

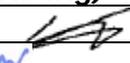
**CITY OF PALMER
ACTION MEMORANDUM NO. 13-056**

Subject: Authorize the City Manager to Amend the Professional Services Agreement with HDL Engineers to Add Construction Administration Services for the Southwest Utility System Extension, Phase IIa: Construct Reservoir 4 and Booster Station

Agenda of: September 9, 2013

Council Action: Authorized

Approved for presentation by:

City Manager (Acting) 
 City Attorney 
 City Clerk 

Certification of Funds:

Total amount of funds listed in legislation:	\$ <u>308,367</u>
This legislation (√):	
<input type="checkbox"/> Has no fiscal impact	
Creates:	
<input checked="" type="checkbox"/> A negative fiscal impact in the amount of:	\$ <u>308,367</u>
<input type="checkbox"/> A positive fiscal impact in the amount of:	\$ _____
<input type="checkbox"/> Funds are budgeted.	
Funds are budgeted from this (these) line item(s):	
a) ➤	\$ _____
b) ➤	\$ _____
a) Funds originally budgeted in line item :	\$ _____
Difference in budgeted funds:	\$ _____
b) Funds originally budgeted in line item :	\$ _____
Difference in budgeted funds:	\$ _____
<input checked="" type="checkbox"/> Funds are not budgeted.	
Budget amendment required in the total amount of:	\$ _____
Affected line item(s):	
➤ 24-20-06-6223 (#67116) W/E Const Eng & Mgmt (70%)	\$ <u>215,857</u>
➤ 24-02-06-6223 (#67116 City Match) 30%	\$ <u>92,510</u>
➤	\$ _____
<input type="checkbox"/> General fund unassigned balance (after budget modification)	\$ _____
<input type="checkbox"/> Enterprise unrestricted net position (after budget modification)	\$ _____
Director of Finance signature certifying funds:	<u></u>

Attachment(s):

- HDL Amendment Proposal dated July 30, 2013

Summary statement: This action will approve Amendment 5 to an existing Professional Services Agreement between the City and HDL Engineers for construction administration services related to the Palmer Southwest Utility System Extension (SWX) Phase IIa project.

Phase IIa of the SWX project includes extending the City domestic water system onto the Mat-Su College campus, construction of a 1 million gallon reservoir and construction of a booster pumping station to serve Pressure Zone 2.

HDL's scope of work under this amendment will include construction monitoring, coordination, administration, inspection, material testing, system startup, record drawings and project closeout. HDL proposes to provide these services on a time-and-expenses basis for a cost not to exceed \$308,367.

In reference to PMC 3.21.230, Governmental and Proprietary Procurements, HDL's extensive work over several years to design and administer the construction of the SWX project, their knowledge of the system and their role as the Phase IIa project design engineers reasonably limits the source of the Phase IIa construction administration services to HDL.

Bids for this project were opened in late June 2013. Frawner Construction was the apparent low bidder at approximately \$3.3 million. Due to the need for the City to secure a portion of the funding for this project, the bid award has been extended with Frawner's consent to October 25, 2013.

Administration recommendation: Approve action memorandum 13-056.

July 30, 2013

File: 78-046

Mr. Tom Healy, Director of Public Works
City of Palmer
231 West Evergreen Avenue
Palmer, Alaska 99645

Re: Amendment for Additional Construction Phase Services (Amendment 5)
Palmer Southwest Utility Extension, Phase IIa
Construct Reservoir 4 and Booster Station

Dear Mr. Healy:

This letter is an amendment proposal for the Palmer Southwest Utility System Extension (SWX), Phase IIa project. This proposal includes the addition of Construction Phase Services for the Reservoir 4 and Booster Station project.

Background and Summary

The SWX Phase IIa project includes extending the City of Palmer (City) domestic water system onto the Mat-Su College campus, construction of a 1.0 million gallon reservoir, and construction of a booster pumping station to serve Pressure Zone 2. Due to the magnitude of the project, the City chose to divide this project into two smaller projects: *Site Preparation and Water System Extension* and *Construct Reservoir 4 and Booster Station*. The design/bidding phases for the first project were completed in March of 2012 and a contract was awarded to Scarsella Brothers Construction for \$1.79 million. HDL is currently providing construction administration services for the *Site Preparation and Water System Extension* project; only a few small punch list items remain and final completion is expected in August 2013.

