposal

Offerors do not respond to this criterion. Committee members will rate this criterion based on their perception of the clarity, completeness and presentation of submittal. Note: This criterion is NOT used to evaluate color, graphics or other visual techniques except as they may detract from legibility.

#### Geographic Location 8.

Weight shall be "0" if any federal funding EXCEPT if services must be performed by licensed Architects, Engineers or Land Surveyors, then Weight shall be greater than "0", regardless of funding sources.

Established local offices and staff residing in proximity to the project site is preferable for the proposed contract due to convenience, improved communications and reduced travel costs. Your response to this criterion must clearly identify the location of the office housing the Project Manager. Non-responsive answers will be awarded a rating of zero (0).

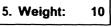
5 8. Weight:

6. Weight:

7. Weight:

10

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FIRM:	Hattenbu	urg Dilley & Linn	ell	PROJECT TITL	E:	South Mack Exte	nsion	DATE:	3/6/2009
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B7	• 1	\$53,730	\$0	\$0	\$53,730		\$53,730	\$63,357	\$117,087
B8	2	\$4,580	\$0	\$110	\$4,690		\$4,690	\$45,892	\$50,582
B9	3	\$4,880	\$0	\$0	\$4,880		\$4,880	\$36,438	\$41,318
B10	4	\$116,370	\$0	\$2,200	\$118,570		\$118,570	\$4,653	\$123,223
B11	5	\$33,480	\$0	\$330	\$33,810		\$33,810	\$38,968	\$72,778
B12	6	\$0	\$0	\$0	\$0 .		\$0	\$0	\$0
B13	7	\$21,570	\$0	\$550	\$22,120		\$22,120	\$0	\$22,120
B14	8	\$0	\$0	\$0	\$0		\$0	\$0	\$0
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ESTIMA TOTA	TED	LABOR (or FP)	INDIRECT COST	EXPENSES	TOTAL COST		FIRM'S TOTAL PRICE		PRICE PLUS SUBS
For Fi	RM:	\$234,610	\$0	\$3,190	\$237,800	\$0	\$237,800	\$189,308	\$427,108

EIRM-	Hattenhurg	Dilley & Linnell					MATE PER IA						
		-			1.1	CT TITLE:	South Mack	Extension					
TASK NO:	1	TASK DESCRIPTION:		Environment	al Services			•				DATE:	3/6/2009
GROUP:		METHOD OF PAYMENT:		FP	FPPE	T&E ✓	CPFF		PREPA	RED BY:	Katrina Moss		
SUB-						LABOR HO	URS PER JOE	CLASSIFICA	TION				
TASK NO.	SUB-	TASK DESCRIPTION	Principal	Proj Mgr/ Civil Eng	Senior Planner	Environ. Manager	Staff Engineer	Senior Designer	Drafter	Environ. Specialist	Admin.		
B7.1	General Mgn	nt & Coordination	4	8	8						8	-	
B7.2	Environment	al Analysis Site Visit		8	8	8		1	1	8			
B7.2.1				:	6	20		6	6	28			
B7.2.2	- Fish Habita	· · · · · · · · · · · · · · · · · · ·			4	4	1	1					
B7.2.3	- Vegetation/	Habitat			4	4			:			;	
B7.2.4					4	4							
B7.2.5					16	8	r.						
B7.2.6	<ul> <li>Threatened</li> </ul>	and Endangered		-	2	4				4			
B7.3	Environmenta	al Checklist		4	20	20		4	14	28	4		
	Dermitting	,,,			16	40	<u> </u>		16		8		
D7.4	Permitting 4		4	10	40		4	10	40	8			
B7.5	Public and Agency Coordination 8		8	16	16			8	16	2			
87.6	Povisod Envi	ranmantal Chacklist		2	6	8			8	16	4		
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TOTAL LA	BOR HOURS	······································	4	34	110	136	0	14	52	140	26	0	0
* LABOR R	ATES (\$/HR)		\$160.00	\$140.00	\$140.00	\$110.00	\$90.00	\$110.00	\$95.00	\$70.00	\$65.00	\$0.00	\$0.00
LABOR CO	STS (\$)		\$640.00	\$4,760.00	\$15,400.00	\$14,960.00	\$0.00	\$1,540.00	\$4,940.00	\$9,800.00	\$1,690.00	\$0.00	\$0.00
B7.6         Revised Environmental Checklist         2           TOTAL LABOR HOURS         4         3           * LABOR RATES (\$/HR)         \$160.00         \$1           LABOR COSTS (\$)         \$640.00         \$4,7           EXPENSES         SUB-         ITEM(\$)								COMMEN	TS: Enviro	onmental C	hecklist fo	r a State fi	inded
SUB- TASK NO.		ITEM(S)			QUANTITY	UNIT PRICE	TOTAL PRICE	project. A	Assumption	ns: 2 actio at Lucille (	n alternativ	ves & no-a	ction
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	GROUP:       METHOD OF PAYMENT:       F         SUB- SK NO.       SUB-TASK DESCRIPTION       Principal       Proj Civil         B7.1       General Mgmt & Coordination       4       1         B7.2       Environmental Analysis Site Visit       4       1         B7.2.1       - Wetland Delineation       3       3       3         B7.2.2       - Fish Habitat       3       3       3         B7.2.3       - Vegetation/Habitat       3       3       3         B7.2.4       - Hazardous Waste       3       3       3         B7.2.5       - Cultural Resources       3       3       3         B7.3       Environmental Checklist       4       3         B7.4       Permitting       4       4         B7.5       Public and Agency Coordination       6       6         B7.6       Revised Environmental Checklist       2       4         TAL LABOR HOURS       4       3       3         ABOR RATES (\$/HR)       \$160.00       \$1         B7.6       EXPENSES       \$340.00       \$4,70         EXPENSES       \$10       \$40.00       \$4,70         St NO.       ITEM(S)       \$640.00					+ + + + + + + + + + + + + + + + + + + +	FIRM'S TOTA	U COST OF		vod Price)		\$53,730	
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				naikup at 107		EXPENSES:		FIRM'S TOTA				0.0076	\$0
				Price Per Ta			. <del>.</del>			Subcontracts	or Feel		\$53,730
EIDM.						Subtotal	10% Markup		12 0001 (IIU	Casconidets			40011.00
				s 	·	\$57,597		TOTAL SUBO	ONTRACTO	B PRICES		T	\$63,357
AMOUNI:	ຈາ/,ວວ4	<b>Φ</b> 17,∠U0	<b>\$22,035</b>			1 401,091	φ5,/00	I U IAL SUD		n FRICEQ;			900,007

-						COST ESTI	MATE PER TA	ASK					
FIRM	: Hattenburg	Dilley & Linnell			PROJE	CT TITLE:	South Mack	Extension	·				
TASK NO	2	TASK DESCRIPTION:		Surveying S	ervices							DATE:	3/6/2009
GROUP	;	METHOD OF PAYMENT:		FP	FPPE	T&E 🗸	CPFF		PREPA	RED BY:	Brad Rinckey		
SUB-			-			LABOR HO	URS PER JOE	CLASSIFICA	TION				
TASK NO.	SUB-	TASK DESCRIPTION	Proj Mgr/	Survey	Survey	Survey		2-Man Crew					
1			Civil Eng	Manager	Tech.XI	Tech. IX							
B8.9	Surveying fo	r Preliminary Design	16	16			1	2	4	-			
	Research		5. 			1	-			1		:	
	Horizontal C		ç				2	1. 					
	Vertical Con									-	1		
	Monument T							2					
	Photogramm						,	2	1	-			
	Preliminary F	ROW Research	-			i.							
B8.10	Topographic	Design Survey		ado	led by amend	I ment							
	Field Survey			·	[	T							
	Topographic Mapping												
B8.11	Right-of-Way	/ Survey		ado	led by amend	ment							
	Research												
	Monument Ties												
	ROW Base Maps												
	ROW Maps					-							
	Parcel Plats												
	Monumentat												
TOTAL LA	BOR HOURS		16	16	0	0	0	0	4	0	0	0	0
	ATES (\$/HR)		\$140.00	\$130.00	\$85.00	\$75.00	\$230.00	\$185.00	\$65.00	\$0.00	\$0.00	\$0.00	\$0.00
LABOR CO			\$2,240.00	\$2,080.00	\$0.00	\$0.00	\$0.00	\$0.00	\$260.00	\$0.00	\$0.00	\$0.00	\$0.00
			EXPENSES			A		COMMEN	TS: Contr	ol Survey	and Aerial F	hotograph	ny and
SUB- TASK NO.		ITEM(S)			QUANTITY	UNIT PRICE	TOTAL PRICE		Design ar		urvey will be		
							\$0.00	Amename	πτ.				
	Reproduction	)S			1	\$100.00	\$100.00						
	Toproductor				•	<i><b></b></i>	\$0.00						
	· · ·				<u>.</u>		\$0.00	-					
						\$0.00							
		<b>Marina and Anna and A</b>											\$4,580
			larkup at 10%	<u>.</u>		\$0.00	IF CPFF, TOT	AL INDIREC	T COST @	ixed Price):	0.00%	\$4,580 \$0	
faile .	ana anat			aixup al 107		EXPENSES:	Local and the second se	FIRM'S TOTA				0.00%	\$110
	jeta pet	SUB-CONTRACTORS: Firm		Price Per To		EAFENJEJ:	φιίU	5.e. 26			or Eag)		\$4,690
FIRM:	MLA	SUB-CONTRACTORS: FILL		-nce rei 1a	JR	Subtotal	10% Markup	FIRM'S TOTA	L COST (NO	Subcontract	SULLES		<i>ф</i> ч,090
AMOUNT:					- ••	\$41,720	the second se						\$45,892

