



**DATE:** November 1, 2016

**CATEGORY:** New Business

**DEPT.:** Public Works

**TITLE:** **Shoreline Boulevard/101 Northbound Off-Ramp Modifications, Project 15-39 – Professional Services Agreement**

## **RECOMMENDATION**

1. Transfer and appropriate \$1,700,000 from the Shoreline Community Fund to Shoreline Boulevard/101 Off-Ramp Modification Feasibility Study, Project 15-39. (Five votes required)
2. Authorize the City Manager to amend an existing professional services agreement with AECOM of San Jose to provide planning, engineering, and environmental services for the conceptual design and Caltrans review phase of the Shoreline Boulevard/101 Northbound Off-Ramp Modifications, Project 15-39, in the amount of \$1,206,892 for total compensation of \$1,300,892.

## **BACKGROUND**

### **Introduction**

Improvement of the Highway 101 off-ramp at North Shoreline Boulevard has been identified as an important project to facilitate anticipated growth in the North Bayshore Area. The Environmental Impact Report (EIR) for the 2014 North Bayshore Precise Plan (NBSPP) identified growth-related impacts to the interchange as significant and unavoidable. The five-legged intersection at the Highway 101/North Shoreline Boulevard intersection carries more than 35 percent of the traffic accessing the NBSPP area. On weekday mornings, vehicle queues sometimes extend from the off-ramp to Middlefield Road on North Shoreline Boulevard and nearly 2,000' along the off-ramp itself.

To proactively address this problem, the City Council funded a feasibility study to evaluate alternatives for improvement of the off-ramp. After being hired by the City through a competitive selection process, AECOM developed and evaluated four alternative solutions for a new ramp configuration. With this feasibility step complete,

the next phase is to proceed with the formal Caltrans approval process. The recommended actions will provide funding and professional services for this step. After the Caltrans process, detailed design can begin.

### Feasibility Study Results

The four alternatives developed by AECOM that will be submitted to Caltrans include:

Alternative 1 would construct a “slip” ramp off the existing northbound U.S. 101/North Shoreline Boulevard off-ramp to connect to La Avenida. Only eastbound access would be allowed from the slip ramp. The existing northbound off-ramp would remain the same.

