



DATE: January 13, 2009
TO: Mayor and City Council
FROM: Director of Public Works
SUBJECT: Authorization for the City Manager to Execute a Professional Services Agreement for Design and Construction Administration Services for the Highland 1000 Reservoir Replacement Project

RECOMMENDATION

That Council adopts the attached resolution authorizing the City Manager to execute a Professional Services Agreement with Brown and Caldwell for design and construction administration services for the Highland 1000 Reservoir Replacement Project in an amount not to exceed \$400,000.

BACKGROUND

The 2002 Water System Master Plan Update (2002 Update), prepared by Carollo Engineers, identified water storage deficiency at the Highland 1000 Reservoir. Given the relatively large size of the service area of the Highland 1000, and the fact that lower and upper pressure zone each have higher storage capacity, this tank's 1 Million Gallon (MG) capacity has been determined to be insufficient. The 2002 Update recommended replacing the existing 1000 Zone reservoir with a larger tank having a minimum capacity of 1.7MG. In early 2008, Carollo Engineers completed a "Water System Reservoirs Project" report (2008 Report) which concluded that the existing 1000 Reservoir should be replaced with a new 1.9MG tank.

Existing Reservoir -

The existing Highland 1000 Reservoir, located at 3466 La Mesa Drive, was built in 1967. The reservoir site is bounded by Hayward Boulevard on the north, La Mesa Drive on the south, and private residences on the east and west. The reservoir site is rectangular in shape with dimensions of 183 feet in depth by 163 feet in width, and with an approximate area of 0.88 acre. The reservoir is a cylindrical, flat-bottom steel tank, with inside diameter (ID) of 70 feet, a usable height of 33.9 feet, and a capacity of 1MG.

New Reservoir -

The 2008 Report recommended replacing the existing 1000 Reservoir with a new 1.9MG tank constructed from welded steel, having the same height as existing. However, the proposal from the recommended consultant Brown and Caldwell suggested that the City consider replacing the steel tank with a post-tensioned concrete tank. City staff had initially considered a concrete tank but did not pursue that option due to concerns related to potentially longer duration of construction. In its proposal, Brown and Caldwell maintains that a concrete tank would be a better choice as it can best

a steel tank in initial and service life costs, create less impact on the neighborhood, and also be competitive in construction duration. Therefore, staff would be exploring this idea in more detail during the design process.

If a new 1.9MG reservoir is constructed matching the existing height as currently recommended, additional land may be required to be purchased from the adjacent property owner at 3452 La Mesa Drive. However, since a concrete tank can be constructed partially buried underground, more storage can be provided without the need to exceed the current height or need for additional property.

This project will necessitate the water tank to be taken out of service for about six months. The City's Utilities staff has developed a scheme to pump water from a lower zone (Highland 750) to a higher zone (Highland 1250) and then to bring the water from the upper 1250 zone to serve the 1000 zone service area while the 1000 Reservoir is out of service. In order to minimize the demand for water during the construction period, the construction work will be scheduled during the winter and spring time. While this would be an acceptable solution, staff will be considering other options that may be developed during preliminary design phase of the project.

DISCUSSION

On November 14, 2008, Requests for Proposals to provide engineering services for the Highland 1000 Reservoir Replacement Project were sent to five engineering consultants. On December 14, 2008, three proposals were received from Brown and Caldwell, Carollo Engineers, and HDR. Brown and Caldwell was found to be the best qualified to perform the work based on their strong understanding of the City's water system and extensive experiences with similar reservoir projects. Therefore, staff recommends that the City Manager execute a professional services agreement with Brown and Caldwell to provide design and construction administration services for the Highland 1000 Reservoir Replacement Project. Time is of the essence to ensure that the schedule can be met and construction can occur during the next winter season.

FISCAL AND ECONOMIC IMPACT

The estimated project costs are as follows:

Design and Construction Administration Services – Consultant	\$400,000
Design Administration – City Staff	100,000
Construction Contract	3,400,000
Inspection and Testing	150,000
R/W Acquisition	<u>70,000</u>
Total:	\$ 4,120,000

The FY 2009 Capital Improvement Program (CIP) includes \$4,122,000 for the Highland 1000 Reservoir Replacement Project in the Water System Replacement Fund.

PUBLIC CONTACT

At the start of the design phase of the project, staff will hold an informational meeting for the residents and property owners that may potentially be impacted by this project. This project will be designed in a manner to create no adverse impact on the quality or quantity of water provided to the customers in Highland 1000 service area. Fire Department will be fully apprised of the project during the design process.

