
MEMORANDUM

To: Mayor McConnell and Members of the Assembly
Mark Gorman, Municipal Administrator

From: Dan Tadic, P.E., Municipal Engineer *DT*
Stephen Weatherman, P.E., Senior Engineer *S*

Reviewed: Michael Harmon, P.E., Public Works Director *MH*
Mike Middleton, Deputy Finance Director *MM*
Tori Fleming, Contract Coordinator *TF*
Brenda Calkins Grant Accountant *BC*

Date: December 17, 2014

Subject: Eagle Way and Old Harbor Mountain Road Upgrades and Ownership Transfer
Approval to Award Design Contract

Background:

A Request for Qualifications for design of the Eagle Way and Old Harbor Mountain Road Utility and Road Upgrades Project was published in accordance with City and Borough procurement policy. The project includes reconstruction and paving of the roadways, storm facilities and a new water line within Eagle Way. The project also includes curb and gutter and a pedestrian amenity for Eagle Way where applicable. Five (5) proposals were received and scored by a Selection Committee consisting of CBS Public Works Department staff. A project team led by DOWL HKM was selected as the most qualified firm to complete the design.

DOWL HKM has provided a fee proposal for a not to exceed time and expense cost of \$112,728.00 for the design of the Eagle Way and Old Harbor Mountain Road Upgrades Project. A copy of that proposal is attached.

Analysis:

Public Works has set a design completion date of September, 2015. Construction is currently planned to begin spring 2016. The total project cost is estimated to be \$1,500,000. A Memorandum of Agreement (MOA) between the State of Alaska and the City and Borough of Sitka for Eagle Way has been signed. The MOA states that CBS will take ownership of Eagle Way upon completion of the improvements.

Fiscal Note:

The project is funded by way of the following source.

- 2012 Designated Legislative Grant Program \$1,500,000

Recommendation:

Approve award of a design contract for the Eagle Way and Old Harbor Mountain Road Utility and Road Upgrades Project to DOWL HKM with a not to exceed amount of \$112,728.00.

- The field work is expected to take two days, and we plan to perform the work in February. The report will be available approximately three to four weeks after completion of the field exploration.
- The findings of the field and laboratory testing will be analyzed and interpreted. A single report will be issued that presents:
 - The data obtained from the field exploration and laboratory testing,
 - Our analysis and interpretation of the data,
 - Recommended geotechnical design parameters for installation of the water and storm lines, and
 - Recommendations for associated construction earthwork and construction inspection and testing.
- Assumptions - The fee is based on the anticipated soil conditions, scope of work described above, and the following assumptions. If you have any additional information regarding the site conditions, if you would like the scope expanded, or if any of the assumptions are incorrect, please contact us so revisions can be made.
 - The client will assist with legal entry and access onto the site for DOWL HKM to perform the exploration.
 - The geotechnical investigations for Eagle Way and Old Harbor Mountain Road will be performed concurrently, under a single mobilization.
 - The site is accessible with a truck-mounted GeoProbe drill rig.
 - Traffic control consisting of signs and cones will be sufficient; no flagging will be required.
 - Test borings will be backfilled with cuttings.

Preliminary Engineering (35%)

- **Early February 2015** – As lead designer, I will perform on-site research and reconnaissance in conjunction with the geotechnical exploration and topographic survey. This 3 day site visit will also include meeting with you and CBS Public Works staff to review existing conditions; maintenance issues; and desired improvements for the roadway, water, sewer, and storm drainage systems. I will also plan to meet with residents of each street to gather information about individual properties.
- **Late March 2015** - DOWL HKM will provide the following deliverables:
 1. Geotechnical Report
 2. Completed Base Mapping
 3. Preliminary Design (35%)
 - Eagle Way:
 - Upon completion of the Base Map, work with CBS to develop the proposed layout, pedestrian improvements, and typical section
 - Make recommendations for the storm drainage system and the water main system
 - Drawings:
 - Title Sheet (covers both projects)
 - Legend Abbreviations, and General Notes (covers both projects)
 - Typical Sections
 - Test Boring Logs
 - Water Sewer & Storm Plan
 - Profile
 - Engineer's Estimate