In late May 2013, final design for the second project, *Construct Reservoir 4 and Booster Station* project, was completed. Bids for the project were opened in late June 2013. Frawner Corporation was the apparent low bidder at approximately \$3.3 million.

Proposed Additional Services

TASK 9 –Construction Phase Services

Similar to previous portions of the SWX project, we propose to provide construction phase services for the *Construct Reservoir 4 and Booster Station* project. The scope of work for construction phase services is generally to provide complete construction administration and inspection services prior to and during the anticipated 58-week construction phase (August 15, 2013 through September 31, 2014). HDL will work closely with Public Works staff and will be the contractor's point of contact. Our scope of work will include construction

CIVIL
ENGINEERING

GEOTECHNICAL
ENGINEERING

TRANSPORTATION
ENGINEERING

ENVIRONMENTAL
SERVICES

PLANNING

SURVEYING

CONSTRUCTION
ADMINISTRATION

MATERIAL
TESTING

monitoring, coordination, administration, inspection, material testing, system startup, record drawings and project closeout:

- a. Monitoring and Coordination. HDL will coordinate and monitor the day-to-day activities of the project on behalf of the City. David Lundin, P.E. will be the Project Manager and Chris Bowman, P.E. will be the Project Engineer. Under Mr. Lundin's close supervision, Mr. Bowman will be the primary point of contact and will keep the City informed of progress, field directives, and changes as they arise and will prepare weekly written status reports.
- b. Project Start-up / Review of Submittals & Shop Drawings. HDL and our subconsultants will review material and equipment submittals, shop drawings, samples, and quality control submittals. HDL will conduct a pre-construction conference to review the contractor's schedule, establish procedures for submittals and shop drawings, and to establish a working understanding between the contractor, HDL, and the City.
- c. Project Administration. HDL will review administrative submittals, schedules, and contract closeout submittals. HDL and our subconsultants will review and respond to Requests for Information (RFIs) from the contractor. We will conduct formal bi-weekly construction meetings and will frequently meet informally with the Contractor and City to assist in coordinating the work. We will review the contractor's monthly pay requests, verify completed pay items or portions thereof, and make recommendations for payment by the City. HDL and our subconsultants will prepare Requests for Proposals (RFP's) for minor changes in the work, review contractor proposals and prepare Change Orders. We will provide written request for ADEC interim approval to operate the newly constructed water system upon substantial completion.
- d. Additional Landscape Design Services. During the late stages of design and bidding HDL met with the City and Mat-Su College officials to discuss the possibility of removing the artwork requirement from the land purchase agreement between the College and City. In lieu of the tank artwork, a solid color siding would be used on the tank exterior with landscaping to help obscure the tank. HDL will subcontract with Sustainable Design Group (SDG) to develop a landscaping plan which will be provided to the Contractor through an RFP.
- e. Construction Inspection & Quality Assurance Testing. HDL will perform periodic construction inspection during a 40-week field construction period. We anticipate our inspector will work an average of 16 hours per week during construction of the reservoir and booster station, except for three of those weeks, we will provide full-time inspection (50 hrs/wk) of below grade appurtenances (yard piping, foundations, etc.) Actual hours will vary depending on the Contractor's schedule. Our inspector will observe, test, and document the construction on behalf of the City. Documentation will include photographs and daily reports detailing the equipment, labor, inspections, testing, and activities occurring each day. HDL and our subconsultants will conduct formal

substantial and final completion inspections jointly with the City and prepare a substantial completion inspection report and list of deficient items.

HDL will provide quality assurance testing of soil and concrete materials to ensure the adequacy of the Contractor's quality control by performing the following independent tests:

- ✓ Approximately 20 field density tests,
- ✓ Approximately 4 laboratory moisture-density tests (Proctors) including soil gradations,
- ✓ Approximately 6 concrete field tests,
- ✓ Approximately 24 concrete cylinder break tests in the lab

In addition to the above mentioned quality control tests, an allowance of \$5,000 is included for any required special inspections for rebar, welding, high strength bolting, etc.

