



CITY OF HAYWARD
AGENDA REPORT

AGENDA DATE 03/13/07
AGENDA ITEM 4
WORK SESSION ITEM _____

TO: Mayor and City Council
FROM: Director of Public Works
SUBJECT: Authorization for Professional Services Agreement with Carollo Engineers to Prepare a Feasibility Study for Providing Additional Water Storage

RECOMMENDATION:

It is recommended that the City Council adopt a resolution authorizing the City Manager to enter into an agreement for professional services with Carollo Engineers to prepare a feasibility study and preliminary report (Phase I), in an amount not to exceed \$130,000.

BACKGROUND:

In 2002, the City updated its Water System Master Plan to identify deficiencies in the system and recommend improvements to correct those deficiencies. The study concluded that additional water storage was needed in the 250-foot elevation zone (base zone) to provide higher reliability and increased operational flexibility. It was also determined that more storage in the 1000-foot elevation zone was required to supply customers in both the 1000-foot and upper zones. Subsequently, the City included three projects into the Five-Year Capital Improvement Program to address the storage deficiencies and maximize use of the existing available reservoir sites in order to address storage deficiencies in the respective zones:

- Replacement of existing 1.0 mg High School Reservoir with two 3.0 mg reservoirs
- Replacement of the two existing 0.5 million gallon (mg) Highland 250 Reservoirs with one larger reservoir with a capacity of 2.0 mg
- Replacement of existing 1.0 mg Highland 1000 Reservoir with a new reservoir providing storage capacity of up to 2.0 mg

The most pressing need for additional capacity is at the 1000' elevation, and it is desirable to begin construction at this site during the winter of 2008-09. There is less urgency with the Highland 250 and High School reservoirs. However, in order to achieve some economies of scale in project costs, staff issued a request for proposals (RFP) for the design of the three reservoirs as a single design package. The projects could then be bid for construction as a single project.

CONSULTANT SELECTION AND REVISED PROJECT SCOPE:

Five qualified firms were invited to submit proposals: Brown and Caldwell, Black and Veatch, Carollo Engineers, Dodson Engineers, and HDR. All of these firms were known to have experience and expertise in designing water reservoirs. All five responded to the RFP and four of the firms were interviewed by staff. The proposal-level costs for the entire project, including evaluation of alternatives and design work, ranged from \$952,000 to \$1,435,000. Staff believes these costs to be generally in the appropriate range for the work described in the RFP. However, during the consultant selection process, several issues emerged that caused staff to rethink the implementation strategy for the projects.

In reviewing the information in the proposals and engaging the consultants during the interviews, it was clear that the projects envisioned by the City, while sound and with merit, were not necessarily the only or most desirable solutions to the water storage deficiencies. The issues raised in the proposals were not new to staff. In fact, in recognition of that, one of the tasks in the scope of work was to evaluate the three projects to verify that they would achieve the City's goals in the most cost effective way. However, given the variables, uncertainties in the scope of work at this stage, and the project's various challenges, the consultants noted that it would be difficult to provide a firm budget for design. It was clear that the actual cost of the work was subject to change depending on which alternatives were finally implemented. Therefore, staff has determined that the most prudent approach would be to divide the project into two phases: 1) Review storage options and prepare a report and preliminary designs discussing the recommended actions (Phase I); and 2) prepare actual designs and plans, specifications and engineer's cost estimates for the recommended projects (Phase II).

Staff recommends that the City proceed with Phase I of this effort by engaging a consulting firm to evaluate the storage options. Specific tasks would include: a review of the assumptions and criteria used to develop the storage needs to ensure that they are still valid; development of potential alternatives to address the storage deficiencies; development of criteria to evaluate the alternatives; and recommendation of specific projects. Phase II, design of the preferred alternatives, would need to follow soon after completion of the evaluation.

Staff further recommends that the City enter into an agreement with Carollo Engineers for the Phase I evaluation. Carollo is very familiar with the City's water system, having completed the 2002 Water Master Plan Update, as well as numerous other water projects. Carollo designed the Hesperian Pump Station, the Skywest Pump Station, and the Decoto Pump Station, and has performed hydraulic modeling of the water system. While Carollo's proposal reflected its extensive knowledge of the City's system, it also displayed creativity and solution-oriented thinking in discussions related to the challenges of the identified projects and the potential for alternative storage options. Carollo is particularly well qualified for this Phase I project.

Staff will return to City Council for authorization to proceed with the design phase (Phase II) of this project at the conclusion of Phase I. Assuming successful completion of the evaluation, and assuming that Carollo will assemble a well qualified design team, Carollo would be in a very strong position to be selected for Phase II. However, there are other qualified engineering firms with very good experience in designing water reservoirs (including one firm with experience in

the design of four reservoirs in the City in the past two years) and it may be in the City's best interest to request other proposals.

PROJECT COST AND FUNDING:

The consultant's cost for preparing the Phase I evaluation is \$130,000, including additional services that may be required. This evaluation will be funded as part of the total \$17.4 million approved for the three reservoir projects in the Water System Improvement Fund and Water System Replacement Fund.

PROJECT SCHEDULE:

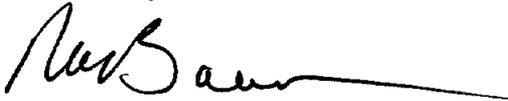
Begin Phase I (Evaluation)	March 21, 2007
Complete Phase I	May 18, 2007
Begin Phase II (Design)	July 2007
Complete Phase II	December 2007

Prepared by:



Alex Ameri, Deputy Director of Public Works

Recommended by:



Robert A. Bauman, Director of Public Works

Approved by:



Jesús Armas, City Manager

DRAFT

11/14
8/27/07

HAYWARD CITY COUNCIL

RESOLUTION NO. _____

Introduced by Council Member _____

RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AGREEMENT BETWEEN THE CITY OF HAYWARD AND CAROLLO ENGINEERS TO PREPARE A FEASIBILITY STUDY FOR PROVIDING ADDITIONAL WATER STORAGE AT THE HIGHLAND 250, HIGHLAND 1000, AND HIGH SCHOOL RESERVOIR PROJECTS, PROJECT NOS. 7173, 7165 AND 7172

BE IT RESOLVED by the City Council of the City of Hayward that the City Manager is hereby authorized and directed to execute on behalf of the City of Hayward an agreement with Carollo Engineers to prepare a feasibility study and preliminary report for providing additional water storage at the Highland 250 and High School Reservoirs or alternate locations in the 250 zone, and at Highland 1000 Projects, Project Nos. 7173, 7165 and 7172 in an amount not to exceed \$130,000, in a form to be approved by the City Attorney.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2007

ADOPTED BY THE FOLLOWING VOTE:

**AYES: COUNCIL MEMBERS:
MAYOR:**

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

**ATTEST: _____
City Clerk of the City of Hayward**

APPROVED AS TO FORM:

City Attorney of the City of Hayward