



MEMO

DATE November 4, 2015
 TO Gail Payne
 City of Alameda
 FROM John Hykes
 SUBJECT **Central Avenue - Recommendations Concept Review**

A. Main Street and Pacific Avenue to Lincoln Avenue

The design of the Study Area's most-western segment, Central Avenue between Main Street/Pacific Avenue and Lincoln Avenue, is based on the concept presented in the 2014 *Alameda Point Master Infrastructure Plan* (MIP). A northbound Class II bike lane also would be included for morning commuters heading toward the ferry or Alameda Point. The existing right-of-way (ROW) of this segment is 65 feet with one motor vehicle lane in each direction. The proposed ROW would be 110 feet south of the Central Avenue/Main Street/Pacific Avenue intersection with one southbound motor vehicle lane and two northbound motor vehicle lanes, which would align better with Main Street to the north. The additional ROW space would be acquired from the City-owned Alameda Point property to the west. On the west side of the street, the existing bus stop, driveway and a no parking zone would be modified for an increase of six on-street parking spots. An eight foot wide bus island would be constructed allowing for boardings and alightings at the southbound bus stop adjacent to the cycle track. The driveway at the storage area into Alameda Point would be closed, which would eliminate a conflict point between bicyclists in the cycle track and motorists. On the east side of the street, the northbound bus stop would move away from the residential area to the landscaped median, which would add two parking spaces at this southeast corner.

The existing Boat Ramp Access Road, which is west of Encinal High School and connects Central Avenue to the Encinal Boat Ramp, also would be widened from approximately 25 feet to 72 feet. The additional ROW would support the projected motor vehicle traffic increase in conjunction with the proposed West Ticonderoga Road on Alameda Point property, as well as additional parking for Encinal High School and a cycle track as part of the San Francisco Bay Trail. Based on an assessment done as part of this project, the Bay Trail will continue to be located along the west and north sides of Encinal High School, instead of along the southern edge of Encinal High School due to space constraints along the bay and at the back of Encinal High School.

For Boat Ramp Road, an interim project would maintain the existing 25 foot ROW between Central Avenue and West Ticonderoga Road. Boat Ramp Road would continue to terminate at the same location at Central Avenue, which is offset from the adjacent Lincoln Avenue. In this interim section, a shared street would be maintained, and a multi-use path would be added adjacent to Encinal High School on the east side of the street. Boat Ramp Road may be realigned in the future, as shown in the *Alameda Point Master Infrastructure Plan*, so that it aligns with Lincoln Avenue at the Central Avenue

terminus. This concept would require coordination with the Alameda Unified School District in that it cuts into their property.

Per the *Alameda Point Master Infrastructure Plan*, Boat Ramp Road between the proposed West Ticonderoga Road and the proposed West Hornet Drive is approximately 550 linear feet. Without taking into consideration potential future driveway access, this length of new street could increase parking by approximately 24 parking spots on both the new west and east sides of the street totaling 48 additional on-street parking spaces.

B. Lincoln Avenue to Third Street/Taylor Avenue

Between Lincoln Avenue and Third Street/Taylor Avenue, there is no reduction in motor vehicle travel lanes, but the lanes are narrowed, allowing for a westbound Class II bike lane for morning commuters heading toward the ferry or Alameda Point. Parking is maintained on both sides of the street with an eight foot width. An accessible on-street parking space would be provided in front of Encinal High School.

The existing curb-to-curb street width is 45 feet with a 6 foot sidewalk on the south side. According to existing parcel information, the City ROW is 25 feet from the curb in front of Encinal High School. The recommended concept would use most of the existing ROW for a pedestrian drop-off/pick-up refuge area, a two-way cycle track and a walkway. The cycle track not only would serve as a safe route to school, but also would be part of the San Francisco Bay Trail. This street segment is part of the Bay Trail, which requires a minimum of Class II bike lanes, safe and clear transitions, and appropriate signage. The cycle track and walkways would be designed to avoid removal of the existing trees, utilities and the Encinal jet. This project proposes to relocate the two marquees outside of the straight path of travel of the cycle track, which also would improve visibility at the adjacent intersection and driveway. At the bus stop in front of Encinal High School, the passenger drop-off/pick-up area is widened to eight feet and the cycle track is narrowed to eight feet wide to help reduce the speed of bicyclists.

