

Agenda Report

TO: City Council **DATE:** May 19, 2003

FROM: CITY MANAGER

SUBJECT: Resolution Approving Program Supplement Agreement for the La Loma Road Bridge over the Arroyo Seco; and Contract Award to Myra L. Frank & Associates, Inc. for the Preparation of Environmental Document and Regulatory Permit Support Services for the La Loma Road Bridge over the Arroyo Seco

RECOMMENDATION:

It is recommended that the City Council:

- (1) Adopt a resolution approving Program Supplement No. M053 to Administering Agency – State Agreement No. 07-5064 between the City of Pasadena and the State of California, for State Reimbursement covering preliminary engineering for the La Loma Road Bridge over the Arroyo Seco, and authorize the City Manager to execute the same on behalf of the City.
- (2) Authorize the City Manager to enter into a contract with Myra L. Frank & Associates, Inc., Los Angeles, for the Preparation of the Environmental Document and Regulatory Permit Support Services for the La Loma Road Bridge Project in an amount not to exceed \$240,000. Competitive bidding is not required pursuant to City Charter Section 1002(F) professional or unique services.

EXECUTIVE SUMMARY:

A 1990 report titled *Seismic Assessment of the La Loma Road Bridge over the Arroyo Seco* indicated that the subject bridge did not meet Caltrans criteria for preventing structural collapse in the event of a specified seismic event. Subsequent to that determination, the City retained the services of several consultants to prepare additional bridge assessment reports, including the *La Loma Road Bridge, Initial Planning Study: Bridge Alternatives Report*. The *Bridge Alternatives Report* provided conceptual plans and cost estimates for a seismic retrofit/rehabilitation alternative that will maintain the architectural integrity of the existing bridge and identified three replacement structure alternatives: a least cost structure, a concrete arch structure, and a "signature" structure that would offer an architectural alternative to an arch-type bridge.

The identification of a preferred alternative will be the objective of the preliminary engineering (environmental review) phase of the project. Therefore, it is recommended that Program Supplement M053 be approved to enable the City to obtain Federal reimbursement of eligible preliminary engineering (environmental review) costs. In addition, it is recommended that the City enter into a contract with Myra L. Frank & Associates, Inc. for the Preparation of the Environmental Document and Regulatory Permit Support Services for the La Loma Road Bridge Project.

BACKGROUND:

The La Loma Road Bridge over the Arroyo Seco project (see Exhibit A for Location Map) is included in the approved Capital Improvement Program. The project consists of the seismic retrofit/rehabilitation or replacement of the existing bridge to address seismic deficiencies. The Department of Public Works has obtained authorization from the State Department of Transportation to proceed with preliminary engineering. The request for Federal Funding reimbursement of 80% of the preliminary engineering requires City Council approval. The City has appropriated \$195,000 (through Fiscal Year 2002) in local funds.

The State of California, acting through the California Department of Transportation (Caltrans), administers certain federal transportation funds. These funds are paid to the City of Pasadena pursuant to the provisions of Administering Agency – State Agreement No. 07-5064 (City of Pasadena Agreement No. 16,298) entered into by the parties on April 3, 1997. To obtain funds for a specific project it is necessary to execute a separate supplemental agreement for the project after it has been approved for funding by Caltrans and the Federal Highway Administration. Program Supplement No. M053 will provide reimbursement of up to \$192,000 in Federal Surface Transportation Program funds for the preliminary engineering of the La Loma Road Bridge over the Arroyo Seco.

Initial Planning Study

A June 2000 report titled the *La Loma Road Bridge, Initial Planning Study: Bridge Alternatives Report*, prepared by De Leuw, Cather & Company, presented conceptual plans and cost estimates for a seismic retrofit/rehabilitation alternative that will maintain the architectural integrity of the existing bridge and identified three replacement structure alternatives: a least cost structure, a concrete arch structure, and a “signature” structure that will offer an architectural alternative to an arch-type bridge (see Exhibit B for Bridge Alternatives). Each of the replacement alternatives would be constructed on the same alignment as the existing bridge, approximately match it in length and width, and like the existing bridge, carry one lane of traffic in each direction. Brief summaries of each alternative are presented below.

