

Transportation Commission

December 11, 2013

Item 5A

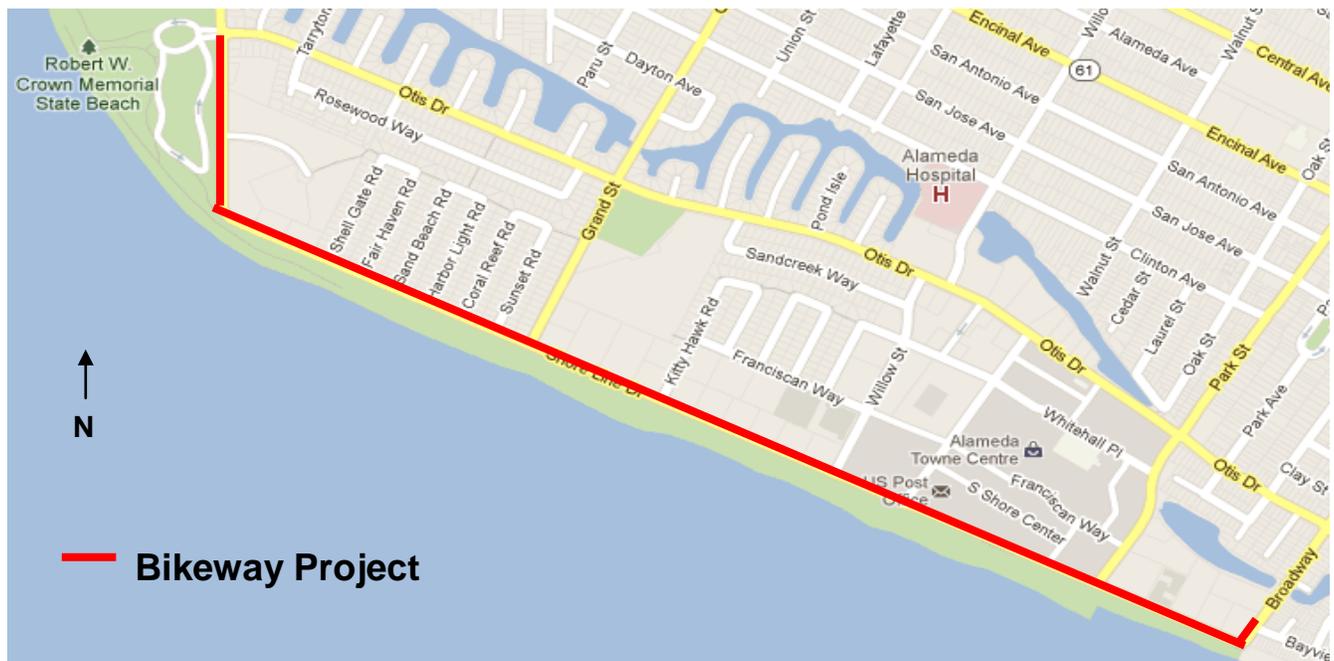
Action

Shore Line Drive/Westline Drive Bikeway Project Update

Background

A proposed bikeway along Shore Line Drive, Westline Drive and a small section of Broadway - as shown in Figure 1 - is a high priority project in the [City of Alameda Bicycle Master Plan](#) (1999 and 2010 update) and is a medium priority project in the City's [Pedestrian Plan](#) (2009). The City's [Local Action Plan for Climate Protection](#) states the need to develop and fund alternative transportation strategies in the City's budget as a key initiative. Shore Line Drive also has countywide significance since it is part of the San Francisco Bay Trail so it is listed in the [Countywide Bicycle and Pedestrian Plans](#) (2006 and 2012).

Figure 1: Shore Line Drive / Westline Drive Bikeway Project



The [Transportation Element of the City's General Plan](#) shows these streets as bicycle priority streets that provide cross island access to bicyclists and as secondary transit streets. The Transportation Element, specifically Policy 4.1.1.a, requires the City to classify streets according to preferred mode(s) of travel - such as bicycle priority streets - so as to create or preserve connected multimodal networks within the constrained right-of-way of streets. The bikeway project also directly supports several Transportation Element policies and objectives.