Four driveways provide ingress/egress for two existing Encinal High School parking lots. The parking lot closer to Third Street is designated for Encinal High School staff while the one adjacent to Boat Ramp Road and Lincoln Avenue is for student parking and student drop-off/pick-up. The parking lot driveways would be redesigned to minimize conflicts between motorists using the driveways, bicyclists using the cycle track and pedestrians on the adjacent walkway. Some best practice treatments include adding a stop bar and stop sign for exiting motorists, constructing a raised cycle track, providing green pavement at the conflict area and installing signage along the cycle track. The concept proposal redesigns the staff parking lot for a one-way access, and decreases the driveway widths to help reduce the speeds of motorists as they enter/exit this parking lot. With this redesign of the parking lot, there would be no loss of parking, and the current accessible off-street parking spots also would be maintained. For the student parking lot, the driveways also would be narrowed to allow for only one motorist to enter/exit at a time. The student parking lot entrance driveway by Lincoln Avenue would be narrowed to accommodate a walkway on the west side of it to allow students to walk in a designated space between the Lincoln Avenue marked crosswalk and the stairs of the adjacent building, which leads to the cafeteria and the Junior Jets area. The Lincoln Avenue

intersection would be improved with curb extensions, keep clear markings, a high visibility crosswalk and rectangular rapid flashing beacons.

The existing intersection at Third/Taylor/Central would be realigned with curb extensions and marked crosswalks on the east and north sides. The cycle track would help improve bicycle safety at this intersection by constraining bicyclist movements and by giving a cue to bicyclists on where to travel. Additionally, the City plans to signalize the intersection with a bike only phase to ease congestion and further enhance safety. For bicyclists traveling westbound towards the ferry or Alameda Point, they either could travel in the cycle track on the south side of the street or in the Class II bike lane on the north side of the street.

C. Third Street/Taylor Avenue to Fifth Street

A motor vehicle travel lane reduction of this segment transforms the road from four motor vehicle travel lanes with no bicycle facilities to three motor vehicle travel lanes with bike facilities. The three motor vehicle travel lanes include one motor vehicle travel lane in either direction and a two-way left turn lane, which also is known as a center turn lane. A westbound Class II bike lane also would be included for morning commuters heading toward the ferry or Alameda Point.

The two-way cycle track would extend from the previous segments on the south side of the street to west of the Paden Elementary School driveway to provide a safer route to and from school for students. Between Third Street/Taylor Avenue and Fourth Street/Ballena Blvd, the cycle track would be installed in the street between the curb and on-street parking, and no parking removal would be expected to occur except for either side of the driveway on the south side of the street. Since Central Avenue widens out to 100 feet west of Fourth Street/Ballena Blvd, the concept includes a landscaped median on the north side of the street and an additional parking area adjacent to it, which increases parking by approximately seven on-street parking spots. Between Fourth Street/Ballena Blvd and west of Paden School, the cycle track would be installed in an existing no parking zone from Fourth Street to the second residential driveway for about 200 feet and then in the current parking lane. The cycle track would reduce on-street parking by approximately eight parking spots on the south side of the street. The motor vehicle travel lane reduction would allow for an increase in on-street parking on the north side of the street by approximately eight parking spots on the east side of this intersection. Thus, eight on-street parking spaces on the east side of the Fourth Street/Ballena Blvd intersection would be reallocated from the south side of the street to the north side of the street. In summary, this intersection area is expected to have an additional five on-street parking spaces.

There are three driveway conflicts on the south side of the street between Fourth Street/Ballena Blvd and Paden School that would need to be clearly marked to increase safety with green striping paint, signage and other best practice treatments. The transition from cycle track to bike lane west of the Paden School driveway includes a midblock marked crosswalk with curb extensions, signage and rapid flashing beacons. The midblock crosswalk would help address midblock crossings that currently take place across Central Avenue along this segment, and would provide a place for westbound bicyclists to transition from the bike lane into the cycle track. The crosswalk would remove two parking spots on the north side of the street. East of Paden School on the south side of Central Avenue, there would be

a Class II bike lane and the existing on-street parking would be maintained. An accessible on-street parking space would be provided.

At the Fourth Street/Ballena Blvd. intersection, a bicycle signal phase would be added to the existing traffic signal to reduce motorist and bicyclist conflicts. At the Fifth Street intersection, a new crosswalk is proposed on the east side of the intersection along with a curb extension in the northeast corner. The new marked crosswalk at this intersection would require the removal of one parking spot on the south side of the street. The installation of a traffic signal at Fifth Street would be recommended in the long term.

This segment is part of the Bay Trail, which requires at least Class II bike lanes, safe and clear transitions and appropriate signage.