SCHEDULE

The estimated schedule for this project is summarized as follows:

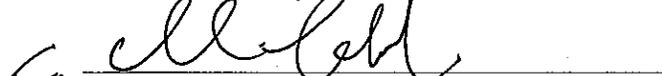
Begin Design	January 2009
Complete Design	June 2009
City Council Approval and Call for Bids	July 2009
Receive Bids	August 2009
Award Construction Contract	September 2009
Begin Construction	October 2009
End Construction	June 2010

Prepared by:



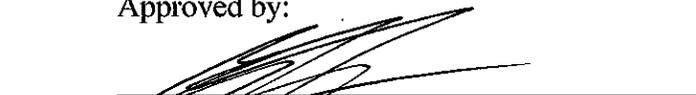
Alex Ameri, Deputy Director of Public Works

Recommended by:



Robert A. Bauman, Director of Public Works

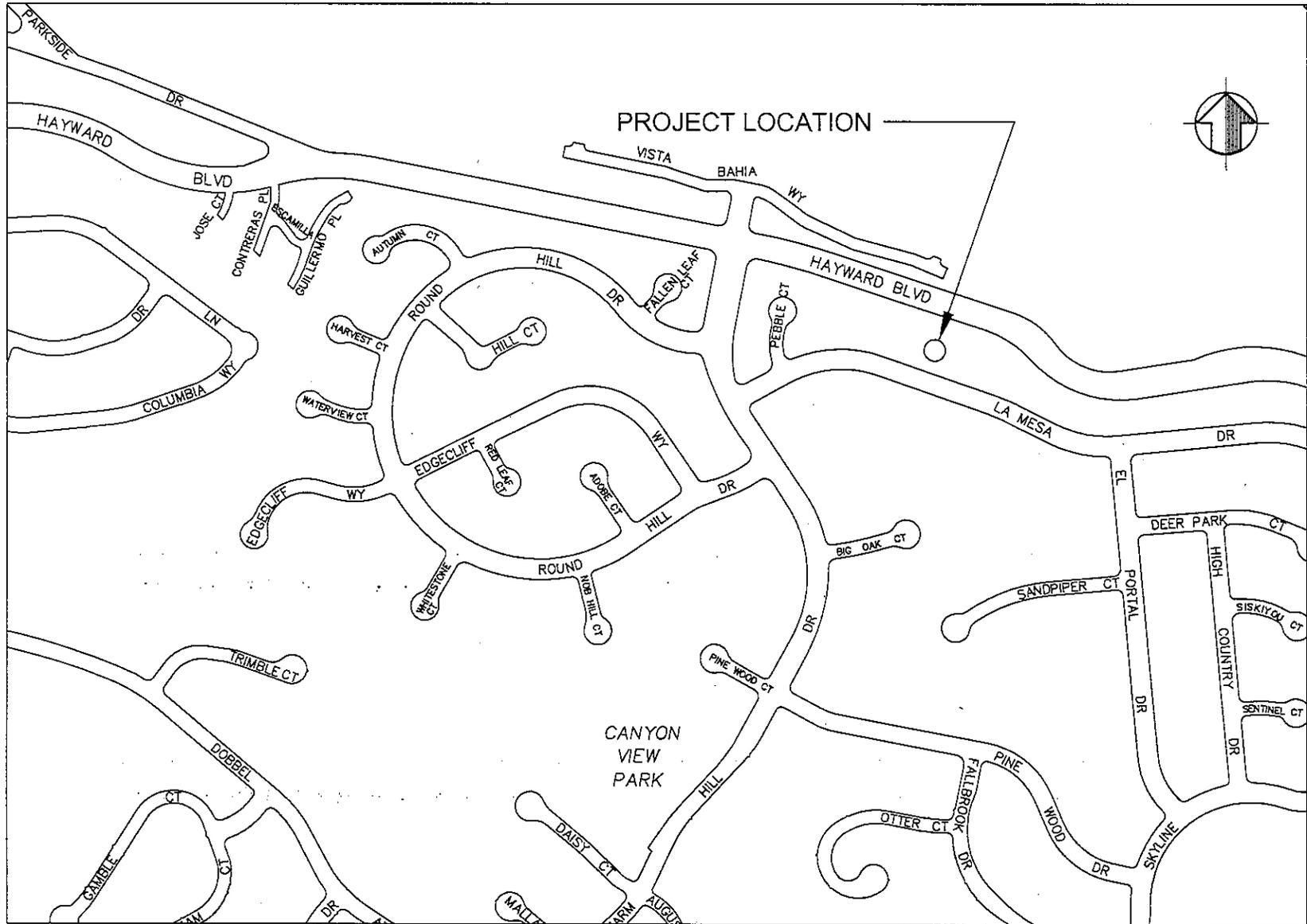
Approved by:



Gregory T. Jones, City Manager

Attachments: Exhibit A: Location Map
Draft Resolution

EXHIBIT A



HIGHLAND 1000 RESERVOIR REPLACEMENT-PROJECT NO. 7165
LOCATION MAP

DRAFT

NH
11/2/09

HAYWARD CITY COUNCIL

RESOLUTION NO. 09-

Introduced by Council Member _____

RESOLUTION AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH BROWN AND CALDWELL FOR DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES FOR THE HIGHLAND 1000 RESERVOIR REPLACEMENT PROJECT, PROJECT NO. 7165

BE IT RESOLVED by the City Council of the City of Hayward that the City Manager is hereby authorized and directed to negotiate and execute a Professional Services Agreement with Brown and Caldwell for design and construction administration services for the Highland 1000 Reservoir Replacement Project, Project No. 7165, in an amount not to exceed \$400,000, in a form to be approved by the City Attorney.

IN COUNCIL, HAYWARD, CALIFORNIA _____, 2009

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