

STAFF REPORT

SUBJECT: Transit Signal Priority Upgrade Project
Scope of Work for Design and Project Management

FROM: Christy Wegener, Director of Planning and Operations

DATE: September 25, 2017

Action Requested

Authorize Executive Director to execute a task-order contract with Kimley-Horn Associates, Inc. to perform project management, design, and construction management services for the LAVTA Transit Signal Priority (TSP) upgrade project pursuant to the terms of LAVTA's existing on-call Engineering Services Contract (Agreement #842, RFP #2016-14) for \$256,285.18, with a 10% contingency to be used at the Executive Director's discretion.

Background

The Rapid TSP upgrade and expansion project will update the onboard and on-street TSP equipment throughout the Tri-Valley to GPS-based technology, and will expand the TSP network to new Rapid corridors in Pleasanton and Livermore. A map of the existing and potential new locations for TSP is included as Attachment 1.

Upgrading the TSP equipment will ensure that the Rapid buses travel through the Tri-Valley as quickly as possible in order to remain competitive with the Single Occupant Vehicle (SOV) and attract riders. The GPS-based technology is more accurate, is conditionally activated (turns on when the bus is late), provides more accurate reporting and schedule adherence data, and can more reliably impact a corridor's on-time performance.

The funding for this project (\$1.14m) is being provided by the Tri-Valley Transportation Council (TVTC) and was secured on July 17, 2017 (TVTC Resolution 2017-17, Attachment 2). The LAVTA Board and the City Council of Dublin, respectively, approved an MOU in September 2017 which outlined how the TVTC funds would pass through the City to LAVTA for the project. The next step is to procure consultant services to oversee the project, and to begin the design of the network, and develop system and vendor specifications for the procurement and installation of the equipment.

Discussion

Kimley Horn is one of LAVTA's on-call Engineering services firms. Kimley Horn is the only LAVTA on-call contractor who specified advanced traffic management systems and Intelligent Transportation Systems as areas of service in their proposal. They have extensive experience working with the Tri-Valley traffic engineers, and also with working on similar TSP upgrade

projects at Bay Area transit agencies (AC Transit, for example). The brief project scope of work for the TSP Upgrade Project is provided below, and the detailed scope of work is included as Attachment 3.

Task 1 – Project Management and Meetings

This task includes project management related tasks and meetings. This includes on-going coordination between Kimley-Horn, LAVTA, the TSP vendor and the cities over the course of the project.

Task 2 – Data Collection and Field Reviews

Kimley-Horn will coordinate with LAVTA and the cities of Livermore, Dublin and Pleasanton to gather information on the existing TSP elements at the project intersections. This information will be used to conduct an initial assessment of the changes necessary at key locations to implement the new TSP system and provide an initial framework to coordinate the installation process with the new TSP system vendor. Kimley-Horn will also review previous efforts when the existing TSP system was deployed and identify constraints from that deployment to determine if anything needs to be done to install the new TSP system. This includes near side stops, roadway alignments that obscured the optical path between bus and traffic signals, queue jumps and any other field and operational constraints that will affect the new TSP.

Task 3 – Coordination with Local Cities

Kimley-Horn will coordinate and meet with the local cities (Dublin, Livermore and Pleasanton) to gather specific issues, needs and requirements that will be required of the new TSP system, or the new TSP system will be able to address. This includes the potential for TSP parameters modifications in the traffic controllers, as well as the implementation of TSP at new or additional locations. The team will also coordinate with the cities on different ways of incorporating the new TSP system into each of the local agency's traffic management system.

Task 4 – Detailed Installation Designs

Kimley-Horn will prepare detailed designs for the installation of the new TSP field elements. The designs will include all necessary details for the installation of the TSP equipment such as mounting details, installation and connection details. It will also include details on re-connecting existing connections within each cabinet to retain any existing functionality, e.g., emergency vehicle preemption. The detailed designs will include plans and technical specifications as necessary for LAVTA to hire a construction contractor to perform the field installations. The detailed designs will be able to be used by the TSP vendor to perform the field installation should that be the preferred direction by LAVTA. The detailed designs will be prepared for up to 54 traffic signal locations (Dublin and Livermore), which includes the potential for TSP installations in Pleasanton at up to 8 intersections.

Task 5 – TSP System Procurement, Installation, Configuration and Integration

Kimley-Horn will provide project management, construction management, oversight and coordination of the procurement, installation, configuration, integration and testing of the new TSP system. This effort will cover through the TSP system commissioning after the successful completion of the acceptance tests and the final burn-in test.

Budget

The cost for project management including design, procurement, and construction management is estimated at 25% of the project budget, or \$285,000. Based on the scope of work detailed in Attachment 3 and briefly described above, Kimley Horn will provide the work for a firm fixed price fee of \$256,285.18. With a standard 10% contingency in place, the total budget for this portion of the project is \$281,913.70.

Next Steps

Upon executing the task order contract with Kimley Horn, LAVTA will issue the Notice to Proceed.

Recommendation

Approve Resolution 32-2017 awarding the TSP Upgrade Project task order contract to LAVTA's on-call contractor Kimley Horn for a not-to-exceed amount of \$256,285.18 with a contingency amount of \$25,628.51 (10%).

Attachment:

1. Existing and Potential TSP Locations
2. TVTC Resolution 2017-17
3. Kimley Horn - Detailed Scope of Services
4. Resolution 32-2017