TO: James L. App, City Manager

FROM: Doug Monn, Public Works Director

**SUBJECT:** Tower Road Wellhead and Pipeline Award

DATE: February 7, 2006

NEEDS:

For the City Council to consider supplementing the budget and award construction and soils engineering contracts, to install the Tower Road wellhead and main pipeline.

FACTS:

- 1. In May 2004, the City Council awarded a construction contract to drill a test well at Tower Road.
- 2. Based on the testing results, the well can produce a permanent production of 400 to 600 gallons per minute.
- 3. On November 16, 2004, the City Council authorized Cannon Associates to prepare construction documents for installation of the permanent wellhead and pipeline.
- 4. At the bid opening on December 22, 2005, eight bids were received ranging from a low of \$878,250 to a high of \$1,329,096.
- 5. The budget for the Tower Road Well is \$655,000. To date, \$419,208 has been spent for drilling of the test well and to prepare construction documents to install the permanent wellhead and pipeline. The remaining Capital Improvement Budget allocation for this item is \$235,800. A budget adjustment will be required to complete the project.

#### ANALYSIS AND CONCLUSION:

The addition of this water well is consistent with the City's General Plan and Water Master Plan. The benefits of installing additional wells include improved ability to meet the City's peak daily water demand, extend the life and efficiency of existing wells, and allow "downtime" for other City wells for maintenance purposes.

The Water CIP Budget was prepared in April 2005 and adopted in June 2005. At that time the project design had just begun. Final pipe size and pipe alignment for the project had not yet been determined and therefore the related costs could not be included in the adopted Water CIP Budget.

The adopted CIP Budget includes a budget to install two new wells; No. 10 with a budget of \$499,300, and No. 11 with a budget of \$500,000 (see attached). It is proposed that \$499,300 be de-appropriated from Well No. 10 and \$500,000 from Well No. 11 and re-allocated to supplement the Tower Road Well and Pipeline project.

# POLICY REFERENCE:

Water Master Plan

Capital Improvement Project Budget

# FISCAL IMPACT:

The approved budget for this project did not include water main pipeline installation as noted under Analysis and Conclusion.

To date, \$419,208 has been expended to drill the test well and design the final well facility and water main needed to deliver water into the City water system. \$235,800 remains. As detailed below, a total budget of \$1,040,000 is needed to complete the project.

#### **Needs:**

<u>Needs</u> :	
Construction	878,250
Soils Engineering	16,600
Construction Survey and Technical Support	
10% Contingency	
TOTAL	\$ 1,040,000
Resources:	
Budget remaining is	
Supplement from Water Development Impact Fees	804,200
TOTAL	\$ 1,040,000

This project is being funded from water development impact fees. Both the well *and* the water main are identified in the impact fee study adopted by Council for which fees are being collected. However, insufficient resources have been collected to date to accommodate the full cost of the proposed project as identified above in the context of the current adopted CIP budget. Thus, it is recommended that appropriations for one or more other projects in the adopted CIP budget be "unappropriated" so that the resources may be used to complete this project.

The adopted CIP Budget includes two wells, Nos. 10 & 11, with a budget totaling \$999,300. It is proposed that the Tower Road Well and Pipeline project budget be supplemented from the un-appropriated funds from these two well projects.

#### **OPTIONS:**

- a. Adopt Resolution No. 06-xx authorizing
  - 1) Appropriation of an additional \$804,200 to Budget No. 220.910.5452.322 for the Tower Road Project;
  - 2) De-appropriation of \$499,300 from Well No. 10 and \$500,000 from Well No. 11;
  - 3) Award of a construction contract to Raminha Construction in the amount of \$878,250 for the Tower Road Wellhead and Pipeline; and
  - 4) Award of a soils engineering service contract to Earth Systems Pacific in the amount of \$16,591.
- **b.** Amend, modify, or reject the above option.

