TO: James L. App, City Manager

FROM: **Doug Monn, Interim Public Works Director** 

SUBJECT: **Award Water Storage Tank Site Alternative Investigation** 

DATE: August 2, 2005

NEEDS:

For the City Council to consider awarding a contract to conduct an investigation of alternative water tank sites at Chandler Ranch and at the southwest part of the City (Trent property).

FACTS:

- 1. The City needs to continue its efforts to investigate and identify potential tank sites to adequately meet existing and future fireflow and water service demands.
- It is the City's policy to develop gravity-fed water supplies. Water storage facilities based on gravity pressure are more reliable in times of emergency/power loss. Consequently, the topographic setting/elevation of tank sites is a strategic consideration.
- The number of area tank sites with suitable elevation to accommodate a gravity-fed system is limited. There are candidate sites in the Chandler Ranch area and near the southwest corner of the City.

#### ANALYSIS

AND

**CONCLUSION:** Boyle Engineering is currently assisting the City with its Water Master Plan update, Integrated Water Resource Plan preparation, and Ladera and 21st Street water tank site investigations. They are very familiar with the City's current water system needs and challenges. Consequently, Boyle was asked to estimate a cost to investigate the viability of additional potential water tank sites. Their preliminary investigation would include site geotechnical analysis, biological and cultural surveys, visual impact analysis, and cost estimates. The preliminary investigations are estimated to cost \$62,000.

#### POLICY

**REFERENCE:** General Plan; Water Master Plan

FISCAL

**IMPACT:** 

Appropriate \$65,000 to perform tank site investigation studies at Chandler Ranch and at South Vine Street.

**OPTIONS:** 

- **a.** Adopt Resolution No. 05-xx to:
  - (1) Appropriate \$65,000 from the Water Enterprise Fund to Budget No. 600-310-5224-782, and
  - (2) Authorize the City Manager to engage the services of Boyle Engineering to perform investigation of three (3) tank sites in Chandler Ranch and four (4) sites at South Vine for \$62,034.
- **b.** Amend, modify, or reject the above option.

#### Attachments (2)

- Scope of Work and Fee Proposal 1)
- Resolution



1194 Pacific Street, Suite 204 San Luis Obispo, CA 93401 TEL: (805)542-9840 FAX: (805)542-9990 www.boyleengineering.com

Employee Owned

Ditas Esperanza, PE Capital Projects Engineer CITY OF PASO ROBLES 1000 Spring Street Paso Robles, CA 93422

July 6, 2005

#### **Chandler Ranch Reservoir - Site Alternative Investigation**

#### Dear Ditas:

This letter outlines the scope of engineering services proposed for the investigation of potential reservoir sites capable of providing future water storage within the City's Main East pressure zone, or to serve as an alternative site for the planned Ladera Reservoir Project. The objective of this investigation is to assess the suitability of four (4) potential reservoir sites (three [3] sites¹ within the planned Chandler Ranch development and one site located on the southwest end of the City²), and to identify issues and site constraints that may prove prohibitive to their development. This "fatal flaw" analysis will include the characterization of subsurface soil conditions, identification of potential biological and cultural impacts, preliminary visual simulation of the proposed reservoirs, and a relative project cost assessment for the four alternatives under consideration.

#### **Scope of Engineering Services**

#### Task 1 Project Kick-Off.

Boyle will attend a kick-off meeting with City Staff to review the project scope, schedule, responsibilities of the project team, available information, and project deliverables. Upon completion of the meeting, a field visit will be attended by the project team to identify any specific concerns prior to the initiation of work.

#### Task 2 Reservoir Center Staking

Twin Cities Surveying of Templeton will provide preliminary staking of reservoir centers at all four sites.

