

Agenda Report

TO:

CITY COUNCIL

March 29, 1999

FROM:

City Manager

SUBJECT:

Rehabilitation or Replacement of the La Loma Road Bridge:

Consultant Contract for Initial Planning Study

RECOMMENDATION:

It is recommended that the City Council authorize the City Manager to enter into a contract with De Leuw, Cather & Company for the provision of structural engineering and historical consulting services in connection with the Capital Improvement Program project that calls for either the rehabilitation or replacement of the La Loma Road Bridge over the Arroyo Seco. Formal bidding was not required pursuant to Section 1002(F) of the City Charter, professional or unique services. A partial exemption from the competitive selection process required by the City's Affirmative Action in Contracting Ordinance is requested pursuant to Pasadena Municipal Code Sections 4.09.060(C)(1), best interest (cost), and 4.09.060(C)(2), best interest (other City policy). The amount of the proposed contract is \$99,329.

SUMMARY:

This report describes the history of the project that calls for either the rehabilitation or replacement of the La Loma Road Bridge, the scope of services and purpose of the proposed consultant contract, and the basis for the requested partial exemption from the competitive selection process required by the Affirmative Action in Contracting Ordinance.

BACKGROUND:

A Seismic Assessment of the La Loma Road Bridge over the Arroyo Seco prepared by De Leuw, Cather & Company in 1990 found that the bridge did not meet Caltrans design standards aimed at preventing structural failure and recommended retrofit measures to improve performance of the structure during a major earthquake. The cost of the recommended retrofit measures together with limited repairs, including the cost of design and construction engineering services, was estimated at \$4,200,000.

MEETING OF _3/29/99

AGENDA ITEM NO. 4.A.(1)

A "Bridge Seismic Retrofit Prioritization" report prepared by Biggs Cardosa Associates, Inc., Structural Engineers, in 1993 for the eight City-owned bridges thought to pose a threat to public safety in the event of a major earthquake, estimated the cost for retrofit and total repair of the La Loma Road Bridge at \$4,715,000. The same report also estimated the cost of replacing the existing bridge with a similar arch-type structure at \$3,015,000.

The Capital Improvement Program has since 1994 contained a project that proposes either the rehabilitation (seismic retrofit plus repair) or replacement of the La Loma Road Bridge. The project was unfunded until the 1999 fiscal year when funds were appropriated to enable staff to initiate the process that will allow the Council to determine which course of action to pursue.

The first step in this process is the retention of a consultant to develop new cost estimates for the rehabilitation and replacement alternatives since City staff does not possess the expertise needed to perform this work. Accordingly, it is recommended that De Leuw, Cather & Company be retained to perform this work. This work, together with other related tasks, will be done for stipulated hourly rates plus direct costs for a total "not to exceed" fee of \$99,329.

The proposed scope of services includes the following:

Rehabilitation Alternative – Material testing will be performed to confirm previous assumptions about the quality and strength of the existing bridge concrete. The prior seismic retrofit study will be reviewed and updated as necessary to reflect current design practice and variations, if any, in concrete strength disclosed by the material testing. A retrofit alternative will be developed which will maintain the architectural integrity of the existing bridge. A summary will be provided for maintenance-type work unrelated to retrofit construction, such as repairing concrete spalls and cracks, sealing deck expansion joints, installing a deck waterproofing membrane, and replacing deteriorated asphalt concrete pavement.

<u>Replacement Alternatives</u> – Concept plans will be developed for three alternatives: a least cost structure in order to provide an economic frame of reference; a concrete arch structure; and a "signature" structure which would offer an architectural alternative to an arch-type bridge.