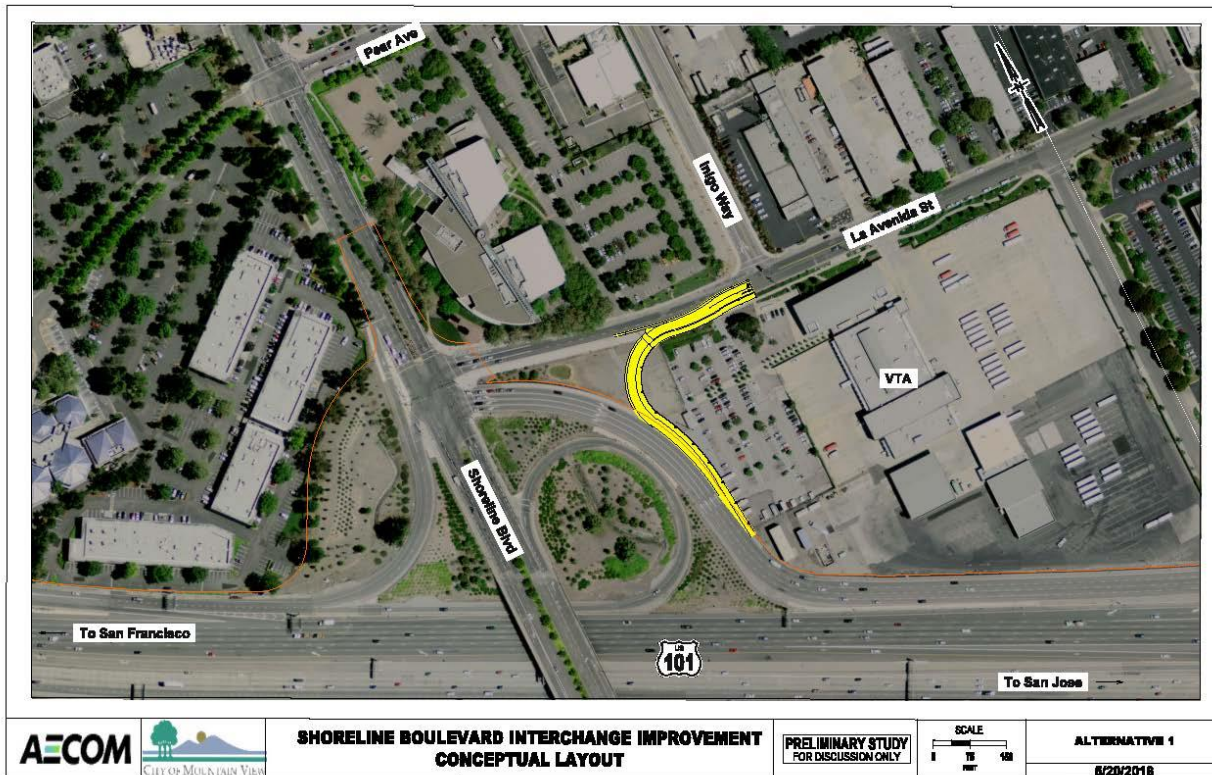


Figure 1 – Alternative 1

Alternative 2 would realign the northbound U.S. 101/North Shoreline Boulevard off-ramp to create a new T-intersection west of the Inigo Way/La Avenida intersection. New traffic signals would be installed at the ramp intersection and the intersection of Inigo Way and La Avenida. La Avenida would revert to a two-way street allowing

eastbound movement from North Shoreline Boulevard. A right-turn lane pocket would also be added from northbound Shoreline Boulevard to eastbound La Avenida.

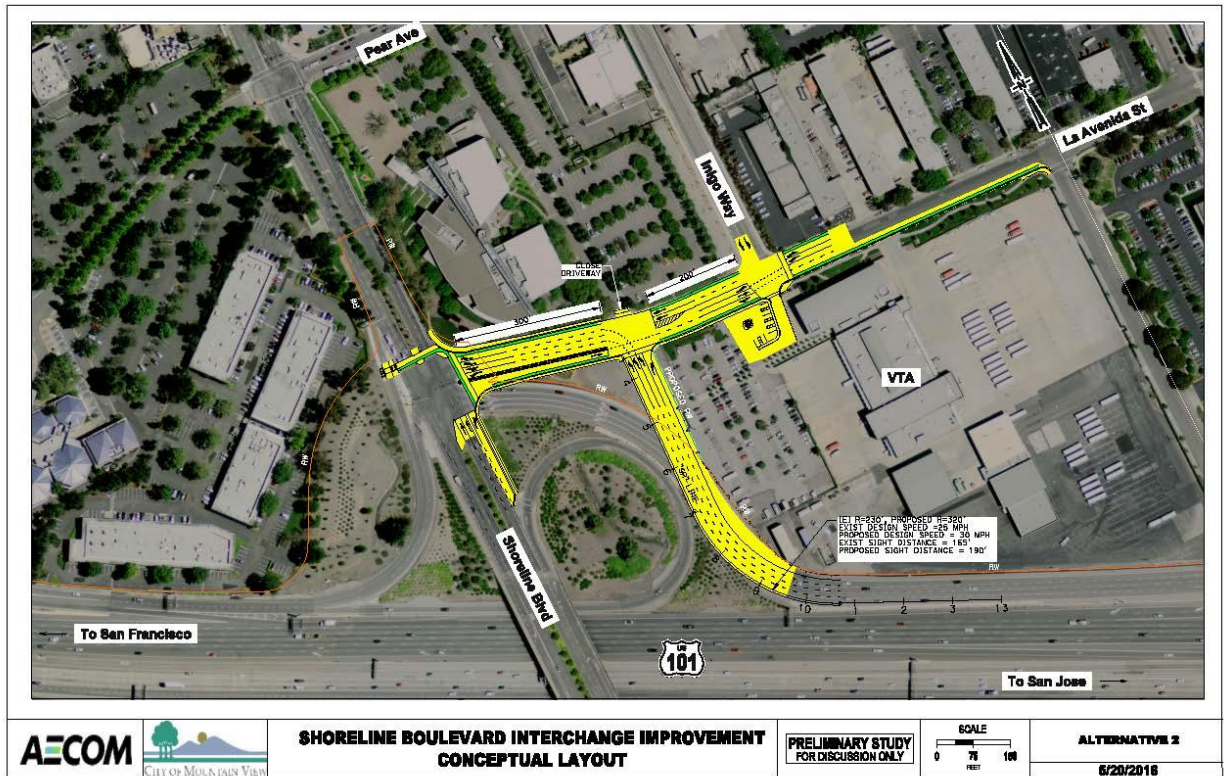


Figure 2 – Alternative 2

Alternative 2 – Bus is similar to Alternative 2 except that it proposes a bus-only lane along the off-ramp at approximately 700' from the ramp termini and between the ramp intersection and North Shoreline Boulevard. Under this alternative, the buses would bypass the queue on the ramp and proceed to the intersections. At the intersections, signal priority would be proposed for buses.