- f. System Startup. HDL will provide full-time representation during system startup to assist with and document the activities, our subconsultant, EDC will provide technical support from their Anchorage office. We anticipate that system startup will occur over the course of two weeks.
- g. Record Drawings/O&M Manuals and Closeout Documents. HDL and our subconsultants will review the contractor's construction markups and will prepare electronic record drawings. We will submit half-size record drawings on bond paper and will provide full- and half-size record drawings in Adobe PDF format; final AutoCAD files will also be submitted on CD for your records. HDL will submit record drawings to ADEC and will apply for Approval to Operate for the new water system on behalf of the City. We will review the contractor's operation and maintenance materials for deficiencies and submit the Contractor's bound copies to the City. For the construction contract closeout, we will request a release of liens and claims statement from the contractor and will distribute a project completion and acceptance certificate for execution.

Construction Phase Assumptions. The following assumptions were used to prepare this estimate for the full construction phase services option:

1. HDL will be the primary point of contact for verbal and written communications. We will provide coordination and monitoring of contractor activities on behalf of the City.
2. HDL will observe and document the construction with photographs and written daily reports. Copies of daily reports will be provided to the City on a weekly basis.
3. Excludes claims negotiations or protracted disputes with the contractor, repeated retesting due to inadequate contractor performance, or if the contractor's work extends beyond the performance period.

SCHEDULE

This proposal is prepared assuming work will begin immediately upon award. However, we also understand that award may be delayed while funding is finalized and our starting and ending dates are flexible. We anticipate that the Contractor will begin field work in mid to late September 2013. Contract substantial completion is required by August 31, 2014 with final completion set for September 31, 2014. If the contractor's work extends beyond the contract performance period, there may be additional cost to our work.

COST

We propose to provide the aforementioned services on a time-and-expenses basis using our published hourly labor rates and receiving reimbursement for subcontracts and expenses at cost plus 10% for a cost not to exceed **\$308,367**.

We appreciate the opportunity to work on this very exciting project and will continue to work towards completion. If you have any questions, you can contact me at 746-5230.

Sincerely,

HATTENBURG DILLEY & LINNELL, LLC



David Lundin, P.E./Principal
Project Manager

Attach: Fee Worksheet dated July 30, 2013 (3 pages)
EDC Fee Proposal dated July 31, 2012 (3 pages)
SDG Fee Proposal Email dated June 28, 2013 (1 page)

Cc: Chris Bowman, P.E.
Greg Wickham



July 31, 2012

Dave Lundin, P.E.
Hattenburg, Dilley, & Linnell
202 W Elmwood Ave, Suite 1
Palmer, AK 99645

Subject: Palmer Southwest Utilities Extension, Phase IIa – Additional Work Proposal

Dear Dave:

This proposal is for providing electrical and mechanical engineering services for additional scope on the Palmer Southwest Utilities Extension project per request by Chris Bowman via e-mail on July 11 and based on the July 26 site visits to Reservoir 1 and Wells 4 & 5. This proposal is based on the following:

SCOPE OF WORK:

PREVIOUSLY AUTHORIZED

We understand that the project will be repackaged to include the booster station building, site work, Reservoir No.4 and additional SCADA work for Reservoir 1 and Well 4 & 5, as the site grading and water main portions of the project were packaged separately and are already in progress. This will require revisions to the 95% drawings that were submitted in 2010 to include the following additions/changes.



Reservoir 4 Booster Station

- Potential replacement of the MiOX system with hypochlorite injection for disinfection
- Addition of a floor drain in the pump room
- Completion of toilet room fixtures and septic system
- On demand water heater
- Addition of CL analyzers
- Installation of a natural gas standby generator instead of diesel generator with consideration of multiple fuel sources (possibly on-site propane)
- Revisions to SCADA to include control of zone 2 pumps by system pressure, incorporation of a building low temperature alarm, and keypad/card entry system

Reservoir 1

- Replacement of the existing relay-based control panel with a new PLC-based SCADA control panel and radio link compatible with the planned system wide SCADA. All existing I/O will be reconnected to the new control panel
- Modifications to the existing radio towers to allow for new SCADA radio link

- Replacement of the existing tank level transducer and pressure transducer associated with the reservoir transfer pump system
- Addition of new building low temperature alarm, and security keypad/card entry system
- Addition of Ethernet/IP security cameras at requested locations

