

*Should this item be pulled from the consent agenda, the following motion is suggested:*

**POSSIBLE MOTION**


**I MOVE** to approve and award a design contract for the Monastery and Baranof Street Water and Sewer Project to CH2M Hill with a not to exceed amount of \$119,500.00




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## MEMORANDUM

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

**From:** Michael Harmon, P.E., Public Works Director   
Stephen Weatherman, P.E., Senior Engineer

**Reviewed:** Dan Tadic, P.E., Municipal Engineer   
Jay Sweeney, Chief Finance and Administration Officer   
Tori Fleming, Contract Coordinator 

**Date:** October 8 , 2014

**Subject:** Monastery and Baranof Street Water and Sewer Project  
Approval to Award Design Contract

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Background:

A Request for Qualifications for design of the Monastery and Baranof Street Water and Sewer Project was published in accordance with City and Borough procurement policy. The project includes replacement of water and sewer mains within Monastery and Baranof between Sawmill Creek Road and Degroff Street. The project also includes curb and gutter, sidewalk and paving where applicable. Two (2) proposals were received and scored by a Selection Committee consisting of CBS Public Works Department staff. A project team led by CH2M Hill was selected as the most qualified firm to complete the design.

CH2M Hill has provided a fee proposal for a not to exceed time and expense cost of \$119,500.00 for the design of the Monastery and Baranof Street Water and Sewer Project. A copy of that proposal is attached.

Analysis

Public Works has set a design completion date of February, 2015. Construction is currently planned to begin spring 2015. The total project cost is estimated to be \$1,232,050.00.

Fiscal Note

The project is funded by way of the following sources.

- 2014 ADEC Loans
  - ADWF Loan Monastery & Baranof Water – SMCR to DeGroff \$497,000
  - ADCW Loan Monastery & Baranof Sewer – SMCR to DeGroff \$533,000
- 2015 ADEC Grants
  - MMG Grant Monastery & Baranof Water & sewer – SMCR to DeGroff \$763,000

- City and Borough of Sitka Capital Funding 2015

Monastery Street

\$102,000

Baranof Street

\$81,000

Total

\$1,976,000

**Recommendation:**

**Approve award of a design contract for the Monastery and Baranof Street Water and Sewer Project to CH2M Hill with a not to exceed amount of \$119,500.00.**



# Scope of Work for Baranof and Monastery Sewer and Water Main Replacement Project

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CH2M HILL (Consultant) shall provide the City and Borough of Sitka (CBS) the services presented herein related to the water and sewer main and associated road reconstruction along Baranof and Monastery Streets between Sawmill Creek Road and De Groff Street.

This scope of work includes survey, geotechnical investigation, design, and ADEC compliance document assistance. This scope does not include bidding services or services during construction. The detailed scope for each task related to the design of bid-ready documents for this project are detailed below.

## Task 1. Review Existing Data

This task will review the utility location, potholing and surveying work completed to-date and provide focused areas of attention to the survey sub-consultant where potential horizontal utility conflicts may occur. In addition, existing geotechnical data for the area will be requested and examined to assist with the development of the geotechnical data collection identified in Task 3.

### Deliverables

Notes to surveyor and meeting notes.

## Task 2. Survey and Base Map (Subconsultant)

This task will be performed by O'Neill Surveying and Engineering (Subconsultant). Prepare a right of way basemap and a topographic survey of existing ground and utilities along Baranof and Monastery Streets between Sawmill Creek Road and DeGroff Street. Survey datum and coordinate system will tie into that established for the rest of the City. Ground shots, elevations, and existing surface structures information will be collected within the project area, including areas outside of the right of way. Temporary traffic control will be provided by the Subconsultant to support surveying on an as-needed basis.

Prepare AutoCAD basemapping in accordance with assumptions and accuracies as set forth in the Scope of Services.

Utility locate requests will be submitted to CBS prior to field survey measurements.

The survey control and base maps will be sealed by a Professional Land Surveyor (PLS) registered and in good standing in the state of Alaska.

### Deliverables

- Topographical and utility basemap of project area, including utility pothole and geotechnical test pit locations.
- Right of way basemap of project area, showing existing right of way and parcels.
- Survey Control Sheet.