#### Task 3 Geotechnical Exploration, Analysis, and Preliminary Report

Fugro West, Inc. of San Luis Obispo will provide geotechnical services for the alternative site evaluation to identify any potential fatal flaws that may exist. Once a specific site and pipeline alignment are selected, a detailed soils evaluation will be required to augment this effort prior

W:\P5320005 (Ladera Res)\New Chandler Ranch Siting Study\Final Proposal Letter (Chandler Ranch Siting Study)\_rev.doc

<sup>&</sup>lt;sup>1</sup> Reservoir Sites to be evaluated are "City Site", "Alt. B", and "Alt. C", see Plate 1.

<sup>&</sup>lt;sup>2</sup> Southwest site is located west of Highway 101 near the southern City Limits. The property is currently owned by the Tatum Trust, see Plate 2.

Task 4

	eration of construction plans and specifications. The detailed soils evaluation is outside bosed scope of work. The geotechnical scope of work is summarized below:
	Two (2) exploratory borings (to a depth of 20 feet and 40 feet) at each site to characterize and evaluate the existing subsurface soil conditions
	Characterization of the subsurface materials and groundwater conditions at the proposed reservoir locations
<b>Q</b> ĵ	Preliminary evaluation regarding potential for tank sites to be impacted by geologic hazards such as seismic activity and liquefaction
	Preliminary design recommendations for reservoir foundation preparation and backfill requirements
	Preparation of a preliminary geotechnical report summarizing results and opinions regarding the subsurface soil conditions each of the four sites
	cal Resource Survey Volff Environmental of Los Osos will survey and assess existing biological resources
at the re	servoir sites under consideration. The Task 3 scope of work is summarized below:
	Review of available background information and search of California Natural Diversity Data Base (CNDDB)
	Field reconnaissance of biological resources at project site to record and map existing conditions of habitats
	Oak tree inventory
	Recording of special-status species if observed during field reconnaissance
	Preparation of a letter report summarizing results

#### Task 5 Cultural/Archeological Review

Boyle Engineering will review the Chandler Ranch Master Plan Draft EIR (2000) and the Chandler Ranch Area Specific Plan EIR (August 2004) to determine if significant archeological resources may exist within or around the general area.

#### Task 6 Visual Impact Analysis

FIRMA of San Luis Obispo will assess the visual impact of the proposed reservoirs in relation to the surrounding area. Digital photo techniques will be used to simulate the effect of the project on the visual setting. The effect of tank placement will be depicted and measures to mitigate impacts such as revegetation, screening, colors, etc. will be depicted graphically. The visual assessment and simulation will include three views, one for each reservoir site. Additional views can be performed at an additional cost.

#### Task 7 Letter Report Summarizing Results and Recommendations

Boyle will prepare a letter report summarizing the results from the geotechnical investigation, biological and cultural surveys, and the visual impact analysis. A relative costs evaluation for the four alternatives will be prepared and will include the cost of transmission piping, reservoirs, site work, visual screening measures and access road. A recommendation will be made for the City's consideration.

#### City's Responsibilities

The City will be responsible for facilitating property access for execution of all tasks described above in the Scope of Work.

#### **Proposed Schedule**

The following table outlines our anticipated schedule:

Milestone Schedule City of Paso Robles – Chandler Ranch Reservoir Site Alternative Investigation				
	Milestone	Start Date	Completion	
1.	Notice to Proceed Received	8/1/05		
2.	Task 1 – Project Kick-Off	8/3/05	9/28/05	
3.	Task 2 – Reservoir Center Staking	8/3/05	8/15/05	
4.	Task 3 – Geotechnical Exploration	8/3/05	9/28/05	
5.	Task 4 – Biological Resource Survey	8/3/05	9/2805	
6.	Task 5 – Cultural/Archeological Review	8/3/05	8/15/05	
7.	Task 6 – Visual Impact Analysis	8/3/05	9/28/05	
8.	Task 7—Letter Report	9/28/05	10/17/05	

#### **Budget for Engineering Services**

The attached Project Budget (Exhibit A) has been prepared based on Boyle's Standard Fees Schedule (Exhibit B) as attached. We propose to perform the scope of work outlined above on a time-and-materials basis with a not-to-exceed budget of \$62,034.

