CITY OF BEVERLY HILLS
STAFF REPORT

Meeting Date: September 15, 2009

To: Honorable Mayor & City Council

From: Ara Maloyan, Deputy City Engineer
Samer Elayyan, Civil Engineer

Subject: Bidding Authorization for the Replacement of Five Water Tanks.

INTRODUCTION

This report is to provide a status on the Five-Tank Replacement Project. Staff plans to bid the project using four pre-qualified bidders unless directed otherwise by the City Council.

DISCUSSION

In August of 2002, the engineering company, Black and Veatch, prepared a Water System Master Plan report for the City of Beverly Hills. The report is used as a guide for the City to ensure a reliable and conservative water supply for its customers. The report documented the results of inspection and assessment of water system facilities and provided a phased capital improvement planning prioritized plan to year 2025.

Recommendations from the report included that all welded steel tanks and booster stations be evaluated for seismic stability to meet the current American Water Works Association (AWWA) standards for "Welded Steel Tanks for Water Storage", and to meet current California Department of Public Health (CDPH) drinking water standards.

In December 2004, a Preliminary Design Report (PDR) was prepared by the engineering company, Tetra Tech, which included site conditions, laboratory testing for lead contained paints (interior and exterior coatings), visual inspection for corrosion and a thorough inspection and assessment of the condition of the existing reservoir tank walls, roof and structural elements at sites 3A, 4B, 5, 6 and 7. The PDR concluded that seismic upgrades are required for the 5 steel water reservoir tanks, 5 associated booster pump stations, and on-site piping at those sites.

In June 2006, Final Design Plans for the seismic retrofit/upgrading of all 5 tanks, 5 booster pump stations, and on-site piping were prepared by Tetra Tech, and in July

2006, the City received bids from three pre-qualified bidders for this retrofit work. The lowest bid received was $5.6M, which was substantially in excess of both Tetra Tech engineer's construction cost estimate and the $3.8M budget approved in fiscal year 2006/2007 by the City for this retrofit construction.

During their detailed review of the construction bids, City staff made a determination that in light of the unexpected high retrofit cost received during the bid process, it may be fiscally prudent to investigate the potential costs associated with replacing these 44-50 year old tanks in lieu of merely retrofitting them.

Consequently, on August 8, 2006, staff sent out four invitations for request for proposal (RFP) for the services of a Water Resources Engineer to prepare an evaluation and detailed life cycle cost analysis for retrofit versus replacement of the five subject tanks. Staff received proposals from three consultants (Black and Veatch, KEC Engineers, and Webb Associates) who were then interviewed by staff on August 30, 2006.

All three consultants agreed with the approach staff was taking, so on October 16, 2006 (for additional affirmation) staff conducted a workshop with the original construction project bidders to discuss their thoughts on retrofit versus replacement costs in light of the fact that the age of the existing tanks range from 44 to 50 years. The general consensus was that the City might well be able to replace the tanks for a cost that would be slightly higher than the retrofit cost received during the bid process.

Consequently, the City entered into an agreement with Webb Associates in July 2007 to prepare an Evaluation and Detailed Life Cycle Cost Analysis of the Five Welded Steel Water Storage Tanks for retrofit versus replacement. The final report was submitted in December 2007 and based on this analysis, it was concluded that the replacement option of these tanks and on-site piping was more fiscally prudent than the retrofit option.

On October 23, 2008, the City sent out six invitations for request for proposal (RFP) to provide professional engineering services for the design of the five new water reservoir tanks, on-site piping, and seismic retrofit of the pump stations at sites 3A, 4B, 5, 6, and 7. On November 24, three responsive proposals were received from MWH Americas, Inc., RBF Consulting, and Webb Associates who were subsequently interviewed by City staff on December 16, 2008.

Staff concurred in their selection of MWH Americas, Inc., and on January 22, 2009, the City Council approved an agreement with MWH, Americas, Inc. in the amount of $788,600 to design and prepare construction documents for five new water reservoir tanks to replace the existing 45-50 year old five welded steel water reservoir tanks and on-site piping, and seismic retrofit design for the associated 5 booster pump stations at Sites 3A, 4B, 5, 6, and 7. MWH, Americas, Inc. started the design on January 23, 2009, and completed it on August 27, 2009.

On May 28, 2009, a legal notice was posted in two local newspapers, on the City's website and was sent to Bid America, Daily Construction, and McGraw-Hill Construction Dodge requesting pre-qualification statements from steel tank contractors. Four contractors (Paso Robles Tank, Inc., Pacific Hydrotech Corporation, Pacific Tank and Construction, Inc., and Spiess Construction Company, Inc. (SCCI)) submitted their pre-qualification statements, and the submittals were assessed by staff using the Department of Industrial Relations (DIR) scoring system and guidelines. Based on the

final pre-qualification package evaluation score and the feedback from the contractors' references, all four contractors have been pre-qualified to bid on this project.

FISCAL IMPACT

Funds for the construction of this project will be provided as follows:

FUND	PROJECT NUMBER	SUB-PROJECT NUMBER	FUNDING SOURCE	AMOUNT
80	796	35-80-0796-85040	80 Water Enterprise Net Assets	$ 9M

MWH's cost estimate for the construction of this project is $7.22M to $9.23M.

RETURN ON INVESTMENT (ROI)

Description	Seismic Retrofit Option	Replacement Option
Project Cost	$5.6M	$9M
Maintenance and Coating Cost Next year	$875,000	------
Extra Manpower, Energy and Chemicals Cost	$120,000/Year	------
Useful Remaining life	21Years	70 Years
Break Even Point	21 Years	21 Years

According to the above comparison, the cost for the seismic retrofit option and the replacement option will break even after 21 years, which is the useful remaining life of the existing tanks. At that time the useful remaining life of the new tanks will be 49 years. Based on the above benefit-cost analysis, the economical course of action would be to replace the existing tanks.

RECOMMENDATION

Unless directed otherwise by the City Council, staff will proceed to bid the project using four pre-qualified bidders and return to the City Council with recommendations for award of contract for the replacement of 5 water reservoir tanks and on-site piping replacement at sites 3A, 4B, 5, 6, and 7, and seismic retrofit of the associated five pump stations.

David Gustavson
Approved By