						COST ESTIN	MATE PER TA	SK				
FIRM:	Hattenburg	Dilley & Linnell			PROJE	CT TITLE:	South Mack	Extension				
TASK NO:	3	TASK DESCRIPTION:		Traffic and S	afety Analysis						DATE:	3/6/2009
GROUP:		METHOD OF PAYMENT:		FP 🗌	FPPE	T&E ✓	CPFF	PREPA	RED BY:	David Lundin		<u></u>
SUB-	-		7			LABOR HOL	JRS PER JOE		TION			
TASK NO.	SUB-	TASK DESCRIPTION	Prinicpal	Proj Mgr/	Senior	Staff	Drafter	Admin.	1			
				Civil Eng	Designer	Engineer						
B9	General Mon	nt & Coordination	4	10	<u> </u>			1				
B9.1	Capacity Stu			2	ė		<u> </u>	s		++		.:
B9.2	Additional St							1				
B9.3	Accident Ana			2	2 2 1	<u>[</u>	1	5		1 1		
B9.4	Design Desig	gnations		2	-	5		1				
	Reports			4	4			·		11		
	Coordination	/meetings		4	4					1		
		· · · · · · · · · · · · · · · · · · ·			1	<b></b>				1		
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				-	·							
	<b>BOR HOURS</b>		4	24	8	0	0	0	0	0	0	0
* LABOR R	ATES (\$/HR)		\$160.00	\$140.00	\$110.00	\$90.00	\$95.00	\$75.00	\$0.00	\$0.00	\$0.00	\$0.00
LABOR CO	STS (\$)	-	\$640.00	\$3,360.00	\$880.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
			EXPENSES					COMMEN	TS: Desig	n Designati	ons, Cras	h l
SUB-		)751(O)			QUANTITY	UNIT PRICE	TOTAL			Evaluation		
TASK NO.		ITEM(S)			QUANTIT	UNIT PRICE	PRICE	Traffic Re		Liandation	5, 1 1011111	,
						-	\$0.00	I ranc Re	port			1
						2	\$0.00					.*
					·	2	\$0.00					
	<u> </u>				ļ		\$0.00					
					A		\$0.00	L				I.,
									LABOR (or Fix		\$4,880	
		-	1	Markup at 10%	6		\$0.00	IF CPFF, TO	0.00%	\$0		
			• •		TOTAL	EXPENSES:	\$0	FIRM'S TOT	AL EXPENSE	S		\$0
	<u> </u>	SUB-CONTRACTORS: Firm	n Initials and	Price Per Ta	sk			FIRM'S TOT	AL COST (no	Subcontracts	or Fee)	\$4,880
FIRM:	Kinney		,			Subtotal	10% Markup					
AMOUNT:						\$33,125	\$3,313	TOTAL SUBO	CONTRACTO	R PRICES:	1	\$36,438

FIRM:	Hattenburg	Dilley & Linnell			PROJEC	COST ESTIN	ATE PER TA						
TASK NO:		TASK DESCRIPTION:		Preliminary E	Engineering Ro	••••••••••••••••••••••••••••••••••••••					****····	DATE:	3/6/2009
GROUP:		METHOD OF PAYMENT:		FP 🗌	FPPE	T&E 🗸	CPFF		PREPA	RED BY:	David Lundir	l )	······
SUB-	T		T			LABOR HOL	IBS PER JOE	B CLASSIFICATION					
TASK NO.	ASK NO. SUB-TASK DESCRIPTION			Proj Mgr/ Civil Eng	Senior Designer	Environ. Manager	Staff Engineer	Drafter	Admin	· · · · · · · · · · · · · · · · · · ·			
B10.1	General Mor	mt & Coordination	16	8		<u> </u>			8				
B10.2	Site Visit			8	16	<u> </u>	<u> </u>	1			<u> </u>		
B10.2	Research		1	8	8	+	6		·	)			
	Design Crite	ria		4	8	·							
B10.2	Typical Sect		<u> </u>	8	16			18					
	Develop Lin		+	40	100		-	100	·				
B10.2	Alternative A	and the second		40	100		60	60			+	╊─────┥	
B10.2	Environmen			8	16								
B10.2.1	Utility Impac	to		8	16	-		· 16					
	ROW & Rek			8	16			16					
	Bridge Selec	and the second	+			added by ame	L	10					
			<u> </u>	12	TODE	added by ame	60	16				}	
B10.2.4	Hydrology S	1009		12		0	00	10					
B10.3	Cost Estima	te		8	60		60	16		·			
	Draft PER			88	40		:	16			ļ		
B10.5	Final PER				20			8					
			:				е Ч						
TOTAL LA	BOR HOURS		16	176	416	8	186	266	8	0	0	0	0
LABOR R	ATES (\$/HR)	)	\$160.00	\$140.00	\$110.00	\$110.00	\$90.00	\$95.00	\$65.00	\$0.00			
ABOR CO	STS (\$)		\$2,560.00	\$24,640.00	\$45,760.00	\$880.00	\$16,740.00	\$25,270.00	\$520.00	\$0.00	\$0.00	\$0.00	\$0.0
			EXPENSES	-				COMMEN	TS: Assun	nes the No	-build and	2 alternativ	ves for
SUB- TASK NO.		ITEM(S)			QUANTITY	UNIT PRICE		reconnais	ance engir	eering an	d selection	n of prefere	d
ASK NO.												rated cross	
B10.2	Asbuilts, loca				1	\$1,000.00	\$0.00 \$1.000.00	RR or brid	lge at Luci	lle. DSR v	vill be adde	ed by Amen	dment.
					10	\$100.00	\$1,000.00	1					
B10.2	Research, re	productions, misc.			10	\$100.00	\$0.00						
							\$0.00	•					
											und Dring's		\$116.37
								FIRM'S TOTA			ixea rrice):		
			Markup at 10%		EVENASS	<b>+-------------</b>	FIRM'S TOTA				0.00%	\$\$ \$2,20	
				Duine Dan W		EXPENSES:	\$2,200				<b>Fee</b>		
		SUB-CONTRACTORS: Fir	m initials and	Price Per Ta	sk		1001 10 1	FIRM'S TOTA	L COST (no s	supcontracts	s or ree)		\$118,57
FIRM:	EDC	L	ļ			Subtotal	10% Markup					Г	
AMOUNT:	\$4,230		1. A.			\$4,230	\$423	TOTAL SUBC	CONTRACTOR	RPRICES:			\$4,65

<del></del>						COST ESTI	MATE PER TA	SK					
FIRM:	FIRM: Hattenburg Dilley & Linnell PROJECT TITLE: South Mack Extension												
TASK NO: 5 TASK DESCRIPTION: Public Involved					rement		•••••••••••••••••••••••••••••••••••••••					DATE:	3/6/2009
GROUP:	•	METHOD OF PAYMENT:		FP	FPPE	T&E ✓	CPFF		PREPA	RED BY:	Katrina Moss	 3	
SUB-	[			LABOR HOURS PER JOB CLASSIFICATION									
TASK NO.	TASK NO. SUB-TASK DESCRIPTION		Principal	Proj Mgr/	Senior	Environ.	Environ.	Senior	Drafter	Admin.			
-				Civil Eng	Planner	Manager	Specialist	Designer					
B11.1	General Mor	nt & Coordination	8	8	16		т. К		<u> </u>	1	- 		
	× ×	(draft & final)		4	4		-	<u> </u>		: :	:	·	<u> </u>
		Mat-Su Community Trans Co		4	8	1	1	1					
	Public Meeti			4	8	-		16	16	4		<u> </u>	<u> </u>
		ng: Agency wkshp	1	4	16	16	16	16	16	4	<u> </u>		<u> </u>
		ng: draft PER		4	8			16	16	4			<u> </u>
	Newsletters/			2	4		<u> </u>	10					
	Review corri		<u> </u>	4	4			<u> </u>					
		ng Comm (2 ea)	<u> </u>	4	8			<u> </u>	-			<u> </u>	
	Comment Su		+	4	8						-		
	PER PI Sum			8	8								
DITLE		mary			l							<u>}</u>	
												<u> </u>	<b></b>
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						<u> </u>						<u> </u>	
	-												
								10					
	BOR HOURS		8	50	92	16	16 \$75.00	48	48 \$85.00	12	0	0	0 \$0.00
	* LABOR RATES (\$/HR) \$160.00			\$140.00	\$140.00	\$110.00		\$110.00		\$65.00	\$0.00		
LABOR COSTS (\$) \$1,280.00 \$7,000.00			\$12,880.00	\$1,760.00	\$1,200.00	\$5,280.00	\$4,080.00	\$780.00	\$0.00	\$0.00	\$0.00		
			EXPENSES					COMMEN	TS: Assur	nes 1 Early	Coordina	tion Meetir	ig with
SUB-		ITEM(S)				UNIT PRICE	TOTAL					ig, 1 Agend	
TASK NO.		TEM(3)			GUANNIT	UNIT FRICE	PRICE					inary Engin	
	Miscellaneou	s meeting expenses			3	\$100.00	\$300.00						cering .
							\$0.00		nd 2 presei				÷
							\$0.00					ntal, Websi	
								mailing li	st, advertis	ement, and	d mtg mate	erials will b	eby 🖡
					-		\$0.00	Brooks .			-		
							\$0.00						
							\$0.00	FIRM'S TOT	AL COST OF I	ABOR (or Fi	xed Price):		\$33,480
			1	Markup at 10%	6		\$30.00	<i>IF CPFF</i> , TO	TAL INDIREC	t cost @		0.00%	\$0
		ing particular and the second s				EXPENSES:	\$330	FIRM'S TOT	L EXPENSES	S			\$330
		SUB-CONTRACTORS: Fire		Price Per Ta	sk			FIRM'S TOT	AL COST (no	Subcontracts	or Fee)		\$33,810
FIRM:	Brooks				<u> </u>	Subtotal	10% Markup						
AMOUNT:						\$35,425		TOTAL SUP	CONTRACTO				\$38,968
ANUUUNI:	300.420	1			1	000,420	a0,040	LIGINE SUDI		n FRICES.			400,300

