TO:	James L. App, City Manager
FROM:	Doug Monn, Public Works Director
SUBJECT:	Elimination of the Palm Court Lift Station
DATE:	June 20, 2006

NEEDS:		For the City Council to consider awarding a contract to North Coast Engineering to design a replacement of the Palm Court Lift Station with a gravity sewer system.	
FACTS:	1.	Palm Court Lift Station (No. 9) was installed in 1983 and serves twelve residents.	
	2.	Upgrade of the lift station was included the City's Capital Improvement Program.	
	3.	Bids received for the lift station upgrade exceeded the available funding by 30%.	
	4.	At the November 15, 2005 City Council meeting, staff requested that Council reject all bids received to determine if a gravity sewer system could be installed and remove the lift station from service.	
	5.	The replacement of the lift station by a gravity sewer would:	
		<ul> <li>a. Serve additional units beyond the twelve now served by the lift station.</li> <li>b. Reduce on-going maintenance costs (estimated at \$46,000/year).</li> <li>c. Eliminate electrical costs (estimated at \$300/year).</li> <li>d. Provide increased dependability to the users.</li> </ul>	
ANALYSIS			
and Conclusion:		North Coast Engineering were the original engineers who prepared the plans for proposed upgrades to the lift station. At the City's request they also prepared a preliminary analysis to determine the feasibility of replacing the Palm Court Lift Station with a gravity sewer line. They determined that this gravity sewer line could be installed.	
		Attached is a Scope of Work and Fee Proposal to prepare the construction documents to install a gravity sewer system in order to eliminate the Palm Court Lift Station.	
POLICY Reference:		Adopted Capital Improvement Program	
Fiscal Impact:		North Cost Engineering's proposal to design a gravity system to replace the lift station at Palm Court is \$43,519. There is a balance of \$194,997 in Budget No. 221.910.5452.575 to cover the cost of the design work. Subject to the design being completed and the bids received, the City Council would need to supplement the remaining budget in order to construct the gravity sewer line.	
OPTIONS:	a.	Direct the City Manager to enter into a contract in the amount of \$43,519 with North Coast Engineering to design a gravity sewer line to eliminate the lift station at Palm Court per the attached Scope of Work and Fee Proposal.	
	b.	Amend, modify, or reject the above option.	



# NORTH COAST ENGINEERING, INC.

Civil Engineering - Land Surveying - Project Development

April 21, 2006

Ditas Esperanza Capital Projects Engineer City of El Paso de Robles 1000 Spring Street Paso Robles, California 93446 RECEIVED

APR 2 1 2006

Public Works Dept

Subject:

Proposal for Engineering Services Palm Court Lift Station Replacement – Gravity Sewer Option

Dear Ditas:

We are pleased to present this proposal for professional engineering services for the gravity sewer option for replacement of the Palm Court lift station.

In October of 2005, we prepared a preliminary analysis of replacing the Palm Court lift station with a gravity sewer line in lieu of construction of a new pump station. The existing lift station near the end of Palm Court would be replaced with a gravity sewer line that would extend northerly to Union Road where it would tie into the existing sewer main. The challenge with this project is that the gravity sewer line must cross a deep ravine, which runs parallel to Union Road. The ravine is dotted with a number of mature oak trees and is approximately 40 feet in depth. Spanning of the ravine will require the design and construction of a pipe bridge structure and associated abutments on either side of the ravine. The remainder of the project will consist of conventional gravity sewer construction, and modifications to the existing lift station to allow for its abandonment.

We have assembled a very capable team for preparing the project design. A soils investigation will be prepared by Earth Systems Pacific, and will provide recommendations for gravity sewer construction, as well as parameters for the concrete abutment design. Applied Engineering will provide structural design services for the pipe bridge and abutments.

Ditas Esperanza April 21, 2006 Page Two

Please find attached a proposed scope of services and fee estimate for the project. Since the exact location of the abutments and the type of pipe bridge has not yet been determined, we have provided allowances for both the soils investigation and structural engineering design. Upon completion of the Preliminary Services phase of the design, and once this information is better defined, we will provide specific fee proposals for the completion of the soils investigation and structural engineering work.

The scope of work includes provisions for establishing existing property lines and preparing legal descriptions for the necessary easement acquisition. It is expected that the City would be responsible for acquiring the actual easements, as well as the rights of entry for the design work and soils investigation on the property. The City would also be responsible for preparation of an arborist report for impacts on existing oak trees; the design proposal includes preparation of the tree protection plan, based on the arborist's recommendations.

All surveying services and any inspection services requested, are subject to prevailing wage rates and have been proposed accordingly.

Please feel free to call if there are any questions regarding this information. We look forward to working with you on this challenging project and are prepared to commence work immediately upon your authorization.

Sincerely,

Atend Agleekter Steven J. Sylvester, P.E.

Steven J. (Sylvester, P President

SJS/jms Enclosures Fee Schedule Scope of Work



# NORTH COAST ENGINEERING, INC.



## Civil Engineering • Land Surveying • Project Development

### PROFESSIONAL SERVICES FOR CITY OF EL PASO DE ROBLES PALM COURT LIFT STATION REPLACEMENT GRAVITY SEWER OPTION 4/20/2006

### **ESTIMATED FEE**

\$ 7,556.00

## PRELIMINARY SERVICES

# A. Field Surveys

- 1. Cross section proposed alignment at 50' C-C.
- 2. Locate existing oak trees.
- 3. Locate existing property corners.
- Prepare Preliminary Plan and Profile of Gravity Sewer
  - 1. Determine locations for pipe bridge crossing abutments.
  - 2. Determine easement requirements.
- C. Soils Investigation
  - 1. Coordinate with Soils Engineer to obtain soil borings and parameters for abutment design.

### II. DESIGN SERVICES

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#### \$16,963.00

- A. Pipe Bridge Design (Structural Engineer)
  - 1. Evaluate/review design alternatives.
  - 2. Review with City.
  - 3. Prepare final design of pipe bridge, abutments and special provisions.

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3.	Gravity Sewer Design
	•

- 1. Prepare final plan and profile.
- 2. Prepare Title sheet.
- 3. Prepare Details and General Notes.
- 4. Prepare lift station modification details.
- 5. Prepare tree protection/removal plan.
- C. Special Provisions
- D. Engineer's Estimate and Bid Proposal Form
- E. Coordination and Quality Control

Structural Engineer Allowance

Soils Engineer Allowance

**Estimated Reimbursible Expenses** 

### TOTAL ESTIMATE

#### \$43,519.00

\$13,200.00

5,500.00

300.00

### **EXCLUSIONS / CITY RESPONSIBILITIES:**

Arborist Report Permitting Easement Acquisition Right of Entry General Conditions / Construction Contract