Furthermore, the project supports the [General Plan City Design Element](#) policies that focus on maximizing access to the shoreline.

Consistent with these plans, Public Works staff submitted a grant application for the bikeway project to Caltrans for the [Highway Safety Improvement Program \(HSIP\)](#) on December 8, 2010. On March 8, 2011, the City received notification from Caltrans on the success of the grant application. On May 17, 2011, the City Council approved the local match for the federal HSIP grant as the Transportation Development Act (TDA) Article 3 Bike/Pedestrian fund, which is allocated by the Metropolitan Transportation Commission. On January 14, 2012, Caltrans authorized the City to proceed with the community outreach process and the preliminary design. Staff conducted community outreach meetings in May, June and October 2012.

Update: On November 28, 2012, the Transportation Commission members approved a bikeway concept. Public Works staff will provide Caltrans with detailed construction drawings in December 2013.

Discussion

Project Description

During the outreach for the project, the community meeting participants reached consensus on the following project goals and priorities:

- Provide more bicycling options
- Minimize traffic impacts
- Maintain bay views
- Reduce multi-use path conflicts
- Provide parking for apartments/condos
- Improve visibility
- Reduce motor vehicle speeds
- Make safer

When developing the project, staff used these project goals and priorities as a guide, and tailored the project depending on the street section and adjacent land uses. The project will reduce the number of motor vehicle travel lanes from four to two or three lanes depending on the street section; install a cycle track (Figure 2), parking spaces, loading zones, bicycle parking, crosswalks, beach parking signage, benches and bus shelters; and construct minor drainage improvements, ADA upgrades and a shuttle bus landing area. The cycle track is recommended to be a two-way bikeway on the southernmost motor vehicle travel lane. Being



Figure 2: Fernside Blvd. Cycle Track

that the public right-of-way is constrained, the project will remove one of the westbound motor vehicle travel lanes to accommodate the cycle track. Fire Department staff has stated that emergency response vehicles will have sufficient width to operate effectively.

Update: Exhibit 1 shows the proposed bikeway plan for Westline Drive, Shore Line Drive and the section of Broadway between Shore Line Drive and Bayview Drive. Staff added red and green markings on the conceptual layout drawings to show how the approved bikeway concept has changed with the development of the detailed construction drawings. Staff explains these changes in the below Project Elements section.

Project Elements

The project includes the following elements, which are listed in alphabetical order except for the initial cycle track description:

- **Cycle Track:** The cycle track will provide a physically separated two-way bikeway for 1.8 miles on the east side of Broadway, on the south side of Shore Line Drive and on the west side of Westline Drive.
 - **Eastern terminus:** The cycle track will end on Broadway at Bayview Drive at an all-way stop allowing bicyclists to easily maneuver in/out of the proposed facility to the bikeway further north on Broadway or further east on Bayview Drive. The cycle track will direct bicyclists to use Bayview Drive as opposed to the Bayview beach path, which is designated for pedestrians only. A stop sign for northbound motorists will be added in a new median between the motor vehicle travel lanes and the cycle track. **Update:** To better align the travel lanes north and south of the intersection, staff is recommending a center turn lane, a bike box (Figure 3) and a raised concrete island at the southbound stop sign on the north side of the intersection. This treatment would eliminate four parking spaces on the east side of Broadway south of Bayview Drive and one parking space on the west side of Broadway.
 - **Western terminus:** The cycle track will end at the Westline Drive/Eighth Street/Otis Drive/Robert Crown Memorial State Beach entrance intersection where a traffic signal exists. Bicyclists will be able to continue into the state park going west or may travel north to Washington Park using the state park path and City sidewalk. Bicyclists traveling either east on Otis Drive or north on Eighth Street will be directed to wait at the traffic signal at a designated "bicycle box" (Figure 3). The bicycle box will facilitate the left turning movements for bicyclists. Bicyclists



Figure 3: Bicycle Box

seeking to make a left turn will be able to position themselves in the bicycle box in front of stopped motor vehicle traffic during the red phase of the signal. **Update:** To ensure consistency, the green colored pavement adjacent to the marked crosswalks will not be used as shown in Exhibit 1. The path connector from the state beach entrance to the adjacent state beach path was dropped from this project because the required state approvals would have delayed the project causing the project to lose the federal funding.