	COST ESTIMATE PER TASK												
FIRM: Hattenburg Dilley & Linnell						OT TITLE:	South Mack	Extension					
TASK NO:	7	TASK DESCRIPT	TION:	Geotechnica	Investigation							DATE:	3/6/2009
GROUP:		METHOD OF PAYMENT:		FP 🗌	FPPE	T&E 🗸	CPFF		PREPA	RED BY:	David Lundir	· · · · · · · · · · · · · · · · · · ·	
SUB-	SUB-					LABOR HOURS PER JOB CLASSIFICATION							
TASK NO.	SUB-1	FASK DESCRIPTION	Principal	Proj Mgr/ Civil Eng	Principal Geotech	Geologist	Hydrology Engineer	Staff Engineer	Drafter				
B13.1		eotech Investigation	-	3						;			
B13.1			4	10	20			:					
B13.1	Geotech rese	arch			8	20							
B13.1	Site visits				4	30		30	·				
B13.1	Geotech field												
B13.1	Laboratory te				2	8		16	-				
B13.1	Piezometer N	and the second		-									
B13.1	Engineering /	Analysis		4	12	24		12			-		
<u> </u>	•								-				
<u> </u>				-									
<u> </u>													
													*******
								· · · · · · · · · · · · · · · · · · ·					
	BOR HOURS		4	14	46	82	0	58	0	0	0	0	0
* LABOR R	ATES (\$/HR)		\$160.00	\$140.00	\$160.00	\$85.00	\$80.00	\$80.00	\$95.00	\$0.00			
LABOR CO	STS (\$)		\$640.00	\$1,960.00	\$7,360.00	\$6,970.00	\$0.00	\$4,640.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
			EXPENSES					COMMEN	TS: No bo	rings. Site	visit with	peat-probe	s and
SUB- TASK NO.		ITEM(S)			QUANTITY	UNIT PRICE	TOTAL PRICE	hand-dug	test pits t	o be comp	leted durin		
13.1	Field Supplies	5			1	\$500.00	\$500.00	contaition	s (oune).	Jeoleening	a mang.		·y.
							\$0.00						
	**************************************			<u></u>			\$0.00						
							\$0.00						
		· · · · · · · · · · · · · · · · · · ·					\$0.00						
								FIRM'S TOT	L COST OF	ABOR (or Fi	xed Price):		\$21,570
Markup at 10%				/							\$0		
		uerro aestro à l'Acadra	Serie de la serie de			EXPENSES:		FIRM'S TOT	AL EXPENSE	S			\$550
<u> </u>		SUB-CONTRACTORS: Firm	n Initials and	Price Per Ta	sk		a and a second	FIRM'S TOT	FIRM'S TOTAL COST (no Subcontracts or Fee)			\$22,120	
FIRM:						Subtotal	10% Markup						
AMOUNT:						\$0		TOTAL SUB	CONTRACTO	R PRICES:			\$0

- - -----

## PROPOSED STATEMENT OF SERVICES

#### South Mack Drive Extension

Environmental assessment, surveying, traffic and safety analysis, preliminary engineering report, public involvement assistance, utility analysis, and plans, specifications, and estimate (PS&E).

### **ARTICLE B1** INDEX

B1.1 Index of Articles. Following is an index of the Articles and Subjects included in this Appendix B.

<u>Article</u>	<u>Task</u>	Subject
<b>B</b> 1		Exhibits
B2		Codes, Regulations, Standards, etc.
B3		Administrative Requirements
B4		Project Location and Description
B5		Summary of Contract Services
B6		Management
B7	1	Environmental Services
<b>B</b> 8	2	Surveying
B9	3	Traffic and Safety Analysis
B10	4	Preliminary Engineering Report
B11	5	Public Involvement
B12	6	Utilities
B13	7	Geotechnical Investigation
B14	8	Plans, Specifications & Estimate (PS&E)
B15	NIC	Construction Assistance

(NIC) is abbreviation for (Not In Contract); the Contracting Agency reserves the right to negotiate and add to this Article by Amendment, however, is under no obligation to do so, and reserves the right to complete the services by any other means.

#### **ARTICLE 1 EXHIBITS**

#### Exhibit Subject

- Project Location Map G-1
- G-2 Highways Standards and Guidelines
- G-3 Environmental Standards and Guidelines
- G-4 Sample Monthly Progress Report

#### **ARTICLE 2 CODES, REGULATIONS, STANDARDS AND PROCEDURES**

2.1 All studies, reports and design services shall be performed in accordance with applicable codes; regulations and standards; professional practice procedures; and commonly recognized construction methods. The Contractor shall consider the geographical location of the project as well as other environmental and site specific constraints when performing services for this project.

**2.2** Publications that contain the current highway and environmental standards and guidelines are listed in Exhibits G-2 and G-3. During the period of this agreement the listed documents may be added to, deleted or revised.

**2.3** English units of measurement shall be used throughout development of the project. Any metric conversions required shall be based upon the U.S. Survey Foot (1 meter = 39.37 inches exactly).

#### <u>ARTICLE 3</u> ADMINISTRATIVE REQUIREMENTS

**3.1 General.** The Contractor shall provide services as identified and authorized by sequentially numbered Notices-to-Proceed. The Contractor shall not perform services or incur billable expense except as authorized by a NTP.

**3.2 Project Staff.** Services must be performed by or under the direct supervision of the following individuals (replacement of, or addition to, the Project Staff named below shall be accomplished only by prior written approval from the City of Wasilla:

#### <u>Name</u>

Scott Hattenburg, P.E. (CE 6739) David Lundin, P.E. (CE 10127) Katrina Moss Carita Backman, E.I.T. Jeff Fuglestad Lorie Dilley, P.E. (CE 9256), C.P.G. Terri Mitchell Brad Rinckey, PLS (LS 11299)

#### **Subcontractors**

John Faschan, P.E. (EE 8286), EDC, Inc.
Randy Kinney, P.E., PTOE (CE 6036), Kinney Engineering, LLC
Gary Kowal, PLS (LS 8856), McClintock Land Assoc.
Phil Barnes, Hoefler Consulting Group
Burr Neely, MA-RPA, NLUR
Anne Brooks, P.E., Brooks & Associates
ABR, Inc.

#### **Project Responsibilities**

Contract Manager Project / Engineering Manager Environmental Manager Engineering Geotechnical Engineering Environmental Analyst Survey

Illumination & Traffic Signalization Traffic Engineering

Control Survey & ROW Environmental Site Assessment Cultural Resources Investigation Public Involvement Essential Fish Habitat Assessment

**3.3 Professional Registration.** Reports, plans, specification, estimates and similar work products provided by the Contractor shall be prepared by or under the supervision of the Registered Alaskan Engineer or Land Surveyor in responsible charge for the services. These

Engineers or Land Surveyors shall be currently registered in the State of Alaska and they shall sign, seal and certify as to the accuracy of each final work product for which they are responsible.

**3.4 Billing Reports.** The Contractor shall provide a two-page (typical) report with each monthly billing for months in which services are performed. The report shall follow the guidelines outlined in the Sample Monthly Progress Report, Exhibit G-4. Any delayed costs from previous billing periods that are included in the current billing must be clearly explained in the report.

**3.5** Correspondence. Correspondence prepared by the Contractor shall bear the City of Wasilla's assigned Project name and numbers (State and/or Federal).

**3.6 Documents and Reports** shall be printed with 12 point, Times New Roman font, solid black letters on white, 8.5-inch x 11-inch bond or "Xerox Copy" paper. Other size paper may be used for illustrations if they are folded to 8.5-inch x 11-inch size. Draft reports shall be double spaced, and final reports shall be 1 1/2 spaced. Original documents and reports shall be printed on one side of the paper only and shall be ready for copying. Original, camera ready, copies of final documents and reports shall be submitted to the Department for a check before printing.

**3.6.1 Copies.** When the Contract calls for multiple copies of documents or reports, the copies shall be printed on both sides of the paper. However, the cover and pages with approved illustrations, multicolored graphics, or photographs shall be printed on one side of the page only. All copies - except for originals - shall be comb bound.

**3.6.2 Page Numbers.** All documents shall be page numbered to allow every major Section, Chapter, Appendix, etc., to begin on a "right hand," odd numbered page.

**3.6.3 Covers.** The cover of all documents and reports shall include the following information:

- a) Name of document or report.
- b) Date.
- c) Indicate whether draft or final.
- d) Project Name.
- e) State and Federal Project Number(s).
- f) Prepared for: City of Wasilla.
- g) Prepared by:
- h) Map and/or picture of project area.

**3.6.4 Electronic Documents.** Final versions of all report submittals shall be submitted in PDF and MSWord format on a CD ROM along with the other deliverables.

**3.7 Contractor Name on Plan Sheets and Documents.** No Contractor logos shall be allowed on any electronic or hard copy document produced for the City of Wasilla. The Contractor company name shall be included in the box above or below the engineer's seal on each plan sheet.

Documents produced for the City of Wasilla shall include the Contractor's company name at the bottom right of the first page; cover sheet or title sheet only. Contractor letterhead shall be allowed only as exhibits in document appendices. The Contractor name shall be in the same font as other lettering on the plan sheet or document, shall be 1/16" or less in height on 11-inch x 17-inch plan sheets, and shall be in the following format:

#### PLANS DEVELOPED BY: HATTENBURG DILLEY & LINNELL

**3.8 Drawings, Plans, Maps, and Plats** shall be prepared in electronic format as specified by the City of Wasilla (currently AutoCAD 2002 compatible format).

**3.8.1** Unless otherwise stated, a standard layering scheme provided by the Department shall be used. Failure to adhere to this scheme will be cause for rejection. The format and standards for all drawings will be according to the most current DOT/PF Central Region Metric (as a guide) Highway Design Drafting Manual (currently dated August 18, 1998). The plotted scale shall be as specified by the City of Wasilla and/or DOT/PF.

**3.8.2** Drawings shall be produced and provided in English (foot units) format. Distances will be shown in horizontal ground foot units. Areas shall be annotated with "Ac." for acres, and "sq. ft." for square feet. Metric units shall not be shown on drawings developed for design work, unless requested to do so by the City of Wasilla.

**3.8.3** All linework and lettering must be of professional quality and all line widths and lettering sizes must be of such size that all information can be clearly shown without overlap or confusion. All lettering must be a minimum size of 0.1-inch. Lettering and linework must be in the appropriate black drafting ink. AutoCAD style names and fonts shall follow the City of Wasilla's specified standards.

