



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: November 22, 2011

TO: Mayor and Councilmembers

FROM: Facilities Division, Public Works Department

SUBJECT: Contract For Construction For The El Estero Wastewater Treatment Plant Pilot Fats, Oil And Grease Program

RECOMMENDATION: That Council:

- A. Award a contract with Lash Construction, Inc., in their low bid amount of \$572,500, for construction of the El Estero Wastewater Treatment Plant Pilot Fats, Oil and Grease Program, Bid No. 3637;
- B. Authorize the Public Works Director to execute the contract and approve expenditures up to \$90,000 to cover any cost increases that may result from contract change orders for extra work, differences between estimated bid quantities and actual quantities measured for payment, and additional scope to connect the project controls to the current Supervisory Control and Data Acquisition system;
- C. Authorize the Public Works Director to execute a contract with AECOM Technical Services, Inc., in the amount of \$12,752 for construction support services, and authorize the General Services Manager to approve expenditures of up to \$1,275 for extra services of AECOM that may result from necessary changes in the scope of work;
- D. Authorize the Public Works Director to execute a contract with Mimiaga Engineering Group in the amount of \$43,280 for construction management services, and authorize the General Services Manager to approve expenditures of up to \$4,328 for extra services of Mimiaga Engineering Group that may result from necessary changes in the scope of work; and
- E. Increase Wastewater Capital Fund appropriations and estimated revenues by \$847,778, representing the total costs for this project that will be funded from a State- and City Council-approved loan from the Clean Water State Revolving Fund.

EXECUTIVE SUMMARY:

The City of Santa Barbara received six bids for the El Estero Wastewater Treatment Plant Pilot Fats, Oil and Grease Program. The apparent lowest responsive bidder was Lash Construction, Inc. (Lash). Staff recommends that Council authorize the Public Works

Director to accept the low bid and enter into a contract with Lash, and recommends that Council authorize the Public Works Director to enter into a contract with AECOM Technical Services, Inc., and Mimiaga Engineering Group (MEG) for services during construction. Staff also recommends that Council accept the Clean Water State Revolving Fund loan and increase the Wastewater Capital Fund appropriations and revenues by \$1,600,000.

DISCUSSION:

PROJECT DESCRIPTION

The work consists of constructing a facility for the proposed Fats, Oil, and Grease (FOG) Project (Project) at the El Estero Wastewater Treatment Plant (El Estero). The goal is to convert a waste stream of selected fats, oil, and grease in the wastewater plant's digester units to increase biogas production, which can then be used for a reusable energy source. The Project includes installing pumps, tanks, piping, and all necessary equipment per the plans and specifications for a FOG facility, complete and in place at El Estero. The work will also include connecting the FOG facility to the current Supervisory Control and Data Acquisition (SCADA) system in order to allow staff to control the FOG facility using their existing SCADA system.

FOG material that enters the sanitary sewer coats the lines, eventually causing blockages which lead to overflows. The City's Municipal Code requires that restaurants install grease traps to remove grease prior to discharging wastewater to the sanitary sewer system. Currently, the FOG material is collected and hauled to Fresno, Bakersfield or Watsonville for disposal. MarBorg Industries, Inc. (MarBorg) will transfer between 2,000 and 5,000 gallons of FOG material from the restaurants to El Estero daily. MarBorg will pre-screen and adjust the pH of the material and ensure that the material has not been mixed with any other waste materials prior to delivery to the City.

In February 2010, Council authorized staff to negotiate a contract with MarBorg to haul, pre-treat, and deliver FOG materials to El Estero for the pilot project. The City is in final negotiations with MarBorg for a four-year contract to haul the waste material to El Estero, paying the City five cents per gallon of FOG. When an agreement is reached, the proposed contract will be scheduled for Council approval.

CONTRACT BIDS

A total of six bids were received for the subject work, ranging as follows:

	BIDDER	BID AMOUNT
1.	Lash Constuction, Inc. Santa Barbara, CA	\$572,500
2.	Cushman Construction Goleta, CA	\$640,000
3.	Specialty Construction San Luis Obispo, CA	\$695,000

4.	Spiess Construction	Santa Maria, CA	\$698,770
5.	Brough Construction	Arroyo Grande, CA	\$739,400
6.	Hanly General Engineering	Santa Ynez, CA	\$828,522

The low bid of \$572,500, submitted by Lash, is an acceptable bid that is responsive to and meets the requirements of the bid specifications.