Old Harbor Mountain Road:

- Upon completion of the Base Map, work with CBS to develop the proposed layout and typical section
- Make recommendations for the storm drainage system and the addition of a sanitary sewer manhole to the sewer main coming down the hill from the mobile home park.
- Evaluate the ground water seepage observed on the uphill end of the project area and make recommendations to address the problem.
- Drawings:
 - Typical Sections
 - Test Boring Logs
 - Sewer & Storm Plan
 - Profile
 - Engineer's estimate

Final Design (65% through Bid-ready Documents)

- **65%** design plans and updated engineer's estimate will be submitted electronically by the end of **May, 2015**. In addition to the plan sheets included in the 35% submittal, this submittal will include the Traffic Control Sheet, Demolition Plan, and the Curb & Gutter Layout. The submittal will also include draft Special Provisions and an updated engineer's estimate.
- **Public Meeting** – The Project Engineer will be available to attend a public meeting to discuss the project with property owners and stake holders affected by the two projects. We suggest holding a public meeting following the 65% submittal. However, we can change the timing of the public meeting if CBS prefers a different time frame.
- **95%** design plans and Special Provisions will be submitted electronically by the end of **July, 2015**. This submittal will have all plan sheets, Special Provisions, and engineer's estimate. This plan set will also be submitted to the Alaska Department of Environmental Conservation (DEC) for their Engineering Plan Review. CBS will submit fees for this review directly to the DEC.
- **100%** bid-ready contract documents with final engineer's estimate will be submitted in CBS format by the end of **September, 2015**. This submittal will include a full set of bid documents. The final civil plan set for both Eagle Way and Old Harbor Mountain Road will include the following sheets:
 - a. Cover sheet
 - b. General notes, abbreviations, and symbols
 - c. Survey control map
 - d. Sheet key map
 - e. Typical sections and Details
 - f. Demolition plans
 - g. Painted traffic markings (if appropriate) and signage
 - h. Grading plans
 - i. Sewer, storm and water plans
 - j. Profile views
 - k. Additional sheets as necessary

Following is our estimated fee proposal based on the preceding scope of work and a rough construction estimate of approximately \$840,000 total for both projects:

Survey and Mapping	\$19,509
Geotechnical Exploration	\$20,899
Civil Design (35%)	\$26,522
Civil Design (65% to Final)	<u>\$45,798</u>
TOTAL ESTIMATED NOT-TO-EXCEED FEE:	\$112,728

Please contact me if you have questions, or require additional information.

