



REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: July 15, 2008

SUBJECT: Water Meter Implementation, Project No. 07-51 (08-08) Phase 1;
Authorize bid advertisement

Report in brief

As part of the Water Meter Retrofit Project, West Yost Consulting Engineers has been selected to prepare bid documents for general contractors to retrofit the Phase 1 portion of the Water Meter Implementation, Project No 07-51 (08-08), to meet the requirements of the State law AB 2572. This law requires that water connections to the City's water system made after January 1, 1992 be billed on consumptive basis by January 1, 2010. It also stipulates that houses that are already metered should also be billed volumetrically by January 1, 2010.

The scope of work in the bid document includes the installation of the automatic meter reading (AMR) hardware and software to collect data from the meters and make it available to the billing system in the City's Finance Department. It also includes the inspection, cleaning, and replacement of meter boxes and appropriate components; the installation of meters where necessary; and the modification of meter box covers for the installation of the AMR unit.

Staff recommends that the City Council authorize the advertisement for the Water Meter Implementation Phase 1, Project No 07-51 (08-08). To keep the project on scheduled staff will submit plans and specifications to Council prior to or with the bid award submittal.

Background

AB 2572 requires the City to install water meters on all municipal and industrial water service connections that are located in its service area by January 1, 2025. Water connections that are already metered and those connected after 1991 are to be billed volumetrically by January 1, 2010. All other customers are to be billed on a consumptive basis by January 1, 2025. Moreover, the bill also authorizes urban water suppliers to recover the cost of providing services related to the purchase, installation, and operation of a water meter from rates, fees, or charges.

The Meter Implementation Plan discusses the estimated cost for each option of complying with State law. Due to time constraints, this Plan was prepared concurrently with the bid documents and project specifications for the Phase 1 portion of the project. A draft Meter Implementation Plan report was

received by staff in March 2008; the final copy will be submitted with the final specification and plans for the Phase 1 Water Meter Retrofit Project. This parallel work approach of finalizing the Meter Implementation Plan with the preparation of the plans and specifications was necessary to meet the deadline requirements of State law and to have enough time to provide customers with sample billings before meter rates go into effect.

Discussion

Presently, the City utilizes a touch-read Sensus technology device (Touch Read) to read our Sensus commercial meters. Many existing residential connections installed after 1991 have meters but they are not being read and no residential meter rate currently exists. It takes from 3 to 5 days to complete the reading process for approximately 1,400 existing commercial meters.

Investigations of other organizations which have installed AMR's revealed that operational problems are always encountered where the meter and the collection data system are not a product of the same vendor. Subsequently, City staff recommends the installation of the Sensus radio data collection system (Flex-Net) because it is compatible with the existing residential and commercial meters.

By direction of the Council, City staff has divided the City-wide metering project into two phases: as indicated below;

Phase 1: This phase consists of houses that are already metered, houses built after January 1st 1992, all commercial accounts, and all City owned facilities. The tasks in this part of the project include the inspection of all existing commercial and residential water meters. It also includes the installation of automatic meter reading system devices that will be able to collect meter usage data City-wide. In addition, transmitters will be placed on all of the existing meters. The transmitters will collect data from the meters and transfer them to the communication network which will then supply that information to the billing system in Finance. This Council action only applies to the Phase 1 portion of the project.

Phase 2: This phase includes the installation and calibration of new meters as well as transmitters on all other properties in the City not included in Phase 1 above.

The total number of metered connections in the City for Phase 1 by meter type includes;

Meter Type (Phase 1)	Approximate Number of Parcels to be Retrofitted
Residential	3,735
Commercial	1,084
City Facilities	109
Total	4,928

The total number of meters to be retrofitted in Phase 1 and Phase 2 are approximately 4,928 and 10,128 respectively, for a total of 15,056. City staff intends to complete the Phase 1 portion of the project on or before May 2009. This will enable customers to receive sample billings for six months before the beginning of the actual billing on January 1, 2010.