The change order funding recommendation of \$90,000, or 16%, is not typical for this type of work and size of project. However, we have added additional scope of services to connect the FOG system to El Estero's SCADA system (originally planned as future work) and have taken this into account in determining an appropriate change order amount.

CONSTRUCTION PHASE CONTRACT SERVICES

Staff recommends that Council authorize the Public Works Director to execute a contract with AECOM in the amount of \$12,752 for design support services, and approve expenditures of up to \$1,252 for extra services that may result from necessary changes in the scope of work. The extra services funding recommendation is 10% and is typical for this scope of work. AECOM designed the FOG Project and is experienced in this type of work.

Staff recommends that Council authorize the Public Works Director to execute a contract with MEG in the amount of \$43,280 for construction management services, with \$4,328 for extra services. The extra services funding recommendation is 10% and is typical for this scope of work. The scope of work includes construction project administration, meetings, submittal review, inspection, and preparation and processing of the monthly California Clean Water State Revolving Fund claim reimbursement requests. MEG is on the City's Prequalified Engineering Services list and is experienced in this type of work. MEG was selected to provide construction management services for the El Estero Headworks Screening Project (currently under construction) through a Request for Proposal process, which means that they will be onsite and familiar with the facility.

FUNDING

On March 17, 2009, Council adopted Resolution No. 09-013, authorizing the City Administrator to submit a Financial Assistance Grant Application to the State of California Water Resources Control Board (CWRCB) for the FOG Project. The CWRCB notified staff that the FOG project was not selected for Federal Stimulus Bill funds. However, the State provided the City with an opportunity to convert the project application into the Clean Water State Revolving Fund (CWSRF) loan.

On October 18, 2011, the City received the draft funding agreement for a 20-year loan in the amount of \$1,600,000, at an interest rate of 2.6%, from the CWRCB, a portion of which will be appropriated to fund the FOG Project.

The CWSRF loan includes two phases to be implemented that will increase the energy generated at El Estero. Phase I includes constructing the FOG receiving facility at a total project cost is \$847,778. The remaining balance of the funds, approximately \$752,222, will be used for Phase II, which includes infrastructure upgrades for using the waste heat and modifications to the system for sludge transfer, heating, mixing, and gas conveyance. Staff will return to Council in the future to request appropriation of the remaining funds for Phase II concurrent approval of the related contracts.

The following summarizes the contracts recommended in this report:

CONSTRUCTION CONTRACT FUNDING SUMMARY

	Basic Contract	Change Funds	Total
Lash Construction	\$572,500	\$90,000	\$662,500
AECOM (Design Support)	\$12,752	\$1,275	\$14,027
MEG (Construction Management)	\$43,280	\$4,328	\$47,608
TOTAL RECOMMENDED AUTHORIZATION			\$724,135

The following summarizes all Project design costs, construction contract funding, and other Project costs, all of which will be funded from the State Revolving Loan:

ESTIMATED TOTAL PROJECT COST

**Cents have been rounded to the nearest dollar in this table.*

Design (by Contract - AECOM)	\$87,340
City Staff Costs	\$25,000
Subtotal	\$112,340
Construction Contract	\$572,500
Construction Change Order Allowance	\$90,000
Design Support During Construction (by Contract with AECOM)	\$14,027
Construction Management/Inspection (by Contract with MEG)	\$47,608
Subtotal	\$724,135
Contract Administration (by City Staff)	\$11,303
Subtotal	\$11,303
TOTAL PROJECT COST	\$847,778

SUSTAINABILITY IMPACT:

Implementing the FOG Project will allow El Estero to convert a waste stream of fats, oils and grease in the plant's digester units into an increased amount of biogas production, which can then be used as a renewable energy source, yielding up to approximately 4,500 kWh per day. Additional electrical generation equipment is being installed, which will allow the facility to fully benefit from the increased gas production.

Additionally, by reducing trips to FOG disposal sites, up to an annual 240 tons of carbon dioxide-equivalent emissions could be avoided.

PREPARED BY: Jim Dewey, Facilities Manager/JW/mh

SUBMITTED BY: Christine F. Andersen, Public Works Director

APPROVED BY: City Administrator's Office