## Task 3. Geotechnical Data Collection

CH2M HILL will perform geotechnical investigation by drilling test holes on both Baranof and Monastery streets utilizing Blakeley's Drilling or other subcontractor available and approved by CBS. Test holes will be drilled within the right-of-way. Test holes will be backfilled with sand and cold patched. The level of effort assumes that the geotechnical investigation field work will be completed in one day, and that the drill rig will be utilized for 8 hours. Test hole locations will be surveyed as part of Task 2.

Laboratory testing and engineering analysis/evaluation will be performed. Field test hole log data, information, and conclusions of the analysis/evaluation will be summarized in the Geotechnical Data and Analysis Technical Memorandum.

CH2M HILL will identify locations for test holes, witness drilling and log results, collect samples for laboratory analysis. CH2M HILL will also request locates of ACS and GCI lines buried in the roadway.

Responsibilities of the Subconsultant will be to provide traffic control, drill and operator, sand for backfilling holes, and placing the cold-patch material.

CBS will provide locates for water, sewer, and power lines in the road and provide cold-patch material. The locate information can be combined with the survey locate requests in Task 2.

#### **Deliverables**

Geotechnical Data and Analysis Technical Memorandum

### **Task 4. Design**

The design will be completed in three stages:

- Predesign Report
- 60% Design
- 100% Design

#### **Predesign Report and 30% Drawings**

The Predesign Report will summarize the basis of design including code compliance, pipeline materials and sizes, and road criteria. Drawings will include plan, profiles and details. The drawings will be prepared using AutoCAD computer software. A design review workshop will be conducted in Sitka after completion of the 30% design to discuss any alternatives and finalize the design going forward. The project water/sewer engineer and project roadway engineer will attend the workshop.

#### **Deliverables**

- 30% Drawings
- Predesign Report
- Design workshop meeting notes

#### **60% Design**

The CBS 30% design comments will be incorporated into the 60% Design. This package will include 60% design of the drawings and specifications.

#### **Deliverables**

- 60% Drawings and Specifications
- 60% Cost Estimate

#### **100% Design**

The CBS 60% design comments will be incorporated into the 100% Design. This task will advance the design to a bid-ready package with all plan/profile drawings, details and general sheets (cover, index, legends).

#### **Deliverables**

- 100% Drawings and Specifications
- 100% Cost Estimate

## **Coordination with ADEC**

The 100% design will be submitted to ADEC drinking water and wastewater reviews. Required submission forms will be prepared. One set of responses to comments and updates to drawings and specifications is included.

### **Deliverables**

- ADEC Drinking Water Permit Application
- ADEC Wastewater Permit Application

## **Task 5. Services During Bidding**

CH2M HILL will prepare bid-ready documents in electronic format, including electronic signatures.

CBS will be responsible for all bid advertising and other bidding related costs during the bidding phase. CBS will be the primary point of contact for bidders during the bid phase. CBS will provide bidding services including bid package preparation, conducting the pre-bid conference, review of contractors' questions, preparation of addenda, and a recommendation for the apparent low bidder for the project.

CH2M HILL will participate via conference call in the pre-bid conference. CH2M HILL will provide technical interpretation of the contract bid documents and will prepare proposed responses to bidders' questions and requests, which may be in the form of addenda. CH2M HILL shall assist CBS in issuing Addenda to the Bid Documents. CBS will distribute the addenda to the bidders. All Addenda shall be approved by CBS.

## **Task 6. Services During Construction**

Services during construction can be added to the scope of this project as a change order if desired.

## **Task 7. Project Management**

The scope of this task is to provide the overall project planning, management, and coordination of efforts and the day-to-day administrative tasks required for the project.

CH2M HILL will prepare invoices for work completed and submit them to the City, approximately monthly. Additionally this task includes planning and coordination of design activities and setup of project files. It also includes the development of Field Safety Instructions for Consultant's staff that address site visits.

### **Deliverables**

- Progress reports and billing summary
- Monthly invoices for work completed

## **Assumptions**

The following assumptions were utilized in developing the scope and budget:

- The project is assumed to require three months for design and approval.
- Open-cut construction methods and lane shutdown will be the basis of design. Construction staging will require periods where the streets are closed to through traffic.
- No easements or new right of way are anticipated to be required. Temporary construction easements/permits will likely be required, but their number and characteristics are unknown. If temporary construction easements/permits are determined to be required, the contract will be amended. The Consultant and Subconsultant will provide parcel plats to CBS.
- New water services from the new main will connect to existing valves, assumed to be at the property line. New sanitary sewer services from the new main will connect to existing services at the property line.

