

**CITY OF ALBANY
TRAFFIC & SAFETY COMMISSION AGENDA
STAFF REPORT**

Agenda date: December 1, 2011

SUBJECT: Review of Design Options and Cost Estimates for Improvements at the Intersection of Marin Avenue and Santa Fe Avenue

FROM: Aleida Andrino Chavez, Transportation Planner
Randy Leptien, City Engineer
Jeff Bond, Community Development Director

STAFF RECOMMENDATION

1. Adopt Motion recommending to the City Council an amendment to the contract with AECOM to develop a revised design to reduce project costs
2. Provide direction to staff on revised design as it relates to project objectives and the policy issues associated with projected cost increase. Staff Recommends Option 2.

BACKGROUND

The City of Albany Traffic Management Plan (TMP), adopted by the City Council on May 15, 2000, identified the need to improve the safety of the intersection of Marin Avenue with Santa Fe Avenue as the number one priority traffic and safety project out of 61 projects identified throughout the City.

In 2002, the citizens of Albany approved Measure F 2002, which provided funding for traffic calming projects. Using these funds, in 2004, the City constructed traffic islands at the southwest corner of the intersection in order to slow vehicles turning right from eastbound Marin onto southbound Santa Fe. The traffic islands also provided a refuge for pedestrians and shortened the crossing length across Santa Fe. The 2004 improvements were intended as interim improvements until funding for full intersection improvements could be obtained.

In 2005, Marin Avenue was reconfigured between The Alameda and Cornell Avenue. The two lanes in each direction were replaced with a single lane in each direction plus a two way left turn lane and bike lanes in each direction. An evaluation conducted one year after the lane reconfiguration on Marin Ave. recommended that in order to improve pedestrian safety and operations on Marin, it was necessary to implement new vehicle detection system at the Marin/Santa Fe intersection. A detection system would reduce the length of the vehicle queue on Marin, which in turn would reduce the amount of time pedestrians wait to find a gap in traffic to cross at un-signalized intersections along Marin Ave.

In 2009, the City obtained a State of California Safe Routes to School (SR2S) Grant for pedestrian enhancements around Marin Elementary School. The total amount of the SR2S grant was \$576,205, including \$86,310 for engineering and \$23,269 for an educational program. The Grant required a local match of \$63,540 from the City. The total funds allocated to the project were estimated in October of 2009 to be \$639,744. The source of the local match funds was a combination of non-discretionary Measure B funds, gas tax and TDA funds.

The final draft of the Active Transportation Plan calls for Marin Avenue and Santa Fe Avenue pedestrian and bike enhancements. At this corner, the ATP includes high-visibility school crosswalks, corner bulb outs, and elimination of the eastbound right-turn slip lane, bicycle boxes, directional signage.

Project Implementation to Date

On December 7, 2009, the City Council approved an agreement with AECOM to prepare plans and specifications for this project and authorized the City Manager to execute a Program Supplement with Caltrans for the design, construction and implementation of this project.

In the summer of 2010, the Traffic & Safety Commission reviewed the 65% plans. At that time, in order to improve pedestrian safety and reduce project cost, the project proposed to eliminate the crosswalk on the west leg of the intersection. The Commission's major concerns surrounded the removal of the westerly crosswalk, the alignment of the centerline of the intersection, the bulb outs encroaching into the bike lane, and the ability of the plans to show before and after project to see the modifications that would be taking place.

On October 28, 2010, the Traffic & Safety Commission reviewed the revised 65% plans. The revised plans restored the westerly crosswalk and removed the encroachment from the bike lanes. The consultant explained that in order to retain the westerly crosswalk, it was necessary to shift the centerline to the east, and that this would require significant revisions to the design. Following the Commission meeting, the consultant was authorized to prepare complete plans and a cost estimate for the revised project.

DISCUSSION

Summary of Current Policy Issue

The recently received cost estimate based on the current revised plans for the project is approximately \$1.2 million, which far exceeds the \$639,744 currently available from the Safe Routes to Schools grant and local match.

Design Objectives

The TMP identified the following problems at this intersection:

- An elementary school is located at this intersection
- Consistent speeding on Marin was documented
- The acute and obtuse angles of intersection result in crosswalks are offset from the corners, making pedestrians difficult to see (poor sight distance) when vehicles make the right turn from either northbound or south bound Santa Fe Ave onto westbound or eastbound Marin Avenue.
- The acute and obtuse angles also produce large radius turning lanes which promote high and unsafe vehicle speeds
- Crosswalks were long making it difficult for children and pedestrians in general to cross Marin Ave (a busy arterial) and Santa Fe (a busy collector).
- Bicycle crossings were also observed to be difficult

The elements of the proposed project that will address these deficiencies were identified in the City's grant application and include:

- Implementation of a new traffic signal with detection and controller at the Marin and Santa Fe intersection;
- Pedestrian improvements around Marin Elementary School, which include intersection bulb outs that aim to correcting the Marin/Santa Fe intersection skewed geometry;
- Solar speed feedback signs;
- Speed humps on Santa Fe Avenue;
- ADA ramp realignment adjacent to Marin Elementary on Santa Fe Avenue;
- Sidewalk widening from 4 to 5 feet and elimination of existing unused driveway and curb improvements on Curtis St.; and
- An educational component that includes all three elementary schools in Albany.