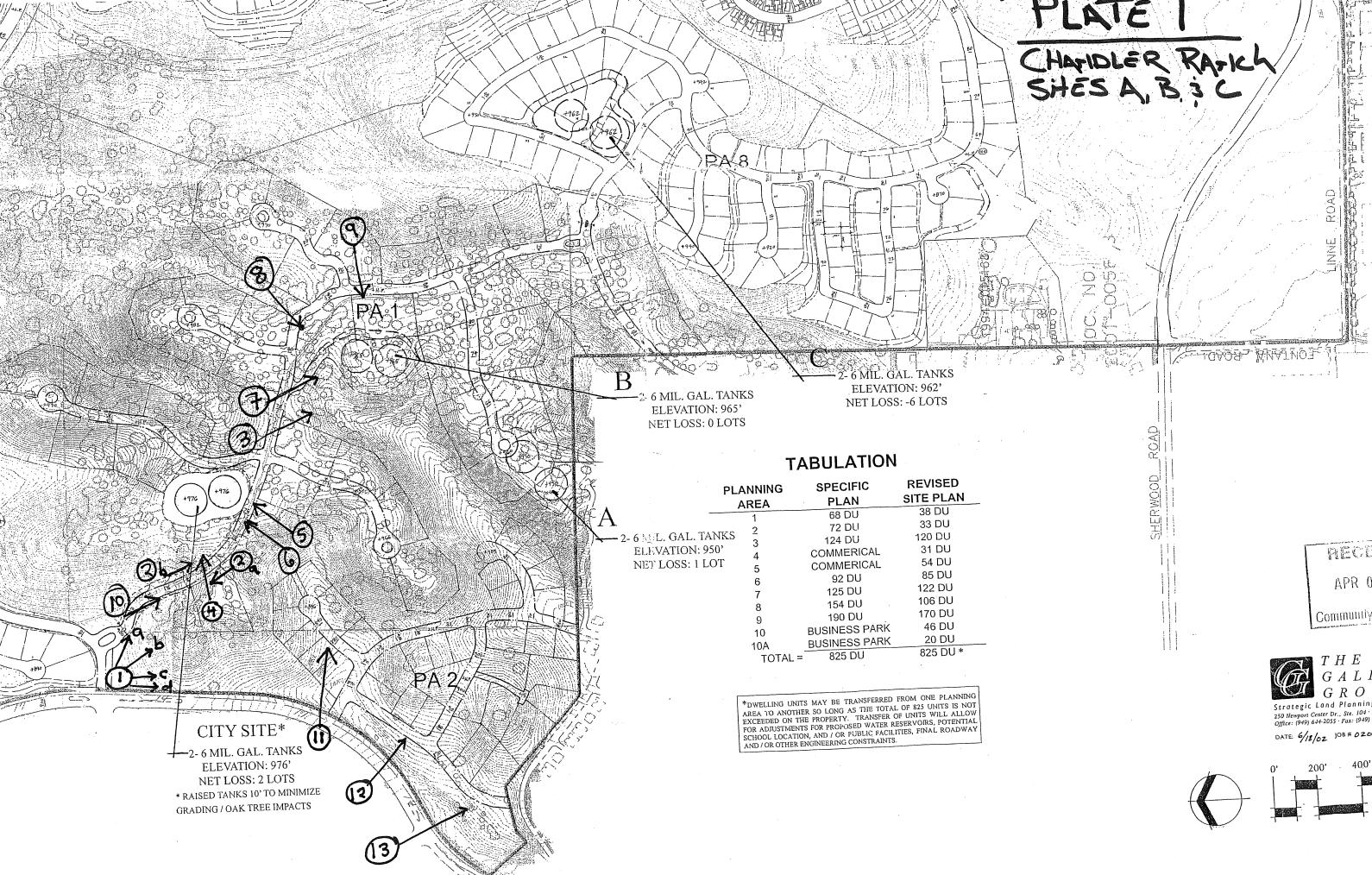
Thank you for the opportunity to provide this proposal to the City. If there are any questions, please don't hesitate to call.