**3.8.4** Linework shall not run through text. Do not break lines at text; mask the linework using color 155 solids. Solids shall be placed on the same layer as the text that the solid lies under. AutoCAD's Express Tools "textmask" may not be used.

**3.8.5** Drawings are to be accurate models of the data shown, e.g.; a line labeled N  $10^{\circ}00'00'' \to 104.35'$  shall be electronically drawn exactly as labeled, a line that is shown to terminate at a monument symbol shall be electronically drawn with no distance between the endpoint of the line and the center of the symbol, etc.

**3.8.6** A standard DOT&PF north arrow, a legend depicting symbols used, a foot unit bar scale, the drawing file name, date of last edit, and standard DOT&PF border will be included on each drawing.

**3.8.7** Plans, Maps, and Plats shall be submitted electronically on CD-ROM discs and with solid black ink on 22" x 34" original vellum or Mylar. **Final drawings** shall be on 4-mil double mat Mylar unless another medium is specifically called for in the Contract.

All final drawings shall be plotted so that the front surface of the Mylar is inkable and erasable. No Kroy lettering or "sticky back" applications shall be used.

**3.8.8 Drawings** not meeting these standards will be rejected. All drawing files shall be submitted electronically at the 10% completion level for a cursory review to ensure that these standards are being met unless otherwise directed by the Project Manager on the NTP.

**3.9** Estimates shall be submitted with solid black letters that are double spaced on white, 8.5 inch x 11-inch bond or "Xerox Copy" paper. They shall be printed on one side of the paper only and shall be ready for copying.

**3.10** Quality Control shall be performed by the Contractor prior to all submittals. The City of Wasilla will reject submittals that do not substantially conform to the requirements of this statement of services.

**3.11 Revisions.** Draft documents required under this agreement shall be submitted to the City of Wasilla for review. The Contractor shall modify work products in response to direction from the City of Wasilla. Corrections, adjustments, or modifications necessitated by the review/approval process which do not substantially affect the scope, complexity, or character of the services, shall be considered a normal part of the Contractor's services.

**3.11.1 Errors and Omissions.** Except as described in this Statement of Services, work products shall be complete when submitted to the City of Wasilla. Work products having significant errors or omissions will not be accepted until such problems are corrected.

**3.11.2 Review Meetings.** Following each review the City of Wasilla will provide written comments and may hold a meeting to discuss the issues. The Contractor shall allow three weeks for the return of written comments. The Contractor's personnel who are inresponsible-charge for the work products under review shall attend the meeting and they may be asked to interpret and provide explanations of the content.

**3.11.3 Comment Resolution.** The Contractor shall provide a written response with subsequent submittals that address all written and oral comments from the City of Wasilla. All changes from previous submittals shall be clearly explained. The Contractor shall address these comments to the satisfaction of the City of Wasilla prior to submitting the final documents.

**3.12 Reproduction.** Items delivered for reproduction shall be organized and camera ready for copying and not stapled or otherwise bound.

#### ARTICLE 4 PROJECT LOCATION AND DESCRIPTION

**4.1** General. South Mack Drive is located North of Wasilla. The existing 2-lane road has an at-grade crossing of the Alaska Railroad and continues 2/3 of mile to the City of Wasilla Multi-

Use Sports Complex. The purpose of this project is to extend South Mack Drive 1-1/2 miles south to Knik-Goose Bay Road. Two alignments that will facilitate a future intersection with Fairview Loop Road will initially be considered.

#### ARTICLE 5 SUMMARY OF CONTRACT SERVICES

**5.1 General.** The Contractor shall provide surveying for preliminary design, preliminary engineering, and environmental services necessary to obtain permits and clearances. The Contractor shall develop and implement a detailed Public Involvement Plan to achieve these goals. Development of a final Plans, Specifications, and Estimate assembly and construction assistance will be added by contract amendment.

**5.2** Cost Effective Design. The Contractor shall evaluate alternatives for each major design element to determine the most cost effective design. Conclusions shall state the recommended alternative and the reasons why it is recommended. The evaluation of each alternative shall consider minimum versus desirable design criteria, earthwork balance, design speed versus roadway classification, ease of construction, and the impact of each alternative on the following:

- a. Right-of-Way requirements
- b. Utilities
- c. Environmental concerns, including hazardous substances and wetlands
- d. The traveling public, both during and after construction
- e. Design Schedule
- f. Design, construction, and maintenance budgets
- g. Other issues as appropriate.

**5.3** There is no guarantee given that the Contractor will be required to provide all of the services detailed in this Statement of Services or that the Contractor will incur all of the costs estimated in Appendix C. Likewise, no guarantee is given that the Contractor will perform other services for the project beyond that defined in this contract.

#### ARTICLE 6 MANAGEMENT

6.1 **Performance Schedule.** The Contractor shall perform this contract according to the Project Schedule developed by the City of Wasilla and the Contractor. This schedule will show the interdependence and duration of the various design activities/contract tasks and will be sequenced in accordance with Federal Highway Administration requirements for project development and City of Wasilla's duration estimates in order to complete the project on time. This schedule shall be used to track Contractor progress and billings.

**6.1.1 Schedule changes.** Adherence to the Project Schedule is necessary to meet the City of Wasilla's long term goals and commitments. The Contractor agrees to expend all effort necessary to stay on schedule and meet the contract delivery dates.

**6.2** Meetings/Reports. The Contractor shall schedule and attend periodic briefing meetings (generally every other week) with the Project Manager. The Contractor shall be responsible for providing timely information required for the project related services performed by the functional groups within the City of Wasilla. The Contractor shall provide "exception reporting" of scheduled activities that are late, suspended, or significantly accelerated. The Contractor shall also explain why any activity is off schedule, or likely to become so. The Contractor shall also

**6.3 Project Coordination.** All coordination and correspondence for the project shall be handled through or with the concurrence of the Project Manager.

**6.3.1 City of Wasilla Activities.** The City of Wasilla's Project Manager will coordinate the Contractor's activities with those of various functional groups within the City of Wasilla.

**6.3.2 Agency and Public Coordination.** The Contractor shall coordinate with appropriate federal (e.g., EPA, USFWS, COE, etc.), state (e.g. DOT/PF, DEC, F&G, DNR – SHPO and Parks & Recreation), and local government agencies and the public, including local business groups, special interest groups and organizations that could be affected by the proposed project. The purpose shall be to inform these entities regarding the project and to allow them to identify concerns, suggestions and/or alternative solutions. This shall not include negotiating mitigation of potential impacts. The Contractor shall not commit the City of Wasilla to any action with respect to the proposed project. Any commitments to action or mitigation will be made by the City of Wasilla. Public Involvement is further addressed in Article 14.

**6.3.3 Correspondence.** The Contractor shall submit all written material, letters, survey forms, etc., used to communicate information regarding the project to the Project Manager for review and acceptance prior to its distribution. Copies of all outgoing and incoming correspondence shall be provided to the Project Manager at least once a week.

**6.3.4 Release of Information.** The Project Manager must approve the release of any project-related information.

**6.4 Right-of-Entry Permits.** The City of Wasilla will obtain Right-of-Entry authorizations or notices for the Contractor, when required. The Contractor shall provide a minimum of 10 working days advance notice for the City of Wasilla to acquire any authorization. Should the authorizations take additional time to obtain, performance schedule(s) may be adjusted accordingly. The Contractor shall not be entitled to any additional compensation for any delay incurred in obtaining Right-of-Entry Permits.

#### ARTICLE 7 - TASK 1 ENVIRONMENTAL SERVICES

7.1 General. This task shall be completed in accordance with Chapter 9, Environmental Review Procedures for State-Funded Projects, of the Alaska Environmental Procedures Manual.

The Contractor shall provide necessary studies, coordination, engineering and documentation to prepare, distribute, revise and obtain approval for an environmental document specifically for state funded projects. In addition, the Contractor shall coordinate with Federal, State, and Municipal agencies, and obtain required permits and clearances.

**7.2** Environmental Analyses. In accordance with procedures for State-funded projects, the Contractor shall provide necessary studies and impact assessments necessary. The studies will be used to assess and compare the impacts of the alternatives. These tasks will include:

**7.2.1 Wetlands Delineation and Functional Assessment**. The Contractor shall prepare a wetland delineation for alternatives and variations. The initial wetland delineation will be office-based, using existing information of the area. The Contractor shall complete the fieldwork and ground truth the delineation for the final document. Methodology for the delineation shall follow the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual. For the functional assessment, one of two methods shall be applied: the Municipality of Anchorage's Wetland Assessment Methodology of the the COE's 1995 Wetland Functions and Values: A Descriptive Approach. COE, EPA, MOA, ADFG, USFWS, NMFS, DEC, and NRCS shall be consulted as necessary to determine wetland functions.

7.2.2 Essential Fish Habitat Assessment If necessary, the Contractor shall conduct a fish habitat study to identify potential impacts to fish and aquatic habitats. The Contractor shall coordinate with ADOT&PF, ADF&G, USFWS, NMFS to identify the streams, ponds, lakes, and wetlands that could be affected by construction and/or operation of each alternative. Available information from the local sources then will be reviewed and assembled for each of the habitats and drainages identified above. Sources will include agency files, interviews with agency personnel, and existing study and planning documents. The information will be summarized in a table that lists each habitat area along with fish species present, species abundance, overall habitat sensitivity, and sensitive time periods for various life history stages. The Contractor shall perform a field reconnaissance of the potential alternatives. Aquatic habitats with potential to support fish resources will be described and photographed. The Contractor shall (1) review existing information on file for Lucille Creek at the Alaska Department of Fish and Game (ADF&G); (2) consult with management agencies and the public regarding the fish resources in Lucille Creek; (3) conduct a 1-day, reconnaissance-level, field sampling effort to determine fish occurrence at the crossing locations for the project alternatives; (4) prepare information on fish for the project environmental-checklist document; and (5) prepare an EFH Assessment document and any necessary agency coordination needed to obtain concurrence from NOAAFS on the EFH Assessment or the determination of no adverse effects on EFH.