Historical Survey – In response to concerns expressed by the preservation community about a 1986 Caltrans Historic Bridge Inventory, which rated the La Loma Road Bridge as "not eligible for the National Register of Historic Places," the historic status of the bridge will be reevaluated. Although this task would ordinarily be undertaken during the environmental phase of the project, doing so now will expedite the preparation of the environmental documents and clarify the need for processing under Section 106 of the National Historic Preservation Act. This work will be done by a sub-consultant, JRP Historical Consulting Services of Davis, that is one of the most experienced and respected public history consulting firms in the nation. The firm's principal who will be performing the work, Steve Mikesell, is the author of the recent book, "Historic Highway Bridges of California," that is regarded as the definite work on the subject. JRP will conduct a historical survey of the bridge and prepare an Historic Resource Evaluation Report/Finding of Eligibility for submittal to the State Office of Historic Preservation.

The product of the consultant's work – the cost estimates for the rehabilitation and replacement alternatives plus the National Register eligibility determination – will not require that a decision be made regarding the scope of the ultimate project. Rather, this information when combined with the information brought to light during the subsequent environmental phase of the project will allow the City Council to make an informed choice between rehabilitation and replacement alternatives.

The proposed contract is for professional services and is, therefore, exempt from competitive bidding pursuant to Section 1002(F) of the City Charter.

The proposed contract should be exempted from the competitive selection process required by the City's Affirmative Action in Contracting Ordinance pursuant to Section 4.09.060(C)(1) of the Pasadena Municipal Code since the affirmative action and equal employment results attainable are substantially outweighed by the cost of achieving compliance. The proposed contract was negotiated directly with De Leuw, Cather & Company since the work previously completed by the firm represents a substantial amount of the engineering needed to determine the cost of retrofitting the structure to meet current standards. Although many advances in bridge retrofit design have been made during the past decade, the structure has not changed and its reanalysis is thought unlikely to alter identification of the critical members that need strengthening to prevent collapse. The original investigation and analysis completed in 1990 is work that would have to be redone by a new consultant to avoid potential professional liability exposure. This effort would increase the cost of the portion of the study related to the rehabilitation alternative, decrease the funding available for the development of replacement alternatives, and eliminate the funding available for the reevalution of the historic status of the bridge at this time.

The proposed contract should also be exempted from the competitive selection process required by the City's Affirmative Action in Contracting Ordinance pursuant to Section 4.09.060(C)(2) of the Pasadena Municipal Code since the affirmative action and equal opportunity results attainable are substantially outweighed by the need to expedite action on the project in order to protect public health and safety. In addition to the need for seismic retrofitting, the La Loma Road Bridge also suffers from observable deterioration at many locations. The most recent inspection of the bridge by the Los Angeles County Department of Public Works, performed in July 1998, rates it as being in poor condition. The use of a competitive selection process to retain a new consultant would delay the completion of this initial phase of the project by four to six months. It would also delay various other projects on account of staff time that would be required for the Request For Proposals process that would be needed to select another consultant.

The firm has agreed to a contract stipulation that it will not be eligible for any subsequent contract funded in part by Federal funds for the preparation of plans, specifications, and estimates for either the rehabilitation or replacement of the La Loma Road Bridge. This stipulation will ensure that the City maintains its eligibility for Federal reimbursement for future design engineering by avoiding a process that could be interpreted as not complying with Federal-Aid regulations that call for a fair and open competitive selection process. It should be noted that the value of design engineering work is typically three to four times that of initial planning studies such as the present one.

The proposed contract with De Leuw, Cather & Company, except for the partial best interest exemption described above, complies fully with the Affirmative Action in Contracting Ordinance, including the rules and regulations promulgated thereunder. The firm's regional work force consists of 244 employees of which 147 or 60 percent are protected class individuals.

FISCAL IMPACT:

There are sufficient funds available in Budget Account 73124 (La Loma Road Bridge) to cover the cost of the proposed contract with De Leuw, Cather & Company.

The Transportation Equity Act for the 21st Century (TEA-21) enacted by Congress in 1998 contains \$2,250,000 in Federal Demonstration Project funds, requiring \$562,500 in City matching funds, that can be used for either the rehabilitation or replacement of the La Loma Road Bridge. Once cost estimates have been prepared for the rehabilitation and replacement alternatives, it will be possible to explore project funding options, including the possibility of obtaining other Federal funds to supplement the above appropriation.

Respectfully submitted,

City Manager

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