Seismic Retrofit/Rehabilitation Alternative – Seismic analysis reflecting current design practices and laboratory testing of concrete and steel samples reveal that the existing structure needs substantial strengthening to be able to withstand the forces that would be generated by a major earthquake.

Concept level details have been developed for retrofit measures that will maintain the architectural integrity of the bridge. Non-seismic deficiencies, such as exposed reinforcing steel, spalled concrete, cracked deck pavement and sidewalks,

deteriorated deck expansion joints, and rusted bearing plates and drain pipes, have been cataloged and the necessary repairs itemized. Details have also been developed for replacing the existing galvanized steel bridge railing and high mast street lights with ornamental concrete railings and post-top street lights having the essential elements of these original features. A modification to the height of the original railing base is recommended in order to meet current standards for the receipt of Federal highway funds. The total estimated project cost of this alternative is \$9,400,000.

Concrete Box Girder Replacement Bridge – Cast-in-place post-tensioned concrete box girder bridges are the most commonly built type of structure throughout California for the span lengths under consideration at this site. There are a great number of contractors experienced in this type of construction so that it would be the quickest and least expensive option.

A box girder superstructure offers a clean and simple appearance. Architectural features can be added in the form of rustications on the pier columns and on the exterior of the bridge railing bases and by modifying the shape of the exterior box girder webs. The total estimated project cost of this alternative is \$3,410,000.

Open Concrete Arch Replacement Bridge – The arch bridge alternative is designed to harmonize with and continue the tradition of arch bridges spanning the Arroyo Seco, while taking advantage of modern construction materials and design techniques. It would consist of three spans without piers or spandrel columns. The bridge would feature wide, single arch ribs supporting the superstructure at their highest points. The “open” arch configuration and single arch ribs would give the structure a more airy appearance compared to conventional arch-type bridges, while helping to reduce construction costs. The total estimated project cost of this alternative is \$3,920,000.

Cable-Stayed Replacement Bridge – A modern appearance would be achieved by the construction of two pairs of tall, slender concrete towers with high strength steel cables supporting a pre-stressed concrete deck system. This bridge type would represent a dramatic departure from the other types of structures along the Arroyo Seco and would make an architectural statement for Pasadena’s future architectural heritage. The total estimated project cost of this alternative is \$4,170,000.

Environmental Phase

Identification of a preferred alternative will be the objective of the preliminary engineering (environmental review) phase of the project. As the project will be partially funded with Federal funds, the environmental review must conform to the requirements of both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). These laws specify different levels of documentation preparation for projects that would have a significant adverse impact on an historical resource – which would be true for replacement of the La Loma Road Bridge. The documentation will consist of a combined NEPA Environmental Impact Statement and a CEQA Environmental Impact Report. This would provide a forum for extensive discussion of environmental issues in a single document that would be circulated for review by the public and responsible agencies.

By letter, dated December 6, 2000, State Historic Preservation Officer (SHPO) approved a determination by the Federal Highway Administration that the bridge is eligible for listing in the National Register of Historic Places.

Broad-based public outreach and project scoping phases of the environmental review process are envisioned to begin in Summer July 2003. These efforts will be carried out with the assistance of neighborhood associations, and any other interested community groups.

It is expected that the environmental investigation would focus primarily on the historic status of the existing bridge and bridge aesthetics. It would also, as required by law, evaluate the impact of the seismic retrofit/rehabilitation and replacement alternatives on the Lower Arroyo Seco parklands and consider the temporary traffic, noise, and air quality effects associated with the construction of each. The environmental review would afford equal weight to the seismic retrofit/rehabilitation and the three replacement alternatives, as well as any other replacement alternatives or variations of the three above described alternatives that might be generated by the public outreach efforts to be undertaken at the beginning of the environmental review process.