**7.2.3 Upland Vegetation/Habitat Mapping**. The Contractor shall prepare mapping of the existing vegetation in areas of the proposed road alignments. The Contractor shall correlate this information on vegetation with wildlife usage and habitat. The Contractor shall (1) consult with management agencies and the public regarding the large mammal resources in the project area; (2) evaluate the current level of habitat fragmentation in the project area, emphasizing the Lucille Creek drainage as a corridor for mammal movements; (3) assess the potential impacts from the proposed project on known or likely large mammal movement patterns in the area; (4) prepare information on large mammals for the project environmental-checklist document; and

(5) develop possible measures to reduce impacts to large mammals and to minimize the moose-vehicle collision hazard for drivers.

**7.2.4 Hazardous Material Site Assessment**. The Contractor shall research existing data bases to identify known hazardous material sites, underground storage tanks, and leaking underground storage tanks along the corridor and prepare a Phase 1 Environmental Site Assessment report.

The Contractor shall conduct background 7.2.5 Cultural Resource Assessment. research and comprehensive literature review of background materials including but not limited to the National Register of Historic Places (NRHP) and the Alaska Heritage Resource Survey database, previous cultural resource reports in the vicinity, existing photographs and other project related documents. The Contractor shall develop preliminary cultural resource management recommendations to facilitate completion of fieldwork and provide recommendations to support selecting an alternative that best minimizes or avoids potential conflicts with historic and/or prehistoric properties. The Contractor shall produce an archaeological data assessment report detailing the findings of the pre-field research and submit a final version for the City of Wasilla and Office of History and Archaeology (OHA) submittal and review. This report will guide further management decisions and the selection of a preferred alternative with respect to avoiding or minimizing adverse effects to historic properties. All deliverables will be in secure electronic format (.pdf). The Contractor shall commence fieldwork after selection of a preferred route based on results of research.

The Contractor shall survey each proposed route if no preferred route has been selected. Field survey will include pedestrian transects of the route with discretionary subsurface testing. The survey will involve completing written field notes, GPS mapping of the APE, and necessary photographic documentation of the project area and evaluations of the cultural resources (if any). Fieldwork will conduced at a Level II or "Evaluation Phase" survey as defined by the OHA (Historic Preservation Series No. 11, revised 2003) designed to determine if properties identified in the APE are eligible for inclusion on the NRHP. The exact route of the selected alternative will need to be flagged in the field or represented by a georectified alignment shapefile that can be uploaded to our GPS unit to ensure accurate survey coverage.

The Contractor shall complete a comprehensive cultural resource survey report that will detail the results of the field investigations. The final report will comply with current OHA standards, and include a historic context of the project area, methodology, a summary of previous archaeological investigations and reports, detailed results, and management recommendations based on the results of the field survey. A final report shall be submitted to the City of Wasilla and State Historic Preservation Officer (SHPO) for compliance review. If additional information or extensive comments are returned from the SHPO, a cost estimate may be required to adequately respond. All written submittals will be provided in secure digital format (.pdf). A hard-copy (printed and bound) report will not be provided. Additional costs may be incurred for publication of hard-copy reports if required.

**7.2.6 Threatened & Endangered Species/Eagle Nest Assessment**. The Contractor shall coordinate with USFWS and ADF&G to identify any Threatened & Endangered Species in

the project area. In addition, any known eagle nesting sites along the project corridor will be identified. A field reconnaissance will be performed to verify the location of possible eagle nesting sites, and their location and activity assessed.

Additional studies and data may be added by contract amendment. These tasks may include:

- 1. Air Quality Analysis / Report
- 2. Noise Analysis / Report
- 3. Secondary & Cumulative Impact Study
- 4. Hazardous Material Corrective Action Plan

**7.3** Environmental Checklist. In accordance with procedures for State-funded projects, the Contractor shall complete an Environmental Checklist for the project to be constructed that documents the permits and clearances necessary for construction of the the project. Public and agency coordination may be performed to assist in determining what permits and clearances are required.

**7.3.1 Substance.** During the environmental review process the Contractor will identify a preferred alternative, the anticipated effects of the preferred alternative and identify the permits and clearances necessary for its construction. The Contractor will prepare a "preliminary engineering report" which recommends a preferred alternative and requests concurrence from the City of Wasilla. The level of detail in the memorandum will depend on the significance of the issues identified during early project development. Technical documentation shall be attached to the memorandum as appropriate. The checklist will provide the documentation necessary to assist the Corps of Engineers in preparation of their Section 404/10 permit decision document. The checklist will be attached to permit applications.

**7.3.2 Appendices.** All special studies, analysis and data collection performed for the checklist shall be documented in appendices.

**7.4 Permitting.** The Contractor shall apply for and obtain required Municipal, Borough, State, and Federal permits and certifications required for the construction of this project. The Contractor's services include acquiring environmental permits and certifications, to include the following, as necessary for the project:

- a) Department of the Army Section 404/10 permit.
- b) Section 401 Water Quality Certification
- c) Alaska Coastal Management Program Coastal Consistency Determination
- d) Alaska Department of Natural Resources Title 41 Permit
- e) Alaska Department of Fish and Game Special Areas Permit
- f) Matanuska- Susitna Borough Floodplain Development Permit
- g) Other required permits

**7.5 Public and Agency Coordination.** The Contractor shall determine the level of public and resource agency coordination as soon as possible after initiating the project. The Contractor shall work closely with the City and Borough to disseminate adequate project information in

order to solicit informed comments. The public and agency coordination process will help recommend a preferred alternative.

**7.5.1** The Contractor shall be responsible for mailing notices to interested agencies, organizations, and individuals on the project mailing list.

**7.5.2** The Contractor shall coordinate with any agency that must approve the project prior to construction (e.g. DOT/PF, SHPO, Corps, ADEC, or ADF&G).

7.6 **Revised Environmental Checklist.** The Contractor shall meet with the Project Manager to discuss how to respond to agency and public comments and issues brought forth at the public meetings, and what revisions will be necessary to the checklist. The Contractor shall revise the checklist as described in the Environmental Procedures Manual. The revised checklist shall include a copy of pertinent comments from the public and agencies and the City of Wasilla's responses. The checklist shall also include a copy of the public meeting comments and a recommendation of the preferred alternative.

#### 7.7 Deliverable Items.

<b>Type of Document</b>	Para	Copies	Originals
Environmental A	Analyses		
Draft	7.2.	0	1
Final	7.2.	0	1
Environmental C	Checklist		
Draft	7.3	0	1
Final	7.3	0	1
Permits			
Draft	7.4	0	1
Final	7.4	0	1

#### ARTICLE 8 - TASK 2 SURVEYING SERVICES

**8.1** The Contractor shall perform the services to standards called for in the <u>Alaska State</u> <u>Professional Land Surveyors (ASPLS) Standards of Practice</u>, the <u>California Geodetic Control</u> <u>Committee (CGCC) Standards for Band IV surveys</u>, <u>U.S. COE Manual EM-1110-1-10000 for</u> <u>Photogrammetric Mapping</u>, or the <u>DOT&PF</u> <u>Construction Surveying Requirements</u>, as appropriate to the services being performed. Studies, reports and services shall be performed in accordance with applicable codes, regulations and standards; professional practice procedures; and commonly recognized surveying and mapping methods. The Contractor shall not begin surveying for design, surveying for right-of way, or right-of-way mapping without specific written authorization from the City of Wasilla.

**8.2** The Contractor shall consider the geographical location of the project as well as other environmental and site specific constraints when performing services for this project.

**8.3 Registration.** Survey services shall be conducted by, or under, the direct supervision of a Professional Land Surveyor (PLS) holding current registration in the State of Alaska. This Land Surveyor shall be an active, on-site field supervisor of the survey crew and be directly involved in the preparation of the Base Maps. The field books, horizontal and vertical control summaries, survey control diagram, topographic mapping, adjusted coordinates, TIN certification, survey control sheet(s), final centerline control, and all final maps and plats shall be sealed, signed, and certified by the PLS responsible for the accuracy and completeness of the services.

**8.4** Field books. The Contractor shall furnish hardbound field books for recording survey information. The books shall become the property of the City of Wasilla after the survey information has been entered and the contract completed. Each book shall be labeled with the project name and an appropriate title, e.g. Horizontal Control, Vertical Control, etc., and shall have an index and comments page. The index page shall reference the contents by page number.

**8.4.1** Field notes shall be kept in a neat and orderly fashion. All pages shall be consecutively numbered, showing date, weather, and crew names. All abbreviations used shall be described on the comments page. Sketches are to be used frequently and shall be detailed enough to assist in following the progression of the services. Notes and sketches shall be adequately detailed to convey their intent to a person who is not familiar with the project.

**8.4.2** Descriptions of all monuments or other points, recovered or set, are to include the data stamped on the monument and the condition of the monument. A list of all corners searched for, but not recovered shall be included in the field notes. The DOT&PF Construction Surveying Requirements details the general note-keeping procedures.

**8.5 TINS.** The format for TINs is Land Development Desktop's TIN format with fault lines as 3D polylines and the boundary as a polyline at elevation zero. An AutoCAD drawing or DXF file with the TIN as 3-D polylines is an acceptable alternative; include the TIN boundary as a closed polyline at elevation zero, and the fault lines as 3D polylines. All TINs produced shall be checked by ground based survey methods and by field inspection of contours generated by the TIN. A TIN certificate shall be submitted, signed, and sealed by the responsible PLS and shall contain the following: 1) the methods used to gather data for production of the TIN(s), 2) the accuracy of the TIN(s), and 3) the checks used to substantiate the accuracy of the TIN(s). A sample certification of TIN is available from the City of Wasilla's Survey Section.

**8.6** Coordinate Files shall be comma-delimited ASCII text files. Data shall be in the sequence Point Number, N, E, Z, Description. Coordinates shall be given to eight decimals for the Northings and Eastings, and three decimals for elevations. Points of unknown elevation shall have a placeholder of -9999 in the Z position. Descriptors shall be no longer than 30 characters and shall not contain commas, question marks (?), or asterisks (\*). Descriptors are to be case sensitive, e.g.: Rebar5 shall not equal REBAR5.