#### Attachments (3)

- 1) Resolution
- 2) Bid Summary
- 3) Earth Systems Pacific Scope of Work and Fee Proposal

#### RESOLUTION NO. 06-

# A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES APPROPRIATING ADDITIONAL FUNDS AND AWARDING CONTRACTS TO INSTALL THE TOWER ROAD WELLHEAD AND PIPELINE

WHEREAS, addition of this water well is consistent with the City's General Plan and Water Master Plan; and

WHEREAS, in May 2004, the City Council awarded a construction contract to drill this new well; and

WHEREAS, a test hole was drilled, field data gathered, and the City's consulting hydro-geologist indicated that this test facility can be developed as a permanent production well with an estimated volume of 400-600 GPM; and

WHEREAS, on November 16, 2004, the City Council authorized staff to engage the services of Cannon Associates to prepare the construction documents to install the permanent wellhead and pipeline to add the Tower Road Well into the City's system; and

WHEREAS, at the Bid Opening on December 22, 2005, eight bids were received ranging from a low of \$878,250 to a high of \$1,329,096; and

WHEREAS, Earth Systems Pacific has submitted a Scope of Work and Fee Proposal, in the amount of \$16,591, for soils engineering services; and

WHEREAS, the adopted budget for the project (Account No. 220.910.5452.322) has a balance of \$235,800, and will need to be supplemented in order to install the pipeline to connect the well to the City's system; and

WHEREAS, in order to complete the project, a budget of \$1,040,000 is needed as follows:

Construction	878,250
Soils Engineering	16,600
Construction Survey and Technical Support	
10% Contingency	

WHEREAS, the adopted CIP Budget has a budget of \$499,300 to Well No. 10 and \$500,000 to Well No. 11; and

WHEREAS, it is recommended that \$499,300 be de-appropriated from Well No. 10 and \$500,000 from Well No. 11.

THEREFORE. BE IT RESOLVED AS FOLLOWS:

<u>SECTION 1.</u> The City Council of the City of Paso Robles does hereby appropriate an additional \$804,200 to Budget No. 220.910.5452.322 for the Tower Road Well Project.

<u>SECTION 2.</u> The City Council does hereby de-appropriate \$499,300 from Well No. 10, and \$500,000 from Well No. 11.

<u>SECTION 3.</u> The City Council of the City of Paso Robles does hereby award a construction contract to Raminha Construction in the amount of \$878,250 for the Tower Road Wellhead and Pipeline.

<u>SECTION 4.</u> The City Council of the City of Paso Robles does hereby award a soils engineering service contract to Earth Systems Pacific in the amount of \$16,591.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 17th day of January 2006 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

Frank R. Mecham, Mayor

Cathy M. David, Deputy City Clerk

				Raminha Co Atascado		MGE Unde Paso Rol			onstruction dero, CA	Ahrens Co San Die	
ITEM	DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE
1	Mobiliation (not to exceed 5% of bid), complete and in place, in accordance with the plans and specifications, for the price of	1	LS	20,000.00	20,000.00	40,000.00	40,000.00	26,927.00	26,927.00	12,650.00	12,650.00
2	Traffic Control, complete and in place, in accordance with the plans and specifications, for the price of	1	LS	5,000.00	5,000.00	698.00	698.00	3,827.00	3,827.00	65,320.00	65,320.00
3	10-inch diameter ductile iron water main (pressure class 350) from Sta. 5+00 to Sta. 68+50, complete and in place, in accordance with the plans and specifications, for the price of	6,350	LF	44.00	279,400.00	31.01	196,913.50	57.86	367,411.00	52.00	330,200.00
4	20-inch diameter welded steel casing pipe by jacking method including 10-inch DIP carrier pipe, complete and in place, in accordance with the plans and specifications, for the price of	200	LF	360.00	72,000.00	324.00	64,800.00	309.97	61,994.00	519.00	103,800.00
5	10-inch Gate Valve Assembly, complete and in place, in accordance with the plans and specifications, for the price of	3	EA	2,300.00	6,900.00	2,077.00	6,231.00	2,240.00	6,720.00	2,440.00	7,320.00
6	2-inch Air Release/Vacuum Release Assembly, complete and in place, in accordance with the plans and specifications, for the price of	3	EA	2,000.00	6,000.00	2,237.00	6,711.00	1,600.00	4,800.00	2,818.00	8,454.00
7	Fire Hydrant Assembly, complete and in place, in accordance with the plans and specifications, for the price of	7	EA	4,200.00	29,400.00	4,572.00	32,004.00	4,711.00	32,977.00	8,341.00	58,387.00
8	Wellhead Facility complete and in place, in accordance with the plans and specifications, for the price of	1	LS	459,550.00	459,550.00	553,589.50	553,589.50	481,846.00	481,846.00	520,000.00	520,000.00
	BID TOTALS:		<b>В</b>		878,250.00		900,947.00		986,502.00		1,106,131.00