D. Fifth Street to Webster Street

Similar to the previous street segment, the design of this segment transforms the road from four motor vehicle travel lanes with no bicycle facilities to three motor vehicle travel lanes with bike facilities. The three motor vehicle travel lanes would include one motor vehicle travel lane in either direction and a center turn lane. There would be Class II bike lanes in either direction, and the existing on-street parking would be maintained.

This segment is part of the San Francisco Bay Trail until the trailhead entrance east of Fifth Street by Crown Drive, which requires at least Class II bike lanes, safe and clear transitions and appropriate signage. The design proposes a new marked crosswalk at the San Francisco Bay Trail entrance with curb extensions, a high visibility marked crosswalk and rectangular rapid flashing beacons. Two on-street parking spaces would be removed on the north side of the street to accommodate the new marked crosswalk.

Curb extensions and a pedestrian refuge would be added at the Sixth Street intersection crosswalk. The curb extensions are located at existing red curbs to minimize parking loss.

E. Webster Street to Eighth Street

The concept would recommend no center turn lane from approximately 150 to 200 feet west of Webster Street to approximately 150 to 200 feet east of Eighth Street to minimize motor vehicle travel delays and to maintain the on-street parking, which is a high priority for the adjacent commercial district. The three motor vehicle travel lane design transitions into four lanes between Webster Street and approximately 150 to 200 feet east of the intersection. Since no change would be recommended for this section, the bike lanes would transition into sharrows. For the eastbound direction, the sharrows would begin approximately 150 to 200 feet west of Webster Street. Sharrow markings would be added in the outside motor vehicle travel lanes that would be shared between motorists and bicyclists to provide a visual cue to share the road. East of the sharrow section, Central Avenue would maintain two eastbound motor vehicle travel lanes, and would have only one westbound motor vehicle travel lane and Class II bike lanes. The limited driveways on the south side of the street due to Washington Park would reduce the need for a center turn lane, westbound left-

turn pockets or two westbound motor vehicle travel lanes. The two eastbound lanes are recommended to accommodate the afternoon peak motor vehicle movements from southbound Webster Street onto eastbound Central Avenue; this movement currently has two left turn lanes.

At Page Street, the high visibility crosswalk with curb extensions and rectangular rapid fire beacons would improve pedestrian connectivity to/from the park. The curb extension would be extended to the commercial driveway at this location before the street increases its width from 56 feet west of Page Street to 65 feet east of Page Street. The additional street width would allow for buffered bike lanes between Page Street and Eighth Street before the intersection. The buffer would be a striped area of two to three feet between the bike lanes and the motor vehicle travel lanes. West of Eighth Street, the two eastbound motor vehicle travel lanes transition to one lane and the two westbound motor vehicle travel lanes transition to one lane to minimize motor vehicle delay. A total of three accessible on-street parking spaces would be added – two near Webster Street and one adjacent to Washington Park.

At Eighth Street, the bus stops would be improved with potential shelters or benches and a widened passenger loading area on the north side of the street. The curb extension at the southeast corner of the intersection would reduce one parking space at the corner. East of the Eighth Street intersection, Central Avenue would maintain two westbound motor vehicle travel lanes, and would have only one eastbound motor vehicle travel lane with Class II bike lanes. The westbound travel lanes accommodate sharrow markings added in the outside motor vehicle travel lane that would be shared between motorists and bicyclists to provide a visual cue to share the road.

F. Eighth Street to Sherman Street and Encinal Avenue

As with the segment between Paden Elementary School and Webster Street, a motor vehicle travel lane reduction of this segment would transform the road from four motor vehicle travel lanes with no bicycle facilities to three motor vehicle travel lanes with Class II bike lanes. The three motor vehicle travel lanes would include one travel lane in either direction and a center turn lane.

The design would include curb extensions at Eighth Street, Burbank Street, Ninth Street, Caroline Street, St. Charles Street and Sherman Street/Encinal Avenue. At Caroline Street, the concept would recommend the installation of rectangular rapid flashing beacons on the east side of the intersection, and the elimination of the west side marked crosswalk to consolidate pedestrian movements. The concept also would add a marked crosswalk on the side of Bay Street, and an accessible on-street parking space by Weber Street.

New curb extensions that are not located in existing red curb zones and newly proposed crosswalks would improve pedestrian circulation and safety, but they also would impact parking. There would be a loss of one to two parking spots per crosswalk and curb extension, depending on the driveway locations.

The Sherman/Encinal/Central intersection would be improved by narrowing the travel lanes to more appropriate and safe widths and transforming the leftover space into landscape medians and Class II bike lanes with a clear transition to the existing bike lanes on Central Avenue east of Sherman Street.