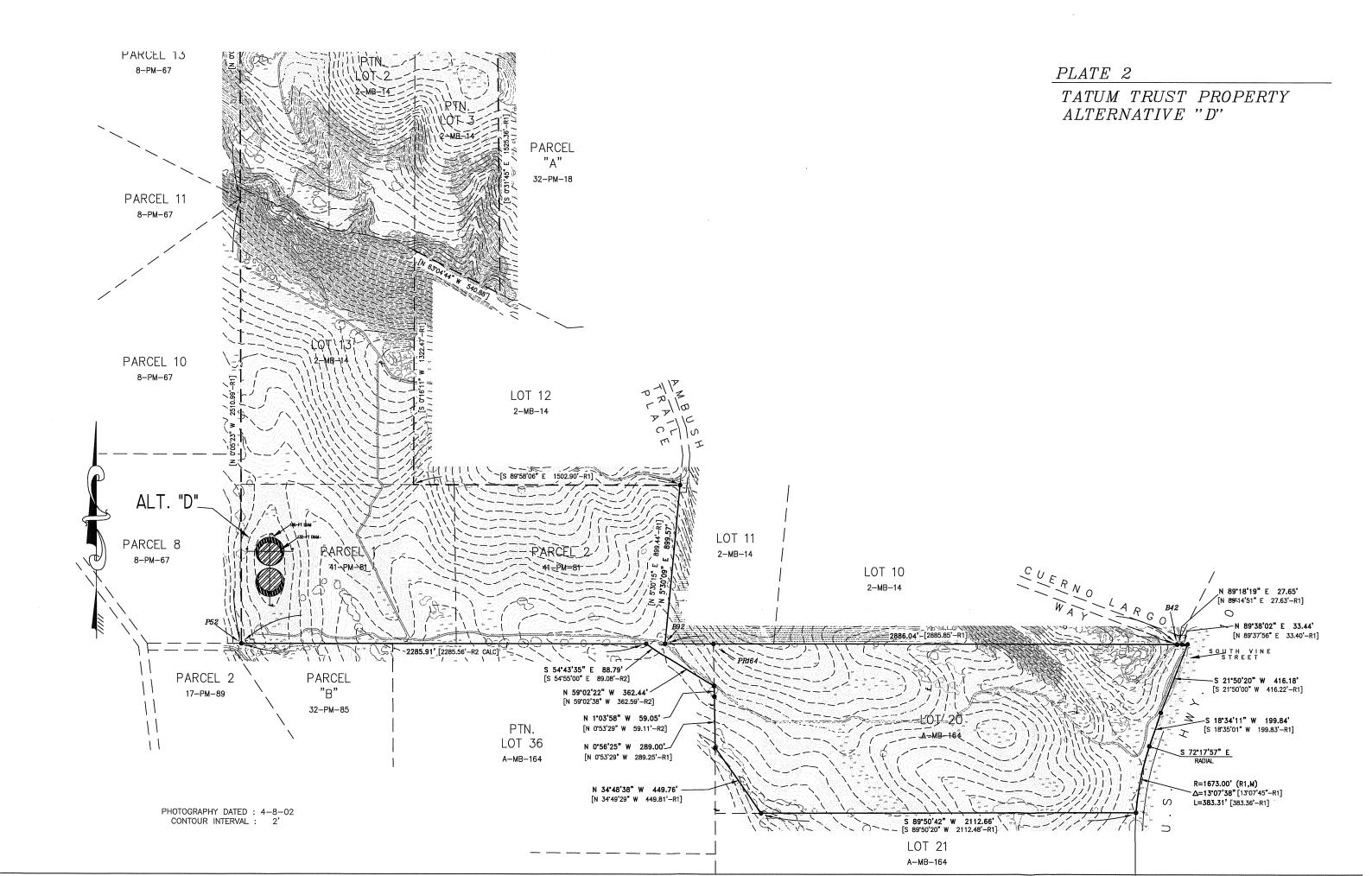
Boyle Engineering Corporation

Christopher Alakel, PE

Project Manager

Mike Nunley, PE Branch Manager





# **Project Budget**

City of Paso Robles

# Chandler Ranch Reservoir Site Alternative Investigation

		Pers	onnel	Personnel Hours	S				Bu	Budget			
Task Description	Senior Engineer II	Associate Engineer	Assistant Engineer	Drafter	Total Hours		Labor		Subconsultant	Офрег	TOWN CO.		Isto T
Task Group 1: Project Kick Off Kick off meeting & site visit		5	2		10	69	1,000			\$	80	€9	1,080
Subtotal	•	ĸ	S	'	10	<del>69</del>	1,000	<del>\$</del>		s	80	se.	1,080
Task Group 2: Reservoir Center Staking Reservoir Center Staking		4			4	s	420	8	2,530			s	2,950
Subtotal		4	1	1	4	s	420	se.	2,530	s		89	2,95
Task Group 3: Geotechnical Exploration Geotechnical exploration, analysis, and preliminary report		9	4		10	€9	1,010	\$	26,840	÷	81	89	27,931
Subtotal	,	9	4	1	10	69	1,010	<del>59</del>	26,840	<del>\$</del>	81	so.	27,93
Task Group 4: Biological SurveyBiological resource survey and report		9	4		10	s-s	1,010	\$	5,500	€9	81	89	6,591
Subtotal	1	9	4	1	10	s	1,010	se	5,500	se.	81	બ	6,591
Task Group 5: Cultural/Archeological Survey literature search and review		8	4		12	S	. 1,220			69	86	جه	1,318
Subtotal		8	4	,	12	e9	1,220	s	1	<del>59</del>	86	6-9	1,318
Task Group 6: Visual Impact Analysis Visual simulations (1 each per site)		8			8	s	840	8	8,800	€9	67	69	9,707
Subtotal	1	8	1	1	<b>*</b>	s	840	جو	8,800	6-8	29	6 <del>9</del>	6,70