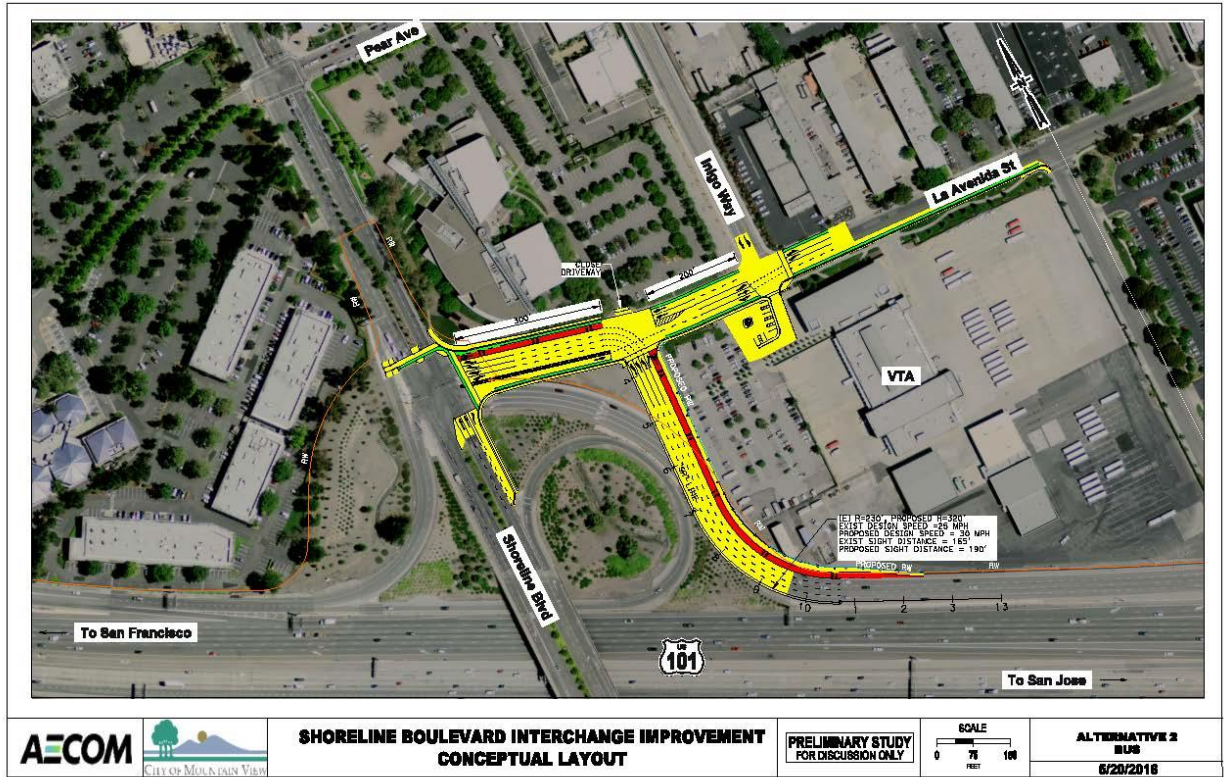
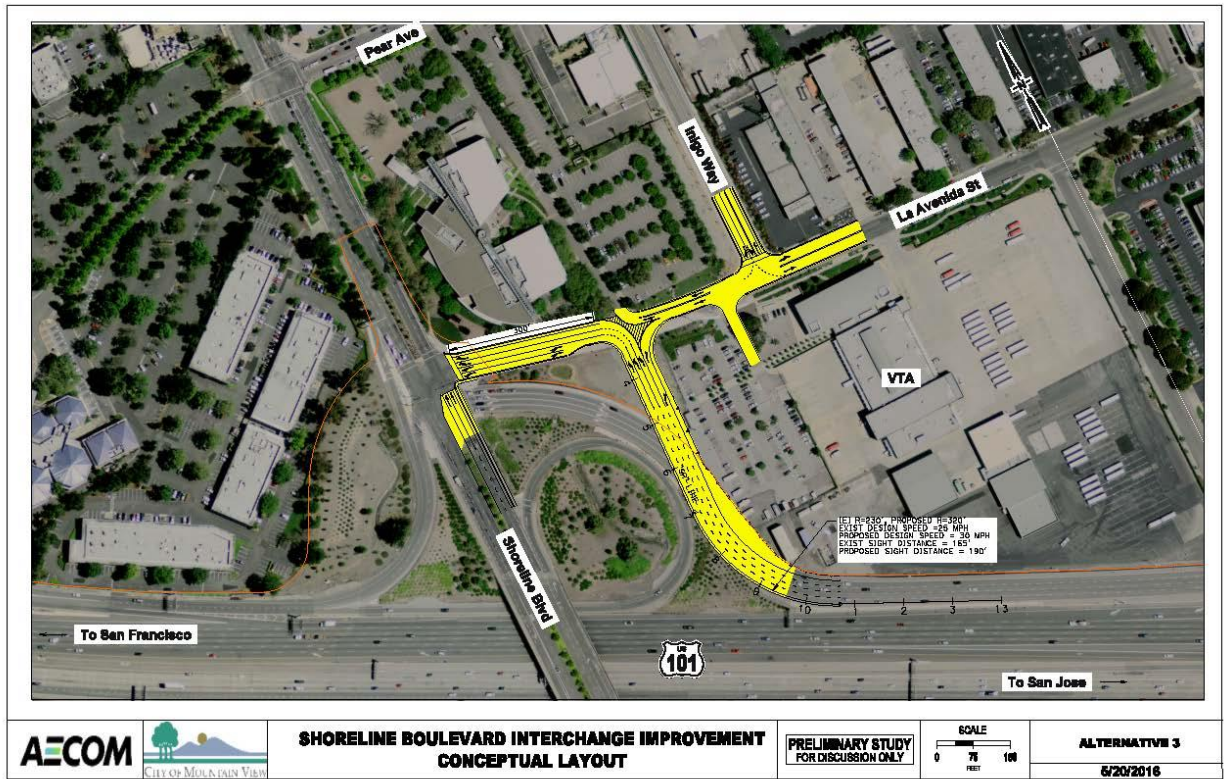