Sincerely,
DOWL HKM



Matt McGuan, P.E.
Project Manager

COST ESTIMATE PER TASK

FIRM: DOWL HKM		PROJECT TITLE: Eagle Way and Old Harbor Mountain Road Utility and Road Upgrades							
TASK NO. 3A	TASK DESCRIPTION: Engineering and Design - 35% Submittal	CLIENT: City & Borough of Sitka					DATE: 12/12/2014		
GROUP:	METHOD OF PAYMENT: FP <input type="checkbox"/> FPPE <input type="checkbox"/> T&N <input checked="" type="checkbox"/> CPFF <input type="checkbox"/>	PREPARED BY: M. McGuire							
SUB-TASK NO.	SUB-TASK DESCRIPTION	Engineer VII (PLH)	Engineer IV (MVM)	Engineer II (CS)	AutoCad Tech (JK)	Admin Assistant			
	Project Management		8			2			
	Preliminary Engineering - Eagle Way								
	As-Built Review & Site Visit		20						
	Conceptual Design Development	4	40						
	Title Sheet (covers both sites)				1				
	Legend & General Notes (both sites)				1				
	Test Boring Logs (both sites)		4		4				
	Typical Sections	2	8	4					
	Water, Sewer, & Storm Plan	4	8		2				
	Profile	2	4		4				
	Engineer's Estimate	1	8	2	2				
	Preliminary Engineering - Old Harbor Mtn. Road								
	As-Built Review & Site Visit		10						
	Conceptual Design Development	2	16						
	Typical Sections	1	1	4					
	Water, Sewer, & Storm Plan	1	4		2				
	Profile	1	2		2				
	Engineer's Estimate	1	4	2	1				
TOTAL LABOR HOURS		19	137	12	19	2			
* LABOR RATES (\$/HR)		\$180.00	\$135.00	\$105.00	\$100.00	\$85.00			
LABOR COSTS (\$)		\$3,420.00	\$18,495.00	\$1,260.00	\$1,900.00	\$170.00			
							COMMENTS:		
ITEM(S)	QUANTITY	UNIT PRICE	TOTAL PRICE						
Airfare (JNU-SIT round trip)	1	\$360.00	\$360.00						
Per Diem (4 days)	4	\$68.00	\$272.00						
Lodging (3 nights)	3	\$125.00	\$375.00						
Rental Car	3	\$90.00	\$270.00						
TOTAL EXPENSES:							\$1,277		
SUB-CONTRACTORS: Firm and Price Per Task							FIRM'S TOTAL COST OF LABOR (or Fixed Price): \$25,245		
							FIRM'S TOTAL EXPENSES: \$1,277		
							FIRM'S TOTAL COST (no Subcontracts or Fee): \$26,522		
							TOTAL SUBCONTRACTOR PRICES: \$0		
							TOTAL COST: \$26,522		

COST ESTIMATE PER TASK

FIRM: DOWL HKM		PROJECT TITLE: Eagle Way and Old Harbor Mountain Road Utility and Road Upgrades												
TASK NO. 38	TASK DESCRIPTION: Engineering and Design - 65% through Final Submittal	CLIENT: City & Borough of Sitka				DATE: 12/12/2014								
GROUP:	METHOD OF PAYMENT: FP <input type="checkbox"/> FPPE <input type="checkbox"/> T&M <input checked="" type="checkbox"/> CPFF <input type="checkbox"/>	PREPARED BY: M. McGuan												
SUB-TASK NO.	SUB-TASK DESCRIPTION	Engineer VII (PUH)	Engineer IV (MVM)	Engineer II (CS)	AutoCad Tech (JK)	Admin Assistant								
	Project Management		8			4								
	Public Meeting		8											
	Combined Plan Set													
	Title Sheet				1									
	Legend Abbreviations, & General Notes		1		1									
	Test Boring Logs		1		1									
	Typical Sections	2	4	8										
	Details		4	4										
	Assembly Tables		1		4									
	Demolition Plan		4	4										
	Curb & Gutter Layout, Grades, & Paving	8	80		12									
	Water, Sewer, & Storm Plan	8	40		12									
	Profile		2		8									
	Engineer's Estimate & Bid Tab	4	16	4	2									
	Special Provisions	4	40			8								
	DEC Review		16											
	Review Meetings	2	8											
	Assistance During Bidding	2	8											
TOTAL LABOR HOURS		30	241	20	41	12								
* LABOR RATES (\$/HR)		\$180.00	\$135.00	\$105.00	\$100.00	\$85.00								
LABOR COSTS (\$)		\$5,400.00	\$32,535.00	\$2,100.00	\$4,100.00	\$1,020.00								
							COMMENTS: FIRM'S TOTAL COST OF LABOR (or Fixed Price): \$45,155 FIRM'S TOTAL EXPENSES: \$643 TOTAL EXPENSES: \$643 FIRM'S TOTAL COST (no Subcontracts or Fee): \$45,798 TOTAL SUBCONTRACTOR PRICES: \$0 TOTAL COST: \$45,798							
SUB-CONTRACTORS: Firm and Price Per Task														
FIRM:														
AMOUNT:														