Design Options

Option 1 - The current design described as Option 1 on attached Exhibit B evolved from the Commission discussion on the 65% plans, including restoring the westerly crosswalk and shifting the centerline alignment to the east. This option makes significant changes to all four corners of the intersection. It realigns the northbound lanes of Santa Fe Avenue adjacent to Marin Elementary further east and includes a median. This option requires significant grading/concrete/drainage work on all four corners, relocation of an overhead telephone and power (joint) pole and elimination of two trees on the southeast corner of the Santa Fe/Marin intersection. The estimated construction cost for this option is \$ 1,208,235.

Option 2 - As a result of this cost increase, and with the intent of finding an option that does not move the northbound lanes on Santa Fe closer to the school, staff has worked with AECOM to produce a second design that reduces costs without affecting safety and policy objectives. Option 2 shown on attached Exhibit C maintains the existing curb alignment for Santa Fe at the southwest corner of the intersection (the entrance to Marin School). This Option significantly reconfigures the northwest corner, while reducing the work on the southeast and southwest corners of the intersection. It entails less grading/concrete/ drainage work. In addition, the joint pole on the southeast side of the south leg does not have to be relocated and the trees proposed to be impacted in Option 1 will remain. This option is expected to require the installation of an additional speed hump in the 800 block of Santa Fe to prevent motorists speeding downhill when turning right onto Marin Avenue. The rough estimated cost of Option 2 is \$900,000.

It should be noted that Option 2 does affect the residence on the northwest corner. The front yard of this property, like nearly all residential properties in Albany, encroaches into the public right of way. The realignment of Santa Fe would stay within the public right-of-way, but reduce the size of the east side of the front yard by several feet and increase the size of the south side of their yard by roughly a corresponding amount. The home on the northeast corner and the Bright Star School property would have larger bulb outs and realignment of the sidewalks in front of their properties in both options.

Exhibit D presents a comparative matrix for the two options discussed. One important aspect of this comparison is that in terms of safety, Option 2 provides more space on the sidewalk adjacent to Marin Elementary. This is important because during bell times, this area is widely used by children walking and even bicycling to school and can be easily congested. In addition, it maintains the existing curb alignment providing a buffer between Santa Fe northbound travel lanes and pedestrians (children), while Option 1 decreased the width of the sidewalk adjacent to school and eliminated the buffer.

Design Engineering

The original scope of services for the design of this project was \$39,585. This included preparation of Plans, Specifications, and Estimates (PS&E) for the intersection realignment and the traffic signal. In February 2010, this contract was amended in the amount of \$10,850 to include design of an ADA ramp, grading and repaving of the intersection in order to reduce cross slopes, producing a color exhibit for presentations, and adding another public meeting. The cost of the original design proposal, Option 1 exceeds the construction budget limit and additional elements of the grant application were included in the design contract, such as the plans for the Curtis Street sidewalk, curb and gutter, the stage construction and pedestrian detour plan, and landscape design. As a result, the cost of the PS&E has increased as well for a total of \$ 160,800 from the original grant amount of \$45,730. This is because the City had to incur in additional expense as design details were refined.

FINANCIAL IMPACT

As presented in Exhibit E, both options exceed the original estimated project cost by approximately \$600,000 for Option 1 and by \$300,000 for Option 2. The major added costs are due to curb and gutter, sidewalk and pavement construction.. Some project components such as landscaping and sidewalk work (estimated at \$100,000) could be deferred to another year in order to save funds and deliver the most critical safety components of the project. Staff continues to review the Project for opportunities to save or defer construction costs. A report on the final estimated cost of Option 2 will be presented at your January meeting.

NEXT STEPS

Under the terms of the SR2S grant, construction of the Marin/Santa Fe signal and related improvements is scheduled to take place in during the summer of 2012. In order to meet this schedule, the City Council will need to authorize the call for bids in March/April 2012. In turn, the design must be completed and the funding strategy approved by the City Council early in 2012. In order to meet this schedule, the scope of work and budget for AECOM contract need to be modified by the City Council at the Council's December 19, meeting.

As a result of the increased project cost, the City Council will need to make a decision, based on a recommendation from the Traffic and Safety Commission, on whether to proceed with the project as shown in the attached Option 1 plans, or modify the design of the project to reduce costs as shown in Option 2. Staff finds that the advantages of Option 2 exceed those for Option 1, and recommends that the Commission direct staff to proceed with the preparation of final plans for Option 2. The final plans would be returned for approval at your January meeting.

Attachments

Exhibit A: Marin Elementary School Pedestrian Improvements

95% Plans

Exhibit B: Option 1

Exhibit C: Option 2

Exhibit D: Comparative Matrix

Exhibit E: Cost Comparison Original Budget and Current Estimate