- **Cycle Track Buffers:** A buffer between the cycle track and the motor vehicle travel lane or parking lane will be three feet wide. When parking is allowed, the buffer will act as a passenger loading space and as a safety zone to avoid conflicts between bicyclists and the opening of motor vehicle passenger doors (“dooring”). The type of buffer will depend on the street section as shown below and in Figure 4:

- **White Pavement Markings Only:** The buffer will be white pavement markings when adjacent to 24/7 parking on:
 - Shore Line Drive between Grand Street and South Shore Center Drive/U.S. Post Office; and
 - Westline Drive south of Shorepoint Court.
- **White Pavement Markings and Car Stops:** Where no parking is allowed adjacent to the cycle track, four inch high car stops in addition to white pavement markings will be located on:
 - Westline Drive north of Shorepoint Court;
 - Shore Line Drive between Shell Gate Road and Grand Street; and
 - Shore Line Drive between South Shore Center Drive/U.S. Post Office and Park Street.



Figure 4: Cycle Track Buffer Examples

- **White Pavement Markings and Raised Curbs/Medians:** Raised curbs or wider medians will be used to provide an enhanced physical barrier at the following key locations:
 - All intersections to have a raised island at the cycle track entrance with signage; (New!)
 - Westline Drive/Otis Drive cycle track terminus;
 - Shore Line Drive/Westline Drive curve;
 - Shore Line Drive / Broadway curve; and
 - Broadway / Bayview Drive terminus.
- **White Pavement Markings and Delineators (New!):** Where parking is allowed only during the evening hours, staff does not recommend installing car stops due to a potential tripping hazard. Instead, staff recommends installing delineators evenly spaced every 20 feet along and within the buffer. A depiction of a delineator is in Figure 5, which shows two white delineators being used at a bicycle corral. Locations for these delineators will include:
 - Shore Line Drive between Westline Drive and Shell Gate Road; and
 - Shore Line Drive between Park Street and Broadway.
- **ADA Upgrades:** Along the entire length of the project, the City will provide Americans with Disabilities Act (ADA) improvements. The ADA issues that will be addressed include providing curb ramps and truncated domes at all existing and new crosswalks.
- **Beach Parking Signs:** Staff will install beach parking signs at key points along the corridor and outside the study area for motorists traveling to the beach. The purpose of the signs is to direct motorists to available off-street state beach parking so as to reduce congestion and U turns, especially on busy, warm weather weekends. Consequently, the U-turn signs will be removed.
Update: Staff does not recommend removing the U-turn signs. Due to the narrowed street, there is insufficient turning radius for U-turn maneuvers.
- **Bicycle Corrals:** Staff will install bicycle corrals at two locations (Figure 5). Bicycle corrals allow for up to five inverted U racks in place of one on-street auto parking space, and will be at:
 - 1) Westline Drive at Shore Line Drive in a parking space on the west side of the street; and
 - 2) Shore Line Drive at Grand Street - southeast of the intersection in a parking space on the far side of an adjacent bus landing island (see below).



Figure 5: Bicycle Corral in Seattle

- **Bicycle Racks:** The City will install “inverted U” style bike racks in highly visible locations that are near the main entrance to a building or facility. Racks on the curbside of the sidewalk will be placed to minimize conflicts between parked bicycles and passengers entering or exiting parked vehicles. The City will install up to 10 inverted U bike racks, and will work with adjacent property owners and residents as well as with the East Bay Regional Park District to ensure that the installations are appropriate.