Range	Use		
1-100	Primary Control Set (main project traverses)		
101-400	Baseline Control (set PIs, PTs, etc.)		
401-450 Secondary Control Set (secondary traverses and sideshots with val			
	elevation)		
451-550	Secondary Control Set (secondary traverses and sideshots without		
1	valid elevation)		
551-600	Recovered Published Hz. Control (NGS, GPS, etc.)		
601-2,000	Found monumentation/Property corners		
2,001-5,000	Computed/Protracted Points		
5,001-	Topography Survey Points		
20,000			
20,001-	Reserved for use by City of Wasilla		

**8.6.1 Point Numbering Scheme.** The following point numbering scheme shall be used:

The Contractor shall ensure that point numbers used in this task do not conflict with point numbers used in other survey tasks on this project.

**8.7** Survey Services shall be performed in the following sequence unless otherwise directed by the City of Wasilla:

- A. Research
- B. Pre-Work Meeting with the City of Wasilla and/or ADOT&PF
- C. Control Survey
- D. Aerial Photography/Photogrammetry

**8.8 Reviews.** Draft documents required under this agreement shall be submitted to the City of Wasilla for review. For maps and drawings, the Contractor shall submit a copy of the project coordinate file with point descriptors and the AutoCAD drawing file along with the final survey point plot.

#### 8.9 SURVEYING FOR PRELIMINARY DESIGN

**8.9.1** Control Surveys include establishing horizontal and vertical control points from existing monuments, from survey control points previously established by the City of Wasilla, and/or from points newly established by the Contractor, and also includes locating and establishing project coordinates for the existing centerline and any monuments within the project survey limits. The Contractor shall prepare a Survey Control Diagram (SCD) in AutoCAD format showing the results of the control surveys. All points used or tied as a part of these control surveys shall be included in the project coordinate file and shown on the SCD.

**8.9.1.1 Basis of Horizontal Control**. The primary control traverse will be provided by the City of Wasilla and will be the basis of control for the project. Any auxiliary control points necessary to augment this control shall be incidental to the task for which it is required. The local project coordinate system to be used shall be based upon transformation parameters supplied by the City of Wasilla.

**8.9.1.2 Basis of Vertical Control.** Primary vertical control data will be provided by the City of Wasilla and will be the basis of control for the project. Any auxiliary control points necessary to augment this control shall be incidental to the task for which it is required. The primary control points to be used shall be decided in discussion with the City of Wasilla.

8.9.1.3 Horizontal Control Standards. All horizontal control survey measurements shall be recorded in field books. The books shall also be used to record all measurements and references to control points found or set, section monuments, centerline monuments, and all found property corners. Electronic data collection is not acceptable for the above mentioned measurements. Global Positioning System (GPS) control surveys are the only exception when an approved GPS session log is used for static surveys. Distances shall be measured and recorded in both feet (nearest 0.01 foot) and meters (nearest 0.001 meter) as a check. Recorded angle sets, at a minimum, will contain a direct and reverse pointing of both the forward angle right and the horizon closure angle. When the difference between a direct and reverse pointing of an angle pair exceeds six seconds (ten seconds for distances of 150 feet or less), then that angle pair shall be rejected and remeasured. When the sum of the mean angle right and the mean horizon closure angle differs from 360 degrees by more than ten seconds, that angle set shall be rejected and remeasured. The adjusted angle right (the mean angle right corrected by one half of the difference between the sum of the means and 360 degrees) shall be used for all computations. All foresights and backsights shall be of the fixed leg type. Auxiliary control points and/or monuments may be side-tied, providing that the point is tied from two traverse points, or tied with two different backsight points (that are closed traverse points). The raw coordinate values for these side ties (calculated from the adjusted traverse coordinates) shall be within 0.10 feet. The final coordinate values for side tied points shall be the mean of the two raw coordinate values or proportionally weighted based on the strength of the observations. Auxiliary control points shall be, at minimum, a PK nail (mag nail preferred) in paved areas or a 6 inch spike in unpaved areas.

All traverses performed for this project shall meet or exceed the standards for Third Order Class I, Traverse Surveys as specified in the Alaska Society of Professional Land Surveyor's Standards of Practice. All traverses shall be closed; beginning and ending at known points with an allowable linear error of closure of 1:10,000 or better. In no case shall ground traverses run greater than 2 miles between GPS controlled points. Static GPS work shall meet current California Geodetic Control Committee (CGCC) Standards for Band IV Surveys. All geodetic positions shall be NAD83 based. Traverse and GPS network adjustments shall be by Simultaneous Least Squares Adjustment methods. The use of Post-Processed Kinematic (PPK) or Real-Time-Kinematic (RTK) GPS procedures are only allowed if the Contractor submits an observation plan including a plan for quality control to the Department's Locations/Survey Manager, or his designee, and such plan is approved by the Department for use on this project.

8.9.1.4 Vertical Control Standards. All vertical control survey measurements shall be recorded in field books, unless an electronic digital level is used and the data is recorded electronically, in which case the Contractor shall provide annotated copies of the raw and reduced data. All vertical survey circuits shall meet or exceed the standards for third order leveling as specified in the latest printing of the Federal Geodetic Control Committee's Standards and Specifications for Geodetic Control Networks. All vertical control points shall be part of a closed level loop; side-shots are not acceptable. Each loop shall be adjusted and this adjusted elevation used for any further loops. Loop closures and loop-adjusted elevations shall be shown in the field books. The books shall also be used to record descriptions and sketches of vertical control points found or set, condition of found points, and for electronically recorded data the loop information (start point, point(s) controlled, end point, etc.) necessary to interpret the data. Primary vertical control points (BMs and TBMs) shall be controlled by differential leveling. Elevations may be established for auxiliary control points by closed trigonometric loops, in which case sight distances shall not exceed 750 feet with foresights and backsights of approximately equal lengths, and the line of sight shall clear obstacles by a minimum of 1.5 feet to avoid the effects of adverse refraction. Elevation differences shall be measured and recorded to the nearest 0.01 foot.

**8.9.1.5 Primary Horizontal Control.** Primary control traverse points within the project survey limits shall be set at maximum 2640 foot intervals and as necessary to maintain line of sight, and shall consist of a minimum 5/8 inch x 30 inch rebar (5/8 inch x 10 inch in pavement) with identifying cap. These points shall be located off of the existing paved surface wherever possible, and shall be set at least 0.1 foot below the existing ground surface.

The Contractor shall prepare a narrative horizontal control summary detailing the datum, primary control points used, Basis of Bearings, type of adjustment performed and statistics, problems encountered during the survey, equipment used, etc., which shall include annotated copies of control computations and control adjustments, and a horizontal control statement. For GPS control surveys, the Contractor shall also provide copies of baseline vector files in both ASCII and native software format for all utilized GPS vectors, along with a RINEX2 format data file of at least 2 hours of GPS data for at least two control points in the Contractor's control network.

**8.9.1.6** Primary Vertical Control. Primary vertical control points shall be established every  $\frac{1}{2}$  mile or less. Existing official bench marks (BMs) shall be used wherever possible, with intermediate temporary bench marks (TBMs) established between them. These TBMs shall be stable objects such as luminaire and signal pole base bolts, spikes in trees, etc. Wooden utility poles shall not be used for TBM's. Where no permanent official bench marks exist, the Contractor shall establish a minimum of two permanent bench marks per project site, or one per mile, whichever is the greater number, for use through project construction. Permanent bench marks shall be at a minimum, 5/8 inch stainless steel rod driven 40 feet or until refusal into dry ground, encased by a 4 foot section of 4 inch well casing buried 3 feet into the ground with a rubber cap covering the top of the pipe, or a brass cap cemented into rock outcrops or

stable concrete structures, e.g. bridge abutments or building foundations and walls. A carsonite witness post shall be placed near each permanent bench mark, found or set. Refer to the <u>NOAA Manual NOS NGS 1</u>, <u>Geodetic Bench Marks</u> for recommended guidelines for setting permanent bench marks. Primary vertical control points, found or set, shall be described in great detail, identifying the particular physical feature used for the elevation point, and sketches shall be made to aid in this effort. Instructions sufficient to enable someone unfamiliar with the project to find these points shall be recorded; these instructions shall include distances and directions from recognizable terrain features such as major intersections, bridges, buildings, etc. All primary vertical control points, found or set, shall be tied to the project horizontal control and shown on the SCD.

The Contractor shall prepare and provide a narrative vertical control summary detailing the datum, primary control points used, vertical network adjustment data, problems encountered during the survey, equipment used, etc., which shall include a benchmark data sheet containing the name, description, final adjusted elevation, and instructions for finding each primary vertical control point, and a vertical control statement.

**8.9.2 Photogrammetry.** Contractor shall obtain aerial photography and associated photogrammetric mapping products. The City of Wasilla shall be granted rights to use of the aerial photography and associated delivered photogrammetric products, for project design and/or other in-house uses, including transmittal to contractors.

As an alternative to ground surveying, the Contractor may use controlled aerial photography to provide planimetric and topographic information. Use of photogrammetric data for this project is subject to the City of Wasilla's approval. Existing aerial photography, at a nominal scale of 1"=600', obtained in September 2008 is proposed. Products will include topographic mapping at a contour interval of 2 feet and planimetric features commensurate with a horizontal scale of 1"=100'. As aerial photography may be used for a variety of analyses, the photography shall be natural color film and have sufficient scale and resolution to allow for the preparation of the photogrammetric products which meet the required accuracies and provide economical acquisition. Aerial photography used for topographic mapping products shall be acquired during leaf-free and snow free conditions. Aerial photography used solely for orthophoto products may be acquired with leaf-on conditions. Existing photography may be substituted for new photography with the approval of the City of Wasilla Project Manager. All acquired aerial photography, and all photogrammetric products prepared by the Contractor, shall conform to the guidelines and standards of the US COE Manual EM-1110-1-1000 and shall be map checked to proof compliance with ASPRS Class I accuracy standards for the scale and contour interval required for the project. Aerial photography used for mapping products shall be controlled by the Contractor using methods suitable to return the desired mapping accuracies. Horizontal and vertical datum for the photogrammetric products shall be on the same datums as that used for the project control. Any photo pre-mark panel points shall be set and controlled for this task, using the same methods and materials as detailed for auxiliary control points presented above for Horizontal and Vertical Control. The Contractor shall determine the number of, location of, and panel size for these points in conjunction with the firm performing the aerial photography. Each photogrammetric pre-mark control point shall be marked using appropriate panel material. The Contractor shall remove and dispose of all panels set under this contract at the direction of the City of Wasilla. The use of the most cost effective techniques that will provide the specified products is encouraged. As a result of using existing photography, post-photo ID control points will be used for this mapping. All photogrammetric products for development of TINs shall meet the format, content, accuracy and certification requirements described in this section unless directed otherwise by the City of Wasilla.