Wells 4 & 5

- Modification of existing PLC-based SCADA control panel to be compatible with the planned system wide SCADA.
- Addition of radio link equipment for connection to existing SCADA system
- Addition of radio tower for new SCADA radio link.
- Addition of Ethernet/IP security cameras at requested locations at the site

Bidding Assistance

Services to include answering questions and issuing addendums during bidding

PREVIOUSLY AUTHORIZED

Construction Assistance (CA)

Construction phase services to include:

- Submittal reviews
- Review of RFIs, assistance with RFPs
- Two (2) progress inspections
- Startup assistance
- Final completion inspection
- Record drawing production

*THIS
AMENDMENT*

MECHANICAL SCOPE:

Mechanical work effort will include revisions to the 95% drawings to add floor drainage and specify toilet room fixtures, including selection of on-demand water heater. Also included will be coordination with Enstar for additional demand on natural gas service for support of the natural gas generator and design of fuel supply to the generator set, along with investigation and design of alternate fuel system to support the generator set. Revisions supporting any change to the disinfection system will also be included.

ELECTRICAL SCOPE:

Electrical work effort will include revisions to the 95% drawings to add requested dual fuel generator and additional SCADA/radio upgrades to Reservoir 4, and SCADA/radio upgrades at Reservoir 1 and Wells 4&5 as defined in the above SCOPE OF WORK.

ASSUMPTIONS:

- Existing 95% drawings will be used as the basis for the additional work
- HDL will provide site revised background drawings and any site information if required
- EDC, Inc. will coordinate with TecPro in the development of the SCADA drawings and selection of OFCI equipment

EXCLUSIONS:

- This proposal does not include any electrical or telephone utility line extension design.
- It is assumed that MEA/MTA will provide service to the new reservoir site. EDC, Inc. will provide coordination with MEA/MTA only.

DELIVERABLES:

A full and/or half-size, reproducible copy of each of the design drawings will be provided. A copy of the specifications and engineer's construction cost estimates will also be provided. An electronic copy of the drawings in AutoCAD format, specifications in Word format and estimates in Excel format will also be available upon request.

FEE:

The fee to perform the above scope of work is:

Mechanical design revisions (Reservoir 4)	\$5,400	} <i>PREVIOUSLY AUTHORIZED</i>
Electrical design revisions (Reservoir 4)	\$4,450	
Electrical design (Reservoir 1)	\$16,250	
Electrical design (Wells 4&5)	<u>\$7,500</u>	
Total design	\$33,600	
Mechanical Bidding Assistance	\$1,500	} <i>PREVIOUSLY AUTHORIZED</i>
Electrical Bidding Assistance	<u>\$1,800</u>	
Total Bidding Assistance	\$3,300	
Mechanical CA fee	\$6,920	} <i>THIS AMENDMENT</i>
Electrical CA fee	<u>\$10,750</u>	
Total CM	\$17,670	

Please feel free to contact me if you have any questions concerning this proposal.

Sincerely,



John A. Pepe, P.E.
EDC, Inc.

From: [Eric Morey](#)
To: [Christopher J. Bowman](#)
Cc: [Luanne Urfer](#)
Subject: RE: Reservoir 4 and Booster Station Landscaping
Date: Friday, June 28, 2013 11:30:50 AM
Attachments: [image002.gif](#)
[image003.gif](#)

Chris,

We worked out some numbers for landscape screening for the Water tower.

Our fees are \$10,850.00. This covers the Landscape screening and options for planted berms and a semi decorative fence, if we decide that those are needed, they are included in the fee, if we decided to not need a fence, we can shave some off for the details etc.

If you need CA for this, we have put together a budget of \$1,600.

Total of NTE \$12,450.00 again this is worst case scenario!

Thanks for thinking of us, looking forward to working with you on this!

Connecting People – Creating Places

Come check us out at our new address below. We're in downtown Palmer helping renovate a historic building and breathe new life into it.