			Raminha Construction Atascadero, CA		MGE Underground Paso Robles, CA		Wysong Construction Atascadero, CA		Ahrens Corporation San Diego, CA	
ITEM	DESCRIPTION	EST. QTY. UNIT	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE

				Special Service Construction Paso Robles, CA			Specialty Construction San Luis Obispo, CA		cer Inc. rande, CA	RSH Co Atasca
ITEN	DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE	UNIT PRICE
1	Mobiliation (not to exceed 5% of bid), complete and in place, in accordance with the plans and specifications, for the price of	1	LS	40,000.00	40,000.00	55,000.00	55,000.00	37,000.00	37,000.00	48,000.00
2	Traffic Control, complete and in place, in accordance with the plans and specifications, for the price of	1	LS	1,500.00	1,500.00	1,850.00	1,850.00	800.00	800.00	6,000.00
3	10-inch diameter ductile iron water main (pressure class 350) from Sta. 5+00 to Sta. 68+50, complete and in place, in accordance with the plans and specifications, for the price of	6,350	LF	68.76	436,626.00	57.00	361,950.00	55.50	352,425.00	78.00
4	20-inch diameter welded steel casing pipe by jacking method including 10-inch DIP carrier pipe, complete and in place, in accordance with the plans and specifications, for the price of	200	LF	556.00	111,200.00	559.00	111,800.00	450.00	90,000.00	363.00
5	10-inch Gate Valve Assembly, complete and in place, in accordance with the plans and specifications, for the price of	3	EA	1,500.00	4,500.00	2,350.00	7,050.00	1,650.00	4,950.00	6,000.00
6	2-inch Air Release/Vacuum Release Assembly, complete and in place, in accordance with the plans and specifications, for the price of	3	EA	3,000.00	9,000.00	2,275.00	6,825.00	2,500.00	7,500.00	4,800.00
7	Fire Hydrant Assembly, complete and in place, in accordance with the plans and specifications, for the price of	7	EA	5,885.00	41,195.00	4,100.00	28,700.00	4,900.00	34,300.00	6,000.00
8	Wellhead Facility complete and in place, in accordance with the plans and specifications, for the price of	1	LS	475,188.00	475,188.00	560,250.00	560,250.00	653,500.00	653,500.00	632,796.00
	BID TOTALS:				1,119,209.00		1,133,425.00		1,180,475.00	

					ice Construction Robles, CA		Construction Obispo, CA	R. Baker Inc. Arroyo Grande, CA		RSH Co Atasca
ITEM	DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE	UNIT PRICE	EXT. PRICE	UNIT PRICE