**8.9.2.1** If aerial photography is acquired for, or available for use on this project, a digital orthophoto, geo-referenced to the project coordinates, shall be provided to the City of Wasilla for use in design. Orthophoto format shall be either uncompressed TIF with the associated world file, or geoTIF.

**8.9.3 Preliminary Right-of-Way Research.** Right-of-Way mapping will begin with in-depth research at the Department, the BLM, and the Borough Recorder's office. The Mat-Su Borough tax maps are an excellent tool to accomplish much of the basic research. Plats, owner names, and some elements of property history are quickly and easily available from these maps. Search coordinates for the required R/W markers, cadastral and property corners, as well as other boundary evidence will be generated for field use. PDF copies of source materials will be provided to the City of Wasilla on CD.

**8.10** Topographic Design Survey. Topographic features shall be surveyed using appropriate data collection methods. The Contractor shall prepare topographic drawings detailing the results of these surveys, at a scale of 1'' = 100'. The Contractor shall provide complete topographic mapping in a single AutoCAD drawing file along with a single TIN upon completion. All points located in these surveys shall be included in the project coordinate file. The Contractor shall:

**8.10.1 Define the existing ground surface** by creating a Triangular Irregular Network (TIN). The TIN shall be capable of accurately generating 2-foot contours. In determining contour accuracy, all checkpoints from quality control checks shall check within 1/2 of the specified contour interval. The TIN shall incorporate fault lines (grade breaks, existing centerlines, edges of pavement, curbs [flowline and top back], sidewalks, shoulders and/or tops of bank, toes of slope/fill, ditches and/or drainages, etc.) and additional shots as necessary to insure that the TIN accurately represents the **existing ground surface**. Water surfaces shall not be represented by the TIN. Sufficient data shall be gathered along driveways and side streets to allow grade matching. Provide TIN verification in the form of the City of Wasilla's TIN Certificate.

**8.10.2** Locate and map **existing improvements and utilities** (above and below ground) within the survey limits. Mapping of overhead utility wires shall include the apparent low point of the wire sag. Overhead wire crossings shall also be located at the existing and proposed centerlines. Elevations for these points shall be the bottom wire elevation.

**8.10.3** Locate and map all **drainage structures** within the survey limits. Record diameter, length, invert elevations, structure type and condition, high water marks, and apparent flow direction.

**8.10.4** After the City of Wasilla has reviewed the provided data, the Contractor may need to **extend the TIN & topographic mapping as specified** by the City of Wasilla for those areas where construction will be beyond the TIN generated earlier.

**8.11 Preliminary Right-of-Way Survey.** For the Preliminary Design Phase the Contractor shall locate a minimal number of section corners, subdivision corners and centerline monuments to allow us to accurately overlay the property lines with the photo mapping. Full Right-of-Way surveying shall be performed during phase 2 of the contract after the preferred alignment has been selected.

8.12 Right-of-Way Survey. (NIC) To be added by amendment.

#### ARTICLE 9 - TASK 3 TRAFFIC AND SAFETY ANALYSIS

**9.1 Capacity Analysis.** The Contractor shall perform an evaluation of the roadway alignment and its major intersections.

**9.1.1** The evaluation shall include: a presentation of the advantages and disadvantages of each intersection; level-of-service (LOS) of the facility including the roadway segments, intersections, utility relocation requirements, right-of-way impact, driveway impacts, and other pertinent factors. Scale drawings shall be prepared showing their respective lane configurations. A cursory overview of the alternatives is not acceptable.

**9.1.2** Generally, only alternatives that allow intersection(s) to operate at a level-of-service (LOS) C or better in the design year are acceptable. If LOS C can only be achieved by alternatives having excessive construction costs, LOS D may be acceptable based on a benefit/cost comparison of the alternatives. In such cases, the Contractor shall provide a benefit/cost analysis for each LOS D and LOS C alternative, consisting of a comparison of the total project cost including design and construction to the cost of traffic delay for each alternative.

**9.2** The Contractor shall perform the following additional studies as may be required for project development:

- a) Reconnaissance Level Access Study
- b) Pedestrian Studies to establish volume, flow characteristics, capacity, etc.
- c) Vehicular Speed Studies to determine existing characteristics.
- d) Traffic Signal Warrants Studies to determine need.

**9.3** Accident Analysis. The Contractor shall analyze historical accident data from computer reports provided by DOT&PF for the roadway and prepare analyses for major intersections and roadway segment(s) as required to identify accident patterns. The Contractor shall perform a field investigation of the project site. From this data the Contractor shall identify potential safety and roadway improvements to alleviate accident patterns.

**9.4 Design Designations.** The Contractor shall submit for approval, design designations for this project to include the following information for the current, mid year and design years:

- a. Annual Average Daily Traffic (AADT)
- b. Directional Distribution (D)
- c. Percentage of Trucks (T)
- d. Equivalent Axle Loads (EAL's)
- e. Design Speed (V)
- f. Design Hourly Volume (DHV)
- g. Turning Movements
- h. Pedestrian Traffic
- i. Bicycle Traffic
- j. Motorcycle Traffic

**9.5 Provided Items.** The City of Wasilla will not be responsible for providing traffic information. The Contractor shall obtain this information from other agency sources, or shall collect the data. The City of Wasilla shall assist in requesting information from Alaska State DOT&PF or from the Matanuska-Susitna Borough if required. Specifically, the City may be asked to intercede on behalf of the Contractor to obtain traffic volume data and crash data from DOT&PF, and volume data and to secure permission to use the TransCad Demand Model files from MSB.

#### ARTICLE 10 - TASK 4 PRELIMINARY ENGINEERING REPORT

**10.1 General.** The Contractor shall provide a Preliminary Engineering Report that presents and justifies design features of the proposed project including sufficient design to determine the most economical alignment.

**10.2 Content.** The Preliminary Engineering Report shall include information required by Chapters 4 and 11 of the Highway Preconstruction Manual. It shall present the project purpose; alternatives for major design elements; proposed design; roadway operational characteristics; construction and maintenance costs, environmental considerations; design standards; traffic analysis; cost estimate; and public input. The presentation of each design element shall conclude by stating the selected alternative and the reasons why selected. Other topics or sections may be required and shall be added to the Preliminary Engineering Report as appropriate. Section 4-40 of the Highway Preconstruction Manual provides additional content requirements for the predesign engineering document.

**10.2.1 Utilities.** The Contractor shall contact the utility companies for as-builts, and field review as necessary to determine major conflicts and relocation alternatives. The Contractor shall provide a conceptual level total utility relocation cost estimate.

**10.2.2 Right of Way.** The Contractor shall prepare a plan set showing the amount of right of way required for the preferred alternative.

**10.2.2.1 Conceptual Stage Relocation Report.** The Contractor shall prepare a Conceptual Stage Relocation Report which estimates the probable number of parcels for each alternative alignment, their acquisition and relocation costs, and the incidental cost of performing right of way activities. Each alternative alignment shall also be assessed in terms of the number and socio-economic effects of residential and business displacements it causes.

10.2.3 Bridges (NIC) To be added by amendment.

**10.2.4 Hydrology Study.** The Contractor shall calculate an estimated design flow rate through comparison of USGS equations and nearby gauged streams. The Contractor shall prepare a summary of basic culvert alternatives and costs for each location to determine the preferred layout and structure type to be used as a basis for final design.

**10.3** Estimates. The Preliminary Engineering Report shall include a detailed construction cost estimate in the format used in the sample typical Preliminary Engineering Report provided by the City of Wasilla. Pay item numbers, pay item names, and pay units shall match those in the Standard Specifications for Highway Construction. For items not listed in the Standard Specifications, the Contractor shall obtain the pay item numbers, names, and units from the City of Wasilla. The City of Wasilla will make its historical records available to the Contractor for the determination of unit prices. Both the preparer and checker shall sign and date the estimate.

**10.4 Reviews and Schedule.** A draft of the Preliminary Engineering Report shall be submitted for review. The City of Wasilla shall be allowed four weeks after the draft is submitted for the return of comments. The Contractor shall address these comments to the satisfaction of the City of Wasilla prior to making the next submittal. The final Preliminary Engineering Report shall be submitted to the City of Wasilla prior to, or with, the final submittal of the Environmental document.

**10.5** Approval. The City of Wasilla will review the Preliminary Engineering Report. The Contractor shall address City of Wasilla review comments and make corrections until the report is approved. Upon securing approval, the Contractor shall make any final corrections and submit originals of the report to the Project Manager for reproduction as necessary.

#### ARTICLE 11 – TASK 5 PUBLIC INVOLVEMENT

**11.1** General. For the purpose of this Agreement, Public Involvement is defined as the total effort, both informal and formal, made by the Contractor and the City of Wasilla to keep the public and agencies informed about the project, to ensure that reasonable alternatives are identified, and that public and agency concerns are considered and addressed.

**11.2 Public Involvement Plan.** The City of Wasilla and the Contractor shall jointly develop a Public Involvement Plan (PIP) setting out a formal strategy for communicating with the public and agencies about the project. The PIP may consist of a formal public hearing, informal public "open house" meetings, agency scoping meetings, workshops, user group meetings, presentations

at community council meetings, and presentations at local government meetings. The PIP may include tools for communication, such as; mailing lists, project phone lines, issues boards, Internet sites and newsletters.

**11.2.1** The Contractor shall, as required, conduct technical presentations at public and/or agency meetings, prepare and provide displays for such meetings, establish and maintain a project phone line and mailing list, create and maintain an issues board, and prepare and mail project newsletters.