Environmental Consultant Selection

In February 2003, the Department of Public Works issued a Request for Proposal (RFP) to consultants for the Preparation of Environmental Document and Regulatory Permit Support Services for the subject project. A pre-proposal meeting was held on February 24, 2003 to resolve any questions regarding the RFP. On March 6, 2003, six proposals were received and reviewed by the City's consultant selection committee. The proposals were evaluated and the consultants were ranked based on the selection evaluation criteria set forth in the RFP. As a result of this process, the top four firms were short-listed and invited for interviews. The short-listed consultants were: EIP Associates, Myra L. Frank & Associates, Inc., Parsons, and Ultrasystems.

The consultants and their team were interviewed on April 8, 2003, and ranked by the consultant selection committee. Exhibit C attached to this report provides the final ranking and score of each consultant by the interview panel, and also provides the criteria by which they were rated.

Based on their qualifications and interview, Myra L. Frank & Associates, Inc. was selected to provide the Preparation of Environmental Document and Regulatory Permit Support Services.

The total compensation to Myra L. Frank & Associates, Inc. under the subject contract will include compensation in an amount not to exceed \$240,000. This includes a base contract amount of \$222,314, and approximately 10 percent allocated for contingencies.

Project Schedule

Following completion of the environmental phase of the project, the time required to complete the project varies between the seismic retrofit/rehabilitation alternative and the three replacement alternatives. Based on the City's experience with previous Federal-Aid projects involving consultants, the total time required to complete the project, regardless of the alternative selected, is estimated as being between five and seven years. However,

the time estimates do not include allowances for the time needed to obtain authorization from Caltrans to proceed with reimbursable work on environmental, design, or construction activities, or for the consultant selection/retention process needed to carry out these activities.

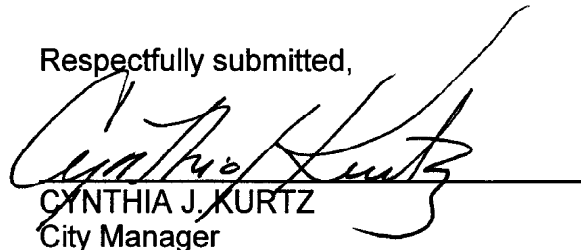
Project Funding

The Transportation Equity Act for the 21st Century (TEA-21) provides \$2,250,000 in Federal Demonstration Project funds that can be used for either the seismic retrofit/rehabilitation or replacement of the La Loma Road Bridge. These funds require a 20 percent match with local funds, so the City's match is: $(\$2,250,000 / 80\%) \times 20\% = \$562,500$. Thus, the total that will be available, once the source of the City's matching share of \$562,500 is identified and appropriated, is \$2,812,500. However, this will not be enough to cover even the cost of the least expensive alternative, the concrete box girder replacement bridge, and is far short of the most expensive alternative, the seismic retrofit/rehabilitation of the existing structure. Therefore, the Department of Public Works will be submitting an application to Caltrans for additional funding under the Highway Bridge Rehabilitation and Replacement (HBRR) program.

FISCAL IMPACT:


The La Loma Bridge – Rehabilitation or Replacement project is included in the current Capital Improvement Program (Budget Account 73124), and sufficient funds are available to cover the City's share of the preliminary engineering (environmental review) costs. Approval of Program Supplement M053 to Administering Agency State Agreement No. 07-5064 will enable the City to obtain Federal reimbursement of eligible preliminary engineering costs.

Respectfully submitted,




CYNTHIA J. KURTZ
City Manager

Prepared by:



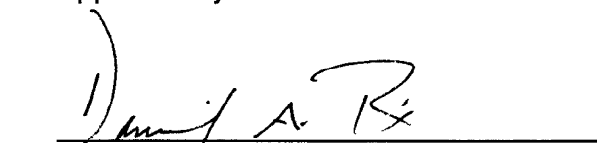
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