Task Group 7: Letter Report Review results from Tasks 3.4.5. & 6.		9	9		12	s	1,200			<b>∽</b>	96	€9	1,296
Prepare report	3	15	30		48	s	4,845			S	388	s	5,233
Prepare plates/exhibits for preliminary tank site plans		3	15	20	38	S	3,540			s	283	s	3,82
Preliminary opinions of probable construction costs for sites		5	15		20	\$	1,950			\$	156	s	2,106
Subtotal	3	29	99	20	118	ક્ક	11,535	s	3	\$	923	89	12,458
Total	3	99	83	20	172	ક્ક	17,035	ક્ક	43,670	8	1,329	89	62,03

### BOYLE ENGINEERING CORPORATION (SAN LUIS OBISPO OFFICE)

### FEE SCHEDULE FOR PROFESSIONAL SERVICES Effective January 1, 2004

#### Engineers, Planners, Architects, Scientists:

Consultant	\$175.00 per hor	ur
Principal	\$160.00 per hor	
Senior II	\$140.00 per hor	
Senior I	\$125.00 per hor	
Associate	\$105.00 per hor	
Assistant	\$95.00 per hor	

#### **Technical Support Staff:**

Design/CADD Supervisor	\$100.00 per hour
Senior Designer/Design CADD Operator	\$95.00 per hour
Drafter/CADD Operator	\$90.00 per hour
Assistant CADD Operator	\$62.00 per hour
Clerical/General Office	\$62.00 per hour

#### General Project Expenses (1)

8% of Labor

#### **Direct Project Expenses**

\$1.15/1.50 per page
\$3.00/7.00 per sheet
Cost + 10%
Cost + 10%
\$0.60 per mile
Cost
Cost + 10%

If authorized by the Client, an overtime premium multiplier of 1.5 may be applied to the billing rate of hourly personnel who work overtime in order to meet a deadline which cannot be met during normal hours.

