



	Approved	Denied
Date Action Taken:	5/14/07	
Other:		
Verified by:	K. Smith	

**WASILLA CITY COUNCIL ACTION MEMORANDUM**

**AM No. 07-23**

**TITLE: CONTRACT AMENDMENT TO RAVEN ENGINEERING IN THE AMOUNT OF \$37,934 FOR THE GARDEN TERRACE WATER MAIN EXTENSION ENGINEERING SERVICES.**

Agenda of: May 14, 2007  
 Originator: Public Works Director

Date: May 2, 2007

Route to:	Department	Signature/Date
	Police Chief Youth Court, Dispatch, Code Compliance	
	Culture and Recreation Services Director Library, Museum, Sports Complex	
X	Public Works & Recreation Facility Maintenance Director	<i>[Signature]</i> 5/2/07
X	Finance, Risk Management & MIS Director Purchasing	<i>[Signature]</i> 5-7-07
X	Deputy Administrator Planning, Economic Development, Human Resources	<i>[Signature]</i> 05-02-07
X	City Clerk	<i>[Signature]</i>

**REVIEWED BY MAYOR DIANNE M. KELLER:** *[Signature]* 5/8/07

**FISCAL IMPACT:**  yes \$37,934 or  no Funds Available  yes  no

Account name/number: Garden Terrace-City/ 320-4369-436.45-25 \$2,656  
 Garden Terrace-State/ 320-4369-436.45-35 \$18,967  
 Garden Terrace-Fed/ 320-4369-436.45-36 \$16,311

Attachments: Contract Amendment Cost Breakdown

**SUMMARY STATEMENT:** The City Council has authorized \$165,000 to Raven Engineering to date for engineering design services for this project through AM 05-02 in January 2005 and AM 06-07 in January 2006. The City Council has also authorized \$72,000 for construction administration and inspection to Raven Engineering for this project through AM 06-47. Phase 1 of the project is under construction and nearing completion that consists of two Pressure Reducing Valve (PRV) buildings and associated yard piping. Phase 2 design is also nearing completion that consists of approximately 1.4 miles of main line piping between the PRV buildings.

The proposed contract amendment provides for \$12,000 to complete the Phase 2 design and \$25,934 to complete Phase 1 construction administration and inspection.

The Phase 1 project construction cost is \$1,433,296 and the Phase 2 construction cost is estimated at \$2.5 million. The combined project cost is estimated at \$3.9 million. Typically, engineering design costs range from 7 to 9 percent of the construction cost that equals \$273,000 to \$351,000 in this case. With the proposed amendment added, the total design contract will be \$177,000 or approximately 5 percent of the construction estimate.

Typically, construction administration and inspection cost range from 9 to 12 percent of the construction cost that equals \$128,996 to \$171,995 for Phase 1 of the project. With the proposed amendment added, the total construction administration and inspection contract for Phase 1 will be \$100,934 or approximately 7 percent of the construction cost for Phase 1.

**ACTION:** Authorize the Mayor to execute a contract amendment with Raven Engineering in the amount of \$37,934 for Garden Terrace Water Main Extension Engineering Services.

Garden Terrace Water Main Design  
and

Old Mat Road and Garden Terrace Water Lines and PRV Buildings Construction  
Raven Engineering Inc. Additional Funds to Complete Project

Task	Hours	Hours @ \$75.00/Hour =	
Complete Design:			
Add tree lines	12		
Complete field work	6		
Check & correct design drawings	40		
Complete traffic control plans	12		
Complete specifications	20		
Complete bid schedule	40		
Assemble Project Manual	10		
Prepare Engineer's Estimate	10		
REI total fees		150	\$ 11,250
REI expenses			\$ 200
Weld procedures (QAS)			\$ 550
Design subtotal			\$ 12,000
Complete Water Line & PRV Bldg Construction			
REI civil/mechanical construction admin (SMM)		30	\$ 2,250
REI civil/mechanical construction admin (SMM)		3	\$ 27,000
Electrical construction admin (LE&C)			\$ 1,045
Testing (MHPE)			\$ 1,320
Welding QC (QAS)			\$ 1,100
Replace astragals (AKG&D)			\$ 264
Contingency			\$ 1,000
Construction subtotal			\$ 33,979
Total to complete design & construction			\$ 45,979
Funds available on 4/1/07			\$ (8,045)
<b>Additional Funds Needed</b>			<b>\$ 37,934</b>