				nstruction adero, CA
ITEM	DESCRIPTION	EST. QTY.	UNIT	EXT. PRICE
1	Mobiliation (not to exceed 5% of bid), complete and in place, in accordance with the plans and specifications, for the price of	1	LS	48,000.00
2	<b>Traffic Control</b> , complete and in place, in accordance with the plans and specifications, for the price of	1	LS	6,000.00
3	10-inch diameter ductile iron water main (pressure class 350) from Sta. 5+00 to Sta. 68+50, complete and in place, in accordance with the plans and specifications, for the price of	6,350	LF	495,300.00
4	20-inch diameter welded steel casing pipe by jacking method including 10-inch DIP carrier pipe, complete and in place, in accordance with the plans and specifications, for the price of	200	LF	72,600.00
5	10-inch Gate Valve Assembly, complete and in place, in accordance with the plans and specifications, for the price of	3	EA	18,000.00
6	2-inch Air Release/Vacuum Release Assembly, complete and in place, in accordance with the plans and specifications, for the price of	3	EA	14,400.00
7	Fire Hydrant Assembly, complete and in place, in accordance with the plans and specifications, for the price of	7	EA	42,000.00
8	Wellhead Facility complete and in place, in accordance with the plans and specifications, for the price of	1	LS	632,796.00
	BID TOTALS:		annamo amo amo amo amo amo amo amo amo amo	1,329,096.00

		nstruction ₃dero, CA				
				idero, CA		
		EST.				
ITEM	DESCRIPTION	QTY.	UNIT	EXT. PRICE		



(805) 544-3276 • FAX (805) 544-1786 E-mail: esc@earthsys.com

December 7, 2005

RECEIVED

DEC 0 9 2005

Ms. Ditas Esperanza City of Paso Robles, Public Works Department 1000 Spring Street Paso Robles, CA 93446

Public Works Dept

PROJECT:

TOWER ROAD WELL & 10-INCH TRANSMISSION MAIN

DPW PROJECT NO. 02-20B PASO ROBLES, CALIFORNIA

SUBJECT:

Estimate of Costs for Construction Inspection and Testing Services

REF:

- 1) Contract Documents for Tower Road Pipeline, with Request for Proposal for Construction Inspection and Testing Services, by the City of Paso Robles, dated November 28, 2005
- Soils Engineering Report, Tower Road Well, Tower Road, East of Airport Road, Paso Robles, California, by Earth Systems Pacific, Doc. No. 0509-047.SER, dated September 12, 2005

#### Dear Ms. Esperanza:

As requested, this estimate of the costs to provide construction observation and testing services has been prepared for the planned development of the Tower Road well site. The project will generally consist of the following: the development of a gravel-surfaced access road (approximately 1,900 feet) to the well site from Tower Road; the installation of housekeeping and equipment slabs for pumps, valves, chemical storage and controls, with a prefabricated metal building at the well site; and the installation of approximately 6,500 feet of 10-inch transmission main to connect the well site with the City's distribution system at the Paso Robles Municipal Airport.

Our proposed scope of work was based upon a review of the project plans and our understanding of our expected duties. As the project is currently in the bidding stage, estimates were made of a possible construction schedule. Once a contractor has been selected, we recommend that this proposal be reviewed in conjunction with the contractor's schedule, to determine if refinements are needed.

We have assumed that the City will employ a separate overall project inspector to monitor installation of the pipeline, pumps, controls, and all other elements of construction not covered by this proposal. This proposed scope of work is for testing of the following: observation and testing of the preparation of subgrade and aggregate base for the access road; special inspection of concrete placement for the well building foundation and the equipment and housekeeping slabs at the well site; special inspection and testing as needed for epoxy/expansion anchors for



#### Ms. Ditas Esperanza

equipment installation; and compaction testing of screened sand, backfill and aggregate base (as needed) for the transmission main. We have assumed that testing of the concrete for the fence post bases will not be needed, and placement of this concrete will be monitored by the project inspector. This proposal does not include any special inspection (such as welding or bolting inspection) for the prefabricated metal building that will be constructed at the pump site; as this building is to be provided entirely by the contractor (including the design), its requirements for testing are unknown at this time. An estimate for special inspection of the metal building can be provided following its design and determination of testing/inspection requirements. It is also assumed that all materials of construction not specifically noted for testing in the following estimate will be accepted based on the manufacturer's certifications.