--

Eric Morey ASLA
Principal
Land Planner

Sustainable Design Group
Landscape Architecture and Land Planning

www.sdg-ak.com

247 South Alaska Street
Palmer, Alaska 99645

O: 907.745.3500

C: 907.720.3259



FEE PROPOSAL WORKSHEET
Amendment 5
Palmer Southwest Utility System Extension Phase IIa

TASK	ACTIVITY	QTY	RATE	HDL LABOR & DIRECT EXPENSES	REIMBURSABLE EXPENSES	SUB- CONTRACTS	SUBTOTAL	TOTAL
9.0	Construction Phase Services							\$305,225
	<u>Project Startup / Review of Submittals & Shop Drawings</u>						\$23,640	
	Project Manager	40 hrs	@ \$160	\$6,400				
	Project Engineer	120 hrs	@ \$110	\$13,200				
	Clerical	20 hrs	@ \$70	\$1,400				
	Structural Engineer (DGT)	24 hrs	@ \$110	\$2,640				
	<u>Assistance During Construction (58 weeks)</u>						\$143,870	
	Project Manager, 4 hrs/wk	232 hrs	@ \$160	\$37,120				
	Project Engineer, 12 hrs/wk	696 hrs	@ \$110	\$76,560				
	Clerical, 2 hrs/wk	116 hrs	@ \$70	\$8,120				
	Structural Engineer (DGT)	40 hrs	@ \$110	\$4,400				
	Mech., Elec. Engineer (EDC)	1 Allowance				\$17,670		
	<u>Construction Inspection (40 Weeks)</u>						\$81,710	
	Inspector, 12 hrs/wk	444 hrs	@ \$85	\$37,740				
	Inspector (OT), 4 hrs/wk	148 hrs	@ \$115	\$17,020				
	Inspection for Below Grade Const.	120 hrs	@ \$85	\$10,200				
	Inspection (OT) for Below Grade Const.	30 hrs	@ \$115	\$3,450				
	Vehicle	160 days	@ \$80	\$12,800				
	Miscellaneous Reimbursables	1 Allowance	@ \$500		\$500			
	<u>Additional Landscape Design Services</u>						\$15,490	
	Project Manager	8 hrs	@ \$160	\$1,280				
	Project Engineer	16 hrs	@ \$110	\$1,760				
	Landscape Design (SDG)	1 Estimate	@ \$12,450			\$12,450		
	<u>Quality Assurance Testing</u>						\$10,315	
	Geotechnical Engineer	8 hrs	@ \$135	\$1,080				
	Nuclear Densometer	10 days	@ \$35	\$350				
	Lab. Moisture-Density Test	4 ea	@ \$270	\$1,080				
	Soil Gradation	4 ea	@ \$150	\$600				
	Topsoil Test Set	1 ea	@ \$175	\$175				
	Concrete Field Test	6 ea	@ \$175	\$1,050				
	Concrete Cylinder Break	24 ea	@ \$20	\$480				
	Special Inspection	1 Allowance	@ \$5,000	\$5,000				
	Miscellaneous Reimbursables	1 Allowance	@ \$500		\$500			

FEE PROPOSAL WORKSHEET
Amendment 5
Palmer Southwest Utility System Extension Phase Ila

<u>TASK</u>	<u>ACTIVITY</u>	<u>QTY</u>	<u>RATE</u>	<u>HDL LABOR & DIRECT EXPENSES</u>	<u>REIMBURSABLE EXPENSES</u>	<u>SUB-CONTRACTS</u>	<u>SUBTOTAL</u>	<u>TOTAL</u>
	<u>System Startup</u>						\$13,760	
	Project Manager	16 hrs	@ \$160	\$2,560				
	Project Engineer	40 hrs	@ \$110	\$4,400				
	Inspector	80 hrs	@ \$85	\$6,800				
	<u>Record Drawings/O&M Manuals and Closeout</u>						\$16,440	
	Project Manager	12 hrs	@ \$160	\$1,920				
	Project Engineer	40 hrs	@ \$110	\$4,400				
	Drafter	60 hrs	@ \$95	\$5,700				
	Clerical	40 hrs	@ \$70	\$2,800				
	Structural Engineer (DGT)	12 hrs	@ \$110	\$1,320				
	Miscellaneous Reimbursables	1 Allowance	@ \$300		\$300			
Subtotal				\$273,805	\$1,300	\$30,120		\$305,225
10% Markup					\$130	\$3,012		\$3,142
Total Task 9				\$273,805	\$1,430	\$33,132		\$308,367