Applicable sale taxes, if any, will be added to these rates. Invoices will be rendered monthly. Payment is due upon presentation.

Fee schedule is subject to change.

(1) Includes mail, telephone, fax, office photo copies, personal computers and mileage (except as noted).

JUL 18 2005

Doug Monn, Interim Director, Department of Public Works City of El Paso de Robles 1000 Spring Street Paso Robles, CA 93446 Public Works Dept.

Re: Consideration of Offer by Dan Lloyd to Provide West Side Tank Site

Dear Doug,

I have recently entered into escrow to purchase approximately 105 acres adjacent to the City on South Vine Street. The property is within the County's jurisdiction relative to development standards, however, it takes access directly from Vine Street.

The property I am acquiring consists of a 53-acre parcel (an old almond orchard) zoned for one (1) unit per acre, and two (2) parcels approximately 25 acres in size that are zoned Agriculture. My goal is to develop the 53-acre parcel as a cluster subdivision while selling the agricultural parcels as individual home sites

I am aware that the City has need of a new tank site for long term storage and supply in the vicinity of this property. Either of my two 25-acre parcels may provide a suitable location for a new City water tank since their elevation and proximity to the City Limit Line is favorable.

Development of my property can be achieved under County standards through the employment of an onsite community water system and a community disposal field. While these options will provide for safe and reliable water and sewer service to my project, I believe that we should explore the option of providing a tank site and access easements on my property to the City in return for the City providing water and sewer service to my subdivision. I would expect to pay for all infrastructure improvements for both services and all engineering and design services to install the appropriate facilities.

I would like to request that the City consider my proposal and undertake the necessary review to determine if there is sufficient public benefit to be gained by constructing a new City water tank on my property. Once the analysis is complete, we can discuss the specific terms of the transaction.

I look forward to assisting the City as you investigate the benefit of this proposal. Please contact me for any additional information you may need.

Sincerely,

Daniel R. Lloyd

#### **RESOLUTION NO. 05-**

## A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES APPROPRIATING FUNDS AND AUTHORIZING AWARD OF A CONTRACT FOR SERVICES TO INVESTIGATE ALTERNATIVE WATER TANK SITES AT CHANDLER RANCH AND ON SOUTH VINE

\_\_\_\_\_

WHEREAS, the City Council of the City of El Paso de Robles needs to continue its efforts to investigate and identify potential water storage tank sites to adequately meet existing and future fireflow and water service demands; and

WHEREAS, it is the City's policy to develop gravity-fed water supplies, which are more reliable in times of emergency and/or power loss; and

WHEREAS, topographic settings and elevation of water storage tanks are strategic considerations for gravity-fed water supplies; and

WHEREAS, the number of area tank sites with suitable elevation to accommodate a gravity-fed system is limited, with candidate sites in the Chandler Ranch area and near the southwest corner of the City; and

WHEREAS, at staff's request, Boyle Engineering has provided a Scope of Work and Fee Proposal in the amount of \$62,034 to evaluate the suitability of the reservoir sites in Chandler Ranch and near the southwest corner of the City.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

<u>SECTION 1.</u> The City Council of the City of El Paso de Robles does hereby appropriate \$65,000 to Budget No. 600-310-5224-78, from the Water Enterprise Fund to perform water storage tank investigation studies for sites in Chandler Ranch and at South Vine Street; and

<u>SECTION 2.</u> The City Council of the City of El Paso de Robles does hereby authorize the City Manager to engage the services of Boyle Engineering to investigate tank sites in Chandler Ranch and at South Vine Street for an amount of \$62,034.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 2nd day of August 2005 by the following vote:

AYES: NOES: ABSTAIN: ABSENT:	
ATTEST:	Frank R. Mecham, Mayor
Sharilyn M. Rvan. Deputy City Clerk	