Figure 3 – Alternative 2 – Bus

Alternative 3 is similar to Alternative 2 except that La Avenida would remain as a westbound-only street between Inigo Way and North Shoreline Boulevard. No traffic signal would be installed at the ramp termini or at the intersection of Inigo Way and La Avenida.



**Figure 4 – Alternative 3**

Since the off-ramp is a Caltrans facility, the preferred alternative will be selected by Caltrans following completion of the current study. In addition to the above, Caltrans may require development of other alternatives for analysis. Staff is, therefore, not requesting that the City Council select from among the proposed alternatives at this time. Staff will continue to work with Caltrans to achieve a mutually preferable alternative. Staff will return to Council with a recommended alternative as part of funding the next phase of the project, detailed design.

Based on the preliminary traffic analysis conducted as part of the Feasibility Study, staff believes that Alternative 2 (and Alternative 2 – Bus) would provide the most improved conditions. The average peak-hour delay time at the intersection of North Shoreline Boulevard and La Avenida would decrease from 208.5 seconds to 44.0 seconds while the queue length on the northbound off-ramp would shorten from 2,000' to 625'. Significant travel time saving would be realized for Alternative 2 (and Alternative 2 – Bus) for northbound off-ramp traffic destined to La Avenida. Informal discussions with Caltrans staff indicate that Caltrans seems to favor Alternative 2 and Alternative 2 – Bus as well.

The Feasibility Study identified several issues, including, but not limited to the following: (1) all of the alternatives would require right-of-way (up to approximately one-third acre) near the westerly edge of the VTA Bus Yard, plus temporary construction easements; (2) cooperative agreements will need to be prepared and executed between Caltrans and the City to engage Caltrans in the oversight function for the various phases of the project; (3) utilities and drainage in the area will be affected and may need to be relocated; (4) several environmental studies may be needed; and (5) a driveway to the Computer Museum off La Avenida would need to be closed or modified.

### Caltrans Process

Since the project modifies a Caltrans interchange ramp, the City will need to follow Caltrans project development procedures. The next step is to obtain Caltrans approval for a preferred alternative so that the improvements can be designed and implemented. Additionally, the project involves introducing a new public road connection to a freeway ramp; therefore, approval from the California Transportation Commission will be required.