**11.2.2** The Contractor shall keep records of a formal public hearing, informal public "open house" meetings, agency scoping meetings, workshops, user group meetings, presentations at community council meetings, and presentations at local government meetings.

**11.2.3** The Contractor shall develop and maintain a current mailing list of interested agencies, organizations, and individuals, including residents, and business and property owners adjacent to the project corridor. A copy of this list shall be given to the City of Wasilla when requested. Mailing labels shall be provided to the City of Wasilla to facilitate distribution of reports and documents.

**11.3 Other Public Involvement.** The Contractor shall provide additional support, as required, for informal public involvement throughout the project. This support may include providing written and/or oral responses - through the City of Wasilla - to requests for information about the project from individuals and/or agencies.

**11.4** Correspondence. The Contractor shall submit all original correspondence to the City of Wasilla as received.

#### <u>ARTICLE 12 – TASK 6</u> <u>UTILITIES</u>

**12.1 General.** The Contractor shall prepare a Utility Conflict Report and the Utility Relocation Agreements required for the project.

**12.2** Utility Conflict Report. The purpose of the utility conflict report is a record of: the existing utilities within the project limits; the conflicts with the proposed work; and the consideration of impacts on construction, relocation costs and right of way needs. The following information shall be included:

- a. Plan Sheets.
- b. Cross Sections.
- c. List of utility conflicts.
- d. Proposed solutions to all utility conflicts.
- e. Cost estimate for utility relocations.

**12.2.1 Plan Sheets.** The Plan Sheets shall be on 11-inch x 17-inch paper and shall include the existing utilities; proposed roadway and pathway improvements including slope limits; existing

and proposed right of way limits; existing and proposed drainage features; and any structures affected by proposed construction. Existing utilities within the project limits shall be identified including their size and type. Existing utility locations shall be based on the following in order of preference: field topographic surveys, as-built drawings, and utility system maps.

**12.2.2 Cross-Sections.** The cross sections shall be on 11-inch x 17-inch paper (unless 22" x 34" paper is specifically requested by the City's project manager) and shall include: the existing ground, the proposed finished ground, side slopes, and proposed right of way limits. To these cross sections the contractor shall add the existing overhead and underground utilities. If elevations of utilities are not available, the elevations shall be estimated from the utility permit depth requirements and based on utility company standard installation practices. Cross sections shall be included in all locations where utility conflicts exist or utility relocations are proposed. A cross section shall be included at each pipe crossing. Side street profiles shall be indicated on the appropriate stations.

**12.2.3 List of Utility Conflicts.** The Utility Conflict Report shall compare the proposed design of the roadway and appurtenances against the existing and proposed utilities and identify any conflicts. All conflicts will be identified and listed per utility affected.

**12.2.4 Proposed Solutions to all Utility Conflicts.** The report shall propose solution(s) to all conflicts and recommend a preferred solution if more than one is proposed. The contractor shall consider the following when selecting the preferred solution.

- a. Relocation costs.
- b. Additional right of way needs and cost.
- c. Alignment, profile or section modifications to resolve utility conflicts.
- d. Construction impacts.
- e. Project development timing.

**12.2.5 Cost Estimate for Utility Relocation.** The report shall include a cost estimate for relocating the utilities in conflict with the proposed project

**12.3** Utility Relocation Agreements. The purpose of the Utility Relocation Agreement is to provide for the relocation or adjustment of utility facilities in conflict with the proposed project. An Agreement may also be required to secure a utility provided service for the project. An Agreement is required to incorporate improvements requested by utilities into the construction contract. The Utility Relocation Agreements shall consist of:

- a. The City contract format for the appropriate agreement type.
- b. The billing format specific to the project.
- c. An estimate of cost, to be designated Exhibit A. The cost estimate shall separate federal participating and non-participating funds and indicate obligation of payment by utility companies or the City. The cost estimate shall include all utility relocations, constructed by the utilities or included in the PS&E package.
- d. A certificate of finding and project scope, to be designated Exhibit B.

- e. Utility design plans to be included in the PS&E package and project plans showing existing and proposed utilities, to be designated Exhibit C.
- f. Special provisions to be included in the PS&E specific to the utility relocation and coordination, to be designated Exhibit D.
- g. Utility plans not included in the PS&E package, to be designated Exhibit E.

**12.3.1 Coordination With Utilities.** The Contractor shall conduct all coordination activities and provide all information required to secure approval of the Utility Relocation Agreements with the utilities. The Contractor shall not commit the City to any action without prior written approval of the Contract Manager. The contractor shall be aware that until the utility is authorized to begin preliminary engineering design that any participation by the utility, except for supplying system as-builts, is voluntary. The Contractor will make the Utility Conflict Report, Cross Sections, other reports, and the PS&E assemblies produced for this project available to those designing the necessary utility relocations. The Contractor shall provide assistance interpreting these documents and sharing other information about this project to those designing the utility relocations.

**12.3.2 Utility Relocation Agreement Preparation.** The following steps, at a minimum, shall be completed in the development of the Utility Relocation Agreements:

- a. Prepare utility conflict report.
- b. Redline request and utility questionnaire concurrent with local review plans.
- c. Review redline drawings and compare to utility locations shown on the plans. Review property interest information for justification of relocation reimbursement.
- d. Prepare notice to relocate and authority to proceed with preliminary engineering for each utility concurrent with PIH review plans. Each notice shall request a one-line design, right of way requirements and a cost estimate to be submitted by the utility within 2 months.
- e. Recommend relocation scheme and reimbursement by the City based on utility design and negotiate with the utilities for final determination.
- f. Determine right of way requirements, if any, for utility relocations.
- g. Prepare authority to proceed (ATP) through final design and estimate letter to each utility.
- h. Prepare Section 105, Control of Work special provisions for inclusion in Plans, Specifications and Estimate package.
- i. Include utility one-line designs and draft special provisions in the Pre-PS&E review assembly.
- j. Prepare draft Utility Relocation Agreements for City's review.
- k. Prepare final Utility Relocation Agreements.

**12.4 Reviews and Schedule**. The Utility Conflict Report shall be submitted with the Pre-PS&E Review Assembly and shall indicate that conflicts (if any) have been resolved. Final Utility Relocation Agreements signed by the utilities shall be submitted with the Final PS&E assembly.

#### <u>ARTICLE 13 – TASK 7</u> <u>GEOTECHNICAL INVESTIGATIONS</u>

#### 13.1 Preliminary Geotechnical Investigation.

The contractor will perform an initial geotechnical investigation aimed at a general reconnaissance of the area of the proposed alternatives. This investigation will involve literature research, site visits, and hand-probing only. Literature review will include reports prepared for the sports center, airport and other projects. In early summer, during thawed conditions, the Contractor will walk proposed routes and collect soil data and samples from peat probes, hand-dug test pits, and surface features and vegetation. The contractor shall provide logistical coordination, utility locates (if any), and overall project coordination. The contractor will test select soil samples encountered for pertinent properties in its soils laboratory. The work will be performed in accordance with the DOT's May 2007 Geotechnical Procedures Manual. A geotechnical findings memo detailing the geotechnical data gathered and our interpretation of the subsurface conditions and anticipated variations between routes will be prepared to aid in selecting a preferred route.

#### <u>ARTICLE 14 – TASK 8</u> <u>PLANS, SPECIFICATIONS, AND ESTIMATE (PS&E)</u>

**14.1** General. The Contractor shall provide a Plans, Specifications, and Estimate (PS&E) assembly suitable for project bidding and construction. The PS&E assembly shall present the design that best accommodates the information derived from prior tasks. This task will be complete when the City accepts the **Final PS&E**.

**14.2 Plans-In-Hand Review**. This assembly shall consist of plans, specifications, and engineer's estimate and represent the design effort approximately 75% complete. Because this assembly will be used to begin right of way appraisal and acquisition and also to begin design of any required utility relocations, the slope limits given on the plans shall be final. The Contractor shall submit one set of 11"x17" black line plan sheets as stated below in the list of Deliverable Items. A field inspection of the project and a meeting shall be conducted to review the plans and discuss comments. The Contractor's personnel who are in responsible-charge of the PS&E assembly shall participate in the meeting and the field review.

14.3 **PS&E Review.** This assembly shall consist of complete plans, specifications and engineer's estimate plus the following:

- a. A recommended number of calendar days for the construction contract or a recommended construction contract completion date.
- b. A brief report of significant changes made to the assembly after the Plans-In-Hand Review meeting that were not discussed at that meeting.
- c. A brief (one or two sentence description) of the work required to construct this project.
- d. An 11"x17" black line plan set.
- e. Specifications, including the Special Notice to Bidders.

- f. Engineer's estimate.
- g. The Plans-In-Hand letter from the Contractor to the City that lists all the comments made on the Plans-In-Hand Review assembly and a response to each.
- h. Draft Erosion and Sediment Control Plan.
- i. A technical memo describing all non-standard design features and the reason(s) for them.

**14.4** Final PS&E Assembly. This review assembly shall consist of complete, sealed and signed, Plans, Specifications and Engineer's Estimate plus the following (Documents that include inadequate response to previous comments and documents with errors or omissions will not be accepted until such problems are corrected):

- a. A brief one or two sentence description of the work required to construct this project.
- b. A brief report of significant changes made to the assembly after the PS&E Review meeting but which were not discussed at that meeting.
- c. The original of all development documents.
- d. An Adobe PDF file of the plan set on CD-ROM plus one 11"x17" plan set on bond paper.
- e. Specifications in Adobe PDF format on CD-ROM and one original on bond paper.
- f. Engineer's Estimate.
- g. A letter from the Contractor to the City that lists all the comments made on the PS&E Review assembly and a response to each.
- h. Erosion and Sediment Control Plan.
- i. Letter describing any unusual features and the reason(s) for them.
- j. A request for the DBE goals on a form provided by the City which shall include a list of pay items in the engineer's estimate.
- k. Design summary memorandum noting major changes since completion of the Design Study Report (if any).

#### ARTICLE 15 – TASK 9 CONSTRUCTION ASSISTANCE (NIC)

The Contracting Agency reserves the right to negotiate and add to this Article by Amendment, however, is under no obligation to do so, and reserves the right to complete the services by any other means.