

Pleasant Hill Road Multipurpose Pathway

(Revised 3-3-23)

Project Time Line:

Total Estimated Project Construction Cost	\$3,500,000
Completion of Construction Bid Documents	Winter 2023
Road Construction Project Begins	Project is currently unfunded

The City of Lafayette is in the preliminary design phase of a project to create a center median multipurpose pathway on Pleasant Hill Road from Mount Diablo Boulevard to Stanley Boulevard. The pathway will provide for a protected route along Pleasant Hill Road that bypasses the existing on- and off-ramps to Highway 24. In locations where additional width is available landscaping can be added between the pathway and the traffic barriers. Funding for the design of this project has been provided through a grant from the state. Funding for the construction of the project has not yet been obtained. However, upon completion of the design plans staff will seek City Council approval to pursue grant funding. Private donations are also being sought through Safe Route to Acalanes High School 501(c)3 organization <https://www.saferouteto.org/>.

Summary of Major Design Elements and Impacts:

1. The majority of the project is located within Caltrans right of way and approvals for the final design and construction will be required from Caltrans.
2. Pathway footprint will be 14-feet-wide with a 10-foot pathways striped with 2-foot shoulders on each side and separated from traffic by vertical concrete barriers.
3. Landscaping will be incorporated into the design where right of way is available (primarily near the intersection with Mount Diablo Boulevard).
4. The project will eliminate parking on both sides of Pleasant Hill Road from Mount Diablo Boulevard to Stanley Boulevard.
5. The project will eliminate the bike lane markings on Pleasant Hill Road and bikes will be directed to the center median. Cyclists that are comfortable riding with traffic will still be permitted to ride in the lanes of Pleasant Hill Road as allowed by the motor vehicle code. Green bike sharrows will delineate this within the vehicle travel lane to alert drivers that they are to share the lane with bicyclists.
6. Access to the center median pathway will only be provided at the intersections of Mount Diablo Boulevard and Stanley Boulevard / Deer Hill Road.
7. The dedicated right turn lane from northbound Pleasant Hill Road to Stanley Boulevard (at the Shell Station) will be eliminated and the existing adjacent through lane reconfigured to a through / right lane. Options to preserve the right turn lane have also been considered and are discussed as in Option 2 below.
8. The project includes an option to add a scramble pedestrian/bike phase to the Stanley Boulevard/Deer Hill Road and Mount Diablo Boulevard intersections with Pleasant Hill Road.
9. Traffic Impacts have been analyzed by Kittelson and Associates. Traffic volumes used in the analysis were derived by looking at the existing traffic counts and growing them 25% to bring them into line with traffic counts from pre-Covid conditions (Terraces traffic counts performed in 2018). The full traffic study prepared by Kittelson and Associates is available on the City's website. In general, the following was found:
 - a. The elimination of the dedicated right turn lane from northbound Pleasant Hill Road to Stanley Boulevard without a scramble phase being added to the intersections results in relatively minor increases in delay over the existing conditions for northbound through traffic, with an increase in delay of 7 seconds in the am peak hour and no change in the pm peak hour. Delays for motorists turning onto Stanley Boulevard from northbound Pleasant Hill Road will be more significant and can be expected to be 9 additional seconds in the am and 2 additional minutes in the pm over the existing conditions at peak travel times. (Traffic Report Table 8)

- b. The addition of a scramble phase would create more significant delays at the Stanley Boulevard / Deer Hill Road intersection, with a maximum increase in delay over the existing conditions for northbound through traffic of 20 seconds in the am peak hour and over 2 minutes in the pm peak hour. Delays for motorists wishing to turn right on Stanley Boulevard can be expected to be even greater, with increases in delay of over 4 minutes in the pm peak hour and 23 seconds in the am peak hour.

The City of Lafayette held the first public meeting for this project on July 12, 2022 where the scope of the project and possible impacts to traffic were discussed. Some of the concerns that were heard at that meeting and the answers found are summarized as follows:

1. How were the traffic counts derived and do they take into account the possible construction of the Terraces development?
 - The traffic counts for Pleasant Hill Road, Deer Hill Road, and Stanley Boulevard that were used in the traffic analysis do not explicitly include the vehicle trips expected to be generated by the proposed Terraces of Lafayette project. That said, a sensitivity analysis was completed and it was determined that the added volumes would have no impact on the Pleasant Hill Road / Mount Diablo intersection and would have minimal impact on the Pleasant Hill Road / Deer Hill Road / Stanley Boulevard intersection. In addition, the traffic counts that were collected were scaled up by 25%, so the traffic analysis made very conservative assumptions about the numbers of vehicles on these streets.
2. Some in the community were concerned by the possible delay and cut through traffic impacts that may be associated with the possible elimination of the dedicated right turn lane from northbound Pleasant Hill Road onto Stanley Boulevard that may be required to implement this project.
 - If the dedicated right turn lane is eliminated, drivers making this movement would see a delay increase in the evening peak hour traffic time of 2 minutes over what they currently experience. If cut through traffic on Acalanes Avenue becomes an issue, mitigation measures can be explored at that time. These mitigations could include speed humps on Acalanes Avenue, blocking the entrance to the neighborhood from Pleasant Hill Road (exit would be preserved), additional signage, or other options.
3. Some attendees were concerned about the elimination of the informal drop-off and pick-up area located on the southwest corner of Pleasant Hill Road and Deer Hill Road.
 - The drop-off and pick-up area can only be preserved if the dedicated right turn lane onto Stanley Boulevard is eliminated or if additional right of way and utility pole relocations are performed on the west side of Pleasant Hill Road. The developer of the Terraces of Lafayette project has indicated that they are amenable to providing the additional right of way and have included the reconstruction of the drop-off area in their project plans. That said, it is uncertain when and if this project will move forward, due to the pending lawsuits. In response, Staff can work with the Acalanes School District to identify alternate potential sites for drop-off and pick-up locations.
4. Some in the community felt that RRFBs (rectangular rapid flashing beacons) should be installed at the freeway on- and off-ramps to better facilitate pedestrian and cyclist access.
 - Caltrans has indicated that they will be installing RRFBs at the on- and off-ramps starting sometime in 2023.
5. Some in the community indicated that they were not in favor of using the scramble phase (an all-pedestrian phase) for the intersection signal timing, due to the greater impact on the vehicle delays.

- Staff agrees that the inclusion of the scramble phase for the intersections results in a significant increase in delay for motorists and as such we will be recommending that the scramble phase not be incorporated into the design at this time.
6. Some in the community were concerned that once individuals reach the end of the pathway at Stanley there is insufficient pedestrian and bicycle facilities on the school side of the street to accommodate the users.
- The traffic study looked at the feasibility of widening the existing sidewalk along the Pleasant Hill Road frontage of the school and found that a 10-foot-wide facility can be constructed; however, it may require the removal of the existing trees in this area.

At this point Staff believes that there are two options for the construction of the pathway. These options, along with the tradeoffs, are summarized below:

Option 1:

Construct the project as originally proposed with staged crossings for pedestrians.

- Dedicated right turn from northbound Pleasant Hill Road to Stanley Boulevard would be eliminated
- On-street bike facilities (other than the center median multi-user pathway) would be eliminated
- On-street parking would be eliminated
- Drop-off and pick-up area on the west side of Pleasant Hill Road would be preserved with some reductions in the pathway and vehicle shoulders
- The inclusion of a wider sidewalk along the Pleasant Hill Road frontage to the first school driveway can be incorporated into the design.
- Anticipated traffic operations impacts at Stanley Boulevard / Deer Hill Road (compared to existing conditions):
 - Overall traffic impacts to the intersection are negligible in the am peak hour; more substantial impacts in pm peak hour
 - Northbound through traffic – additional delay of 7 seconds in the am peak hour and no change in the pm peak hour
 - Northbound right-turning traffic – additional delay of 2 minutes in the pm peak hour
 - Southbound left-turning traffic – additional delay of 22 seconds in the pm peak hour
 - Westbound left-turning and through traffic – additional delay of 21 to 22 seconds in the pm peak hour
 - Westbound right-turning traffic – additional delay of 81 seconds in the pm peak hour

Option 2:

Construct the project with widening to the west and staged crossings for pedestrians.

- The dedicated right turn from northbound Pleasant Hill Road to Stanley Boulevard would be preserved
- On-street bike facilities (other than the center median multi-user pathway) would be eliminated
- On-street parking would be eliminated
- Drop-off and pick-up area on the west side of Pleasant Hill Road could be preserved
- Additional right of way would be required and it is unknown as to when this could be obtained, due to pending lawsuits.
- Utility poles would need to be relocated, with anticipated lead times of at least 2 years after funding has been committed to the construction of the project
- The inclusion of a wider sidewalk along the Pleasant Hill Road frontage to the first school driveway can be incorporated into the design.
- Anticipated traffic operations impacts at Stanley Boulevard / Deer Hill Road (compared to existing conditions):
 - Overall traffic impacts to the intersection are negligible in the am peak hour and slightly improved in the pm peak hour over the existing conditions

- Westbound left-turning and through traffic – additional delay of about 9 seconds in the pm peak hour
- Westbound right-turning traffic – additional delay of 44 seconds in the pm peak hour
- Southbound left-turning traffic – additional delay of 22 seconds in the pm peak hour

Next Steps:

Staff will take the results of this meeting to the Transportation and Circulation Commission in April for their review and comment, with a final recommendation for the design configuration being presented to the City Council in May. The final construction plans and specifications could be ready by the end of 2023. No additional work beyond this is anticipated until project funding has been procured.

Project Engineer Contact Information

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