It is our understanding that this project is subject to California Prevailing Wage Law.

Our anticipated scope of services and estimated costs are as follows:

#### A. Grading Observation and Compaction Testing

Provide grading observation and testing services during preparation of the well site and the access road (bottom of overexcavation, subgrade and aggregate base), and provide compaction testing on an intermittent basis for backfill of the water line (bedding, general backfill, and subgrade and aggregate base). We have assumed that asphalt patching of trenches, where utilized, will not be tested, and will only be monitored during placement by the project inspector and accepted based on material certifications provided by the supplier. Assuming the contractor has approximately 900 feet of trench ready for testing per visit, thirty site visits have been planned, with an average of 3 billable hours per visit. Two compaction reports are planned for the project. It is assumed that all tests will be located in the reports by station and offset, rather than by mapping.

Field technician		90 hrs. @ \$84.00/hr.	\$7,560.00
Mileage	30 visits	@ 80 miles/visit @ \$0.60/mile	1,440.00
Nuclear density te	sts	150 tests @ \$10.00/ea.	1,500.00
Maximum density	optimum/		
moisture tests	<del>-</del>	8 tests @ \$140.00 ea.	1,120.00
Sieve analysis tes	ts		
(pipe bedding ve	rification)	2 tests @ \$65.00 ea.	130.00
Sand equivalent t	ests		
(pipe bedding ve	rification)	2 tests @ \$80.00 ea.	160.00
Proj Mgmt and Pr	re-Job Mee	ting	
Sen. Engineer		8 hrs. @ \$125.00/hr.	1,000.00
Mileage	1 visit @	70 miles/visit @ \$0.60/mile	<u>42.00</u>

Subtotal, Grading Observation/Compaction Testing

\$12,952.00



#### Ms. Ditas Esperanza

#### B. Concrete Special Inspection, Sampling and Testing

Per Sheet S1 of the project plans, provide special inspection for placement of concrete for the well site equipment slabs and the metal building foundations and slabs, fabricate samples, and pick up and test samples for compressive strength. Verify reinforcing steel placement. Assumes 2 placements for structural concrete, with 5 hours of billable time per placement, and 2 additional inspections to verify reinforcing steel placement. We have assumed that cement and aggregates will be accepted by the engineer based on material certifications, and the cost of any required mix designs will be borne by the supplier.

Reinforcing Inspec	tion	6 hrs. @ \$84.00/hr.	504.00
Mileage	2 visits @	80 miles/visit @ \$0.60/mile	96.00
Placement Inspecti	on	10 hrs. @ \$84.00/hr.	840.00
Mileage	2 visits @	80 miles/visit @ \$0.60/mile	96.00
Compression tests		2 sets @ 3/set @ \$20.00/ea.	120.00
Sample Pick up (N	on PW)	3 hrs. @ \$55.00/hr.	165.00
Mileage	2 visits @	80 miles/visit @ \$0.60/mile	96.00
Report Preparation	, St. Engr.	1 hour at \$ 90.00/hour	<u>90.00</u>

Subtotal, Concrete Special Inspection, Sampling and Testing \$2,007.00

#### C. Epoxy and Expansion Anchor Inspection and Testing

Provide inspection and torque/tension testing as needed for installation of epoxy or expansion anchors. Assumes 3 site visits for installation inspection and/or testing, with an average of 4 billable hours each.

Estimated Total, Construct And Testing	\$16,591.00					
Subtotal, Epoxy/Expansion Anchor Inspection/Testing \$1,632.00						
Report Preparation, St. Engr	2 hours at \$ 90.00/hour	<u>180.00</u>				
Mileage 3 visits @ 80	miles/visit @ \$0.60/mile	144.00				
Equipment	12 hrs. @ \$25.00/hr.	300.00				
Epoxy/Expansion Anchor						
Inspection/Testing	12 hrs. @ \$84.00/hr.	\$1,008.00				
Epoxy/Expansion Anchor						