- New storm drain will connect to existing storm drain on adjacent streets. Capacity and condition of the existing system is adequate for the additional volume and reconstruction of the system will be limited to tying into the nearest existing manhole.
- Subsurface utilities in the project area will be located and marked by CBS prior to the topographic survey. This includes water lines (mains, services, and valves), sanitary sewer lines (mains, services, and cleanouts), electrical lines, communication lines, gas lines, and any other utilities in the project area.
- Utilities in conflict with the project work will be adjusted by lowering or minimal relocation.
- Two different roadway cross sections will be presented at the Predesign submittal for each of the streets to maximize use of the ROW utilizing the CBS standard details. Selection of the project roadway cross sections will be made at the 30% design review meeting.
- Temporary Erosion and Sediment Control Plans are the responsibility of the construction contractor during their preparation of the Storm Water Pollution Prevention Plan.
- The design approach assumes use of CBS 2002 Standard Details and Specifications.
- CBS will provide existing CAD drawings in electronic format.
- The following preliminary drawing list is the basis of the budget.

### Preliminary Drawing List

Sheet No.	Title	Scale (full size)
1	Title Sheet	NA
2	Location Map and General Notes	NA
3	Survey Control	1"=40
4	Roadway Typical Sections	NA
5	Baranof Street Plan and Profile (Roadway and Storm)	1"=20
6	Baranof Street Water Plan and Profile	1"=20
7	Baranof Street Sewer Plan and Profile	1"=20
8	Monastery Street Plan and Profile (Roadway and Storm)	1"=20
9	Monastery Street Water Plan and Profile	1"=20
10	Monastery Street Water Plan and Profile	1"=20
11	Traffic Control Plan – Baranof Street	1"=20
12	Traffic Control Plan – Monastery Street	1"=20
13	Details	NA
14	Details	NA

## Budget

Work will be time and materials with a not to exceed limit as listed below. Additional breakdown of hours and staff is included in Attachment A. This breakdown is provided for information only. Actual hours and staff may vary within the total project not to exceed amount.

Task	Budget
Task 1: Review Existing Data	\$2,500
Task 2: Survey and Base Map	\$22,500
Task 3: Geotechnical Investigation	\$19,000
Task 4: Design	\$64,500
Task 5: Services During Bidding	\$3,000
Task 6: Services During Construction	TBD
Task 7: Project Management	\$8,000
<b>Total (not to exceed)</b>	<b>\$119,500</b>

## Schedule

Our CH2M HILL team is available to begin work upon Notice to Proceed (NTP). We propose the following schedule for completion of this project. The schedule is subject to change.

Submit plans to ADEC for Approval to Construct	December 2014
Construction Bid Advertising	February 2015
Bid Opening	March 2015
Assembly Approval to Award Construction Contract	April 2015

	Week							
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April
Notice to Proceed	●							
Review Existing Data	■							
Survey and Base Map	■	■						
Geotechnical Data Collection	■	■						
Prepare Bid Documents								
PreDesign		■						
60% Design			■					
100% Design			■	■				
ADEC Review and Approval				■	■			
Advertise						■		
Bid Opening							●	
Assembly Approval								●



# O'NEILL SURVEYING & ENGINEERING

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September 16, 2014

Matthew Haapala, P.E.  
CH2M HILL  
Anchorage, Alaska

RE: Sitka Baranof & Monastery Water/Sewer Main Replacement

Hello Matt,

Stephen Weatherman has asked for justification for the price differential between our proposed survey of Baranof and Monastery Streets, and that done earlier on Baranof St. between Lincoln St. and SMC. We have many reasons.

For the proposed survey, there are 24+ parcels involved, only 12 on the earlier survey. The proposed survey area was developed many years earlier than the area between SMC and Lincoln -- the pavement is old, the edge of asphalt dirt covered in places and difficult to locate, many more trees inside or near the right of way, more landscaping obstacles, many fences, and many more services to recover (and some are likely to be buried). In short, it will take longer and there will be more objects to locate per unit length of roadway than on the earlier survey. Also, the earlier survey was made during the summer. We will be working on this project in September and October, with fewer daylight hours and much wetter weather. Our prices have also gone up since 2011 -- as has the cost of insurance and the cost of living in Sitka.

I hope this adequately explains the cost differential. Again, if I have overestimated the effort required, the City will benefit by paying less for the project in the end.

Any questions?

Regards,

Pat O'Neill  
O'Neill Surveying & Engineering