- **Bus Landing Islands:** Two bus landing islands will provide AC Transit passengers with a space to board and alight eastbound buses between the cycle track and the eastbound motor vehicle travel lane (Figure 6). These two bus landing islands will be constructed at:



Figure 6: Bus Landing Area in Seattle

- Shore Line Drive - east of Grand Street
- Shore Line Drive - east of Kitty Hawk Road

- **Bus Shelters and Benches:** Staff will install two bus shelters at the two highest ridership bus stops:
 - Shore Line Drive/Kitty Hawk Road (north side of street)
 - Grand Street/Shore Line Drive (east side of street)

A bus bench will be installed at the other bus and shuttle stops along the corridor. The bus shelter type will be consistent with other bus shelters most recently installed on Webster Street and Park Street except with a length of 9 feet instead of 11 feet to correspond with the smaller-scale residential area (Figure 7).



Figure 7: Bus Shelter on Webster Street

- **Bus Stop Changes:** Staff will move the westbound bus stop on Shore Line Drive at Kitty Hawk Road from the near side of the intersection to the far side to enhance safety for pedestrians. Staff also will eliminate the eastbound midblock bus stop between Kitty Hawk Road and Willow Street to discourage

midblock pedestrian crossings. This bus stop is not highly used with about ten boardings and alightings per day. AC Transit prefers to consolidate bus stops to improve travel times and to address safety concerns associated with the midblock pedestrian crossing.

- **Colored Pavement:** Staff will install colored pavement to highlight the presence of potential conflict locations such as intersections and bus landing islands (Figure 8).
- **Crosswalk(s):** Staff will install additional marked crosswalks along the project corridor, which also will involve the installation of curb



Figure 8: Colored Pavement Example – Vancouver, BC

ramps and truncated domes, where needed. Other locations for crosswalk installations such as a potential midblock crossing on Shore Line Drive near Westline Drive could be considered in the future. **Update:** Staff will not be able to install all seven of the original marked crosswalks as were approved. The grade differential between the street and the curb is too large making curb ramps cost prohibitive and out-of-scope for this project. For one of the locations, staff would have had to remove a tree. Only two of the approved seven marked crosswalk locations will be constructed as shown below:

- Broadway at Bayview Drive – south side of the intersection. (*Eliminated due to required tree removal*)
 - Shore Line Drive at Park Street – west side of the intersection.
 - Shore Line Drive at Fair Haven Road. (*Eliminated due to slope*)
 - Shore Line Drive at Coral Reef Road. (*Eliminated due to slope*)
 - Shore Line Drive at Sand Beach Road. (*Eliminated due to slope*)
 - Shore Line Drive at Sunset Road. (*Eliminated due to slope*)
 - Westline Drive at Shorepoint Court – east side of the intersection.
- **Drainage Improvements:** The project involves minor adjustments to drainage at the intersection of Shore Line Drive at Park Street near the car wash to address ponding concerns. **Update:** This improvement is now part of a citywide storm drain project. This bikeway project will improve drainage at the bus landing island on Shore Line Drive at Kitty Hawk Road. This bikeway project also will move a storm drain grate from the street to the curb east of Park Street.