Typically, Caltrans' process is two steps, including preparation of Project Study Report/Project Development Support (PSR/PDS) documents and then Project Report (PR) documents. Based on the information developed in the Feasibility Study and the fact that no State or Federal funding is needed, initial informal discussions with Caltrans staff indicate that this project may qualify for a streamlined combined PSR/PR process. If combined, the PSR/PR process is estimated to be completed within 12 to 15 months, whereas the two-step process would potentially take an additional 10 to 12 months and would be more expensive.

### ANALYSIS

Because of the relatively high cost of the next phase of the project, staff issued a Request for Proposals to 10 firms to ensure a competitive procurement process. Four proposals were received, and a consultant selection committee that included City staff members, each with different background and expertise, reviewed all the proposals. AECOM was ranked the most qualified firm based on their qualifications, experience with past projects of similar nature, clear understanding and approach to the project, and experience involving the Caltrans Project Development Process.

The recommended scope of work includes:

1. Project Implementation Plan
2. Project Management
3. Caltrans and VTA Permits
4. Traffic Forecasts and Operational Analysis
5. Data Collection, Mapping, and Preparation of 35 Percent Plans and Specifications
6. Environmental Technical Studies
7. Environmental Documents
8. Project Study Report/Project Report (PSR/PR)
9. Utility Conflict Analysis
10. Right-of-Way Requirements Analysis
11. Initial Study/Environmental Assessment (optional)
12. Geoarchaeological Field Investigation to Ascertain the Potential for Buried Archeological Resources (optional)
13. Project Study Report – Project Development Support (optional)

The optional services may be required based on preliminary findings and Caltrans staff determinations during this next phase of work. Based on the proposals received, staff considers the recommended fee to be fair and reasonable.

The initial project funding only included the feasibility study phase, which is now complete. Now that the project is ready to proceed to the next phase and the cost of the required professional services is known, staff recommends funding the next phase and amending AECOM's contract.

With City Council approval of this amendment, AECOM could begin work in November 2016 and may complete it within 12 to 15 months. However, this schedule is

largely dependent on Caltrans' review and approval process. If the City is satisfied with AECOM's performance on this next phase of work, staff anticipates recommending that the City negotiate exclusively with AECOM for the next phase of work (i.e., detailed design).

During the next phase and beyond, the City will continue to work with the VTA on acquiring right-of-way for the project.

### **FISCAL IMPACT**

The estimated cost to advance the project through the Caltrans process and obtain Caltrans approval for a project alternative or set of alternatives is as follows:

AECOM Contract (basic services)	\$ 742,240
AECOM Contract (optional services)	314,652
AECOM Contract (additional services)	<u>150,000</u>
Subtotal AECOM Services	1,206,892
Cost of Caltrans Oversight/Agreement	350,000
Permit Fees	50,000
City Project Management @ 10%	<u>160,689</u>
Subtotal	\$1,767,581
City Administration @ 6.5%	<u>114,893</u>
Total Cost for Caltrans Approval Process	<u>\$1,885,000</u> (Rounded)

Currently, approximately \$185,000 is available in Shoreline Boulevard/101 Off-Ramp Modification Feasibility Study, Project 15-39, and the estimated cost to advance the project to the next stage is \$1,885,000. The recommended action would transfer \$1,700,000 from the Shoreline Community to fund this work.

Once Caltrans approves a project alternative, staff will return to Council with an amendment to the AECOM contract to complete the design work and prepare final plans and specifications for bidding the project. The total cost of the project, including: (1) Caltrans process to approve a project alternative(s); (2) preparation of plans and specifications for bidding the job; (3) acquiring right-of-way; and (4) construction, is estimated to be in the range of \$17 million to \$22 million in current-day costs, excluding the cost of relocating utilities. Funding sources for the remaining phases will include a



combination of Shoreline Community funds and payments from North Bayshore developers.

**ALTERNATIVES**

1. Do not approve the recommended contract and direct staff to reevaluate the other three firms' proposals received or issue another Request for Proposals to other engineering firms.
2. Consider the additional funding as part of the next Capital Improvement Program cycle in spring 2017.
3. Do not proceed with the project at this time.
4. Provide other direction.

**PUBLIC NOTICING** – Agenda posting.

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943-11-01-16CR-E-1