The Phase 1 portion of the meter implementation project has been subdivided into two primary work activities:

Activity 1A: Inspection and calibration, when necessary, of all existing commercial and residential meters. It also includes drilling holes in existing meter box lids for the installation of AMR transmitters as well as procurement of new meters to replace defective meters. Since almost all residential connections installed after 1991 have meters, these actions will position us for compliance with AB 2572.

Activity 1B: Installation of transmitters and a communication link that consists of towers, collectors, data concentrators, network management software, and a meter data management system to handle the large volumes of interval data provided by the system. The system will collect real time data from residential and commercial meters City-wide and provide them to the billing system in Finance.

These two sub-phases will be implemented as the Phase 1 portion of the meter retrofit project and will be contained in the same bid document. The Phase 2 portion will be implemented at a later date.

Since this project would only make minor changes to existing water meter boxes, and to existing structures (i.e. a communication tower situated at Fire Station No 3, and the water storage tank on Beamer Street) and existing water service connections Citywide, the project has been considered categorically exempted from the California Environmental Quality Act .

City staff has selected HDR engineers to conduct a rate study to determine a new rate for both the commercial and residential customers as a result of the implementation of this project.

After review and approval of the City Council, these new rates will become effective on January 1, 2010.

Fiscal Impact

This project is fully funded by enterprise funds and the total estimated cost of implementing the Phase 1 portion of the project is approximately \$4,228,200. These costs are broken down as follows:

Items	Vendor	Services/Materials	Amount (\$)
1	West Yost Associates	Water Meter Implementation Plan, Phase 1 bid documents	125,000
2	Brown and Caldwell	Meter system selection	20,000
3	To be determined by bid	Meter and AMR equipment (AMR System set up)	1,247,100
4	To be determined by bid	Evaluation and cleaning of the commercial meters and installation of the communication network system.	2,261,700
5	Construction Engineering	Services during construction	50,000
6	Construction Management and City staff time.	On-site inspection of contractor's work.	140,000
7		Contingency (10%)	384,400
		Total	4,228,200

Funding Budgeted:

Budget Item	FY 07/08	FY 08/09	FY 09/10	Total
Implementation Plan	\$150,000			\$150,000
Meter Retrofit	\$200,000	\$2,300,000	\$1,300,000	\$3,800,000
			TOTAL	\$3,950,000

Staff may request additional funding authorization depending on the outcome of the bidding process. The project will be funded by Water Enterprise Funds and by serial revenue bond which will be paid off from proceeds of the water enterprise fund. The serial bond is scheduled by Finance to be issued in September 2008.

The implementation of the Phase 2 portion of the project is scheduled to begin in 2016; the volumetric billing is required to become operational Citywide by January 1, 2025 in order to be in compliance with the provision of AB 2572.

Public Contact

An issue of the “Woodland Water News” prepared by the Utilities Engineering Branch was distributed to City water customers in their April and May utility bills. This issue described the State law requirements, the City’s plan to retrofit and install Phase 1 water meters, and that volumetric-based billing would begin on water connections with meters by January 1, 2010. It also discusses the benefit of implementing consumptive base meter billing system and the phasing of the water meter project.

In addition, City staff organized a public workshop with interested citizens on May 5, 2008. At this workshop, a prepared list of commonly ask questions and answers were distributed to educate the public on the upcoming project. Moreover, questions were received and addressed by City staff.

Alternative Courses of Action

1. Authorize the advertisement for the Water Meter Implementation Phase 1, Project No 07-51 (08-08). To keep the project on scheduled staff will submit plans and specifications to Council prior to or with the bid award submittal.
2. Give direction to staff for changes to be made in the Water Meter Implementation Phase 1 plan and request that the plan be resubmitted at the September 2nd Council meeting.

Recommendation for Action

Staff recommends that the City Council approve Alternative No. 1.

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