- **Loading Zones:** Staff will provide up to 17 loading zones - white curb markings - in front of the multi-unit complexes to accommodate deliveries and moving vans between the hours of 9 a.m. and 5 p.m. Staff will install signs explaining the loading zones and stating the hours of operation. Regular on-street parking will not be allowed during loading zone times; however, regular on-street parking will be available during peak parking demand times. Each loading zone will be up to 60 feet in length and will remove up to three regular on-street parking spaces during its hours of operation.
- **Parking:** Staff will change on-street parking as follows:
 - **Additional 24/7 Parking:** On-street parking is recommended at all times on the beach side of Shore Line Drive between Grand Street and South Shore Center Drive/U.S. Post Office and on Westline Drive south of Shorepoint Court to provide more parking options for adjacent multi-unit family dwellers and for visitors to the area.
 - **Disabled parking:** To better accommodate individuals with disabilities, staff will provide disabled parking spaces at regular intervals along the corridor. Staff will move the existing disabled parking on the east side of Broadway at Bayview Drive to one space on the west side of Broadway to avoid potential conflicts with the cycle track on the east side of Broadway. **Update:** The eight approved locations of disabled parking are not possible because these parking spaces require eight foot wide on-street parking whereas only seven foot wide spaces are available. Only four of the original eight locations are possible as shown below:
 - Westline Drive south of Shorepoint Court (**Eliminated**)
 - Shore Line Drive east of Shell Gate Road (**Eliminated**)
 - Shore Line Drive west of Grand Street (**Eliminated**)
 - Shore Line Drive east of Kitty Hawk Road (**Moved to Kitty Hawk Road at Shore Line Drive**)
 - Shore Line Drive east of Willow Street (**Moved to Willow Street at Shore Line Drive**)
 - Shore Line Drive east of South Shore Center Drive/U.S. Post Office (**Eliminated**)
 - Park Street north of Shore Line Drive
 - Broadway at Bayview Drive – west side of street
- **Shuttle Bus Landing Area:** The Alameda Paratransit Shuttle runs on Thursdays between 9 a.m. and 4 p.m. along Shore Line Drive and Westline Drive, and currently stops along Shore Line Drive and at the Crown Bay Nursing & Rehabilitation Center, which is north of Shorepoint Court. The installation of a shuttle bus landing area on Westline Drive south of Shorepoint Court – east side of the street – will allow for an additional shuttle stop that will better serve the Shorepoint Court community.
- **Tree Removal and Replacement (New!):** The City's on-call arborist is recommending the removal and replacement of a Poplar tree on the west side of Westline Drive north of Shorepoint Court due to old age and significant decay (Exhibit 2). This tree is within the right-of-way of the Robert Crown Memorial State Beach. Staff is working with East Bay

Regional Park District who operates the state beach on removing the tree and replacing it with three trees in this area.

Budget Considerations/Fiscal Impact

The project will cost more than the original project budget of \$462,800. The placeholder project for Caltrans approval was a simple restriping project to provide traditional bike lanes. The cycle track requires additional funding because it involves more complex restriping, enhanced signage, raised medians at key locations and car stops to provide a buffer between the cycle track and the adjacent motor vehicle travel lane. Two bus landing islands also will need to be constructed for this new cycle track option as well as signal modifications at Otis Drive/Westline Drive to accommodate bike crossings. Based on community feedback, staff also is providing additional project features such as beach parking signs, bicycle corrals, colored pavement at intersections, more crosswalks than anticipated and loading zones.

Caltrans has awarded the City \$416,400 from the HSIP grant with a local match of \$46,400 making the funded portion of the proposed project as \$462,800. Transportation Development Act (TDA) Article 3 funds are allocated by the Metropolitan Transportation Commission as the local match for this HSIP grant. The City Council approved the TDA local match during the May 17, 2011 meeting. **Update:** The revised project cost for the proposed cycle track is \$971,770; however, staff is finalizing the construction drawings and specifications so this cost is expected to change. In February 2013, the City Council approved a total of \$509,000 in citywide development fee funds for this project increasing the total project budget to \$971.770. Once the construction drawings and specifications are finalized, staff may request City Council to approve additional TDA funds to help pay for the new raised islands at all intersections and the tree removal/replacement as well as to serve as an increased construction contingency.

Recommendation

Staff requests that the Transportation Commission review and approve the project update.

Respectfully submitted,

Gail Payne
Transportation Coordinator

Exhibits:

- 1 Proposed Plan
- 2 Arborist Report

Exhibit 1: Proposed Plan